DRAFT

Program Environmental Impact Report

SANTA BARBARA COUNTY
UTILITY-SCALE SOLAR AMENDMENTS

SCH No. 2024110254







Prepared for
County of Santa Barbara

August 2025

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EXECUTIVE SUMMARY

As the lead agency, the County of Santa Barbara (County) has prepared this Draft Program Environmental Impact Report (Draft Program EIR) to provide information about the potential environmental impacts associated with the Utility-Scale Solar Amendments Project (Project). This Draft Program EIR has been prepared in conformance with the California Environmental Quality Act (CEQA) (California Public Resources Code [PRC] Section 21000 et seq.), the State CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.), and the County's procedures for implementing CEQA. The principal State CEQA Guidelines sections governing the content of this document are Sections 15120 through 15132 (Contents of an EIR), and Section 15168 (Program EIR). The State Clearinghouse Number is 2024110254.

This chapter of the Draft Program EIR meets State CEQA Guidelines Section 15123 requiring that an EIR contain a summary. Per Section 15123, the summary shall contain a brief description of the Project's proposed actions and consequences, including identification of each significant effect and proposed mitigation measures and alternatives that would reduce or avoid those effects. The summary must also contain a description of the areas of controversy known to the lead agency and identification of issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects.

ES.1 Project Location and Overview

The County proposes the Project to expand the potential for renewable energy generation within the unincorporated County. The Project would not affect lands under the jurisdiction of the federal government (e.g., Los Padres National Forest and Vandenberg Space Force Base), the University of California and other State lands, and tribal governments.

As identified in the County's Strategic Energy Plan (SEP), the County has the capacity for up to 2,925 megawatts (MW) of solar photovoltaic energy generated annually from utility-scale and distributed/on-site solar systems combined. The Project would implement the County Board of Supervisors (Board) recommendation to encourage local renewable energy generation by allowing solar development in various areas of the County and by establishing a streamlined permitting process to promote utility-scale solar development to reach this potential.

Proposed amendments to County regulations would establish the streamlined permitting process. The majority of the proposed amendments would be within the three zoning ordinances: County Land Use Development Code (LUDC), Montecito LUDC (MLUDC), and Article II Coastal Zoning Ordinance (CZO). In addition, the Project includes amendments to the County's Comprehensive Plan Land Use Element and the Coastal Land Use Plan. To facilitate utility-scale solar development throughout the unincorporated county, the Project would, in part, remove the Utility-Scale Solar Photovoltaic Overlay within the LUDC and allow utility-scale solar as a conditional use on lands zoned Professional and

Institutional (PI), Agricultural I (AG-I), Agricultural II (AG-II), Public Utility (PU), Light Industry (M-1), General Industry (M-2), Industrial Research Park (M-RP), and Coastal Related Industry (M-CR) within the Inland Area and Coastal Zone portions of the unincorporated county. In addition, the Project would create and define a new category of solar energy facility, termed "community-scale." Community-scale solar would be conditionally allowed within the same zoning designations.

The three ordinances would also be revised to streamline permitting for rooftop and small ground-mounted solar energy systems, and to clarify the County's existing permitting process for standalone battery ESS. Battery ESS facilities are currently permitted as public utility facilities or private services in the LUDC, MLUDC, and CZO. The ordinance definitions and use tables would be revised to clarify that battery ESS facilities are a permitted use. Stand-alone battery ESS would be subject to the same proposed development standards as battery ESS components of a Tier 3 or 4 solar energy facility, for permitting consistency across all three ordinances and within the unincorporated county.

The final Project component is to update the Uniform Rules for Agricultural Preserves and Farmland Security Zones (Uniform Rules). The Uniform Rules amendments would allow utility-scale and community-scale solar energy facilities to be placed within Williamson Act agricultural preserve contracted lands, within specific parameters. The proposed amendments include adding a definition for "agrivoltaics",[1] defining "compatible use" specifically as it pertains to locating an energy facility with agriculture, and adding a definition for "solar energy facility" and "solar-use easement."[2]

As described in more detail in Section 2.4, *Project Components*, the solar energy systems and facilities would be categorized based on size. The smaller-scale systems (e.g., rooftop and small ground-mounted solar energy systems) would be categorized as Tier 1 or Tier 2, respectively. Tier 1 or 2 systems could occur on all unincorporated County lands (regardless of the zoning designation). Larger solar energy facilities (e.g., community-scale and utility-scale) would be categorized as Tier 3 and Tier 4, respectively. Tier 3 or 4 facilities would be allowed on lands zoned as described above.

The Project would include revised or new development standards for each tier of solar energy systems or facilities to be permitted. The existing development standards within the Utility-Scale Solar Photovoltaic Facilities chapter of the County LUDC (Chapter 35.59) would be amended as needed to provide standards for all tiers of solar energy facilities and systems and to mitigate potential resource and land use impacts. These development standards would be applied across all three ordinances.

ES.2 Issues Raised during Notice of Preparation Process and Areas of Controversy

State CEQA Guidelines Section 15123 states that an EIR shall identify areas of controversy known to the lead agency, including issues raised by agencies and the public during the scoping process. The County received comment letters from public agencies and the public during the public review period in response to the Notice of Preparation (NOP) and Scoping of a Program EIR. The County also held a hybrid

[1] Agrivoltaics is the term used to describe the co-location of solar and agriculture uses.

[2] As described by the California Department of Conservation, parties holding a Williamson Act or Farmland Security Zone contract may mutually agree to rescind a contract (or a portion of) in order to simultaneously enter into a solar-use easement, allowing solar as a compatible use.

scoping meeting on Thursday, November 21, 2024, at 5:30 p.m. The County received five comment letters provided by agencies, organizations, and individuals during the scoping comment period; no one attended the hybrid scoping meeting, so no verbal comments were received.

CEQA requires that an EIR identify areas of controversy known to the lead agency, including issues that the lead agency and/or the public raise (CEQA Guidelines Section 15123). Based on comments received during the scoping process, the following environmental issues are known to be of concern and may be controversial:

- Cumulative impacts on visual resources;
- Cumulative impacts on agricultural resources and coastal agriculture;
- Hydrological impacts;
- Range of the sizes for the tiers;
- Direct and cumulative impacts related to wildfires; and
- Cumulative impacts, such as potential overlapping effects on agricultural resources, rural character, and viewsheds.

ES.3 Significant and Unavoidable Environmental Impacts

CEQA Guidelines Section 15126.2(a) requires that the EIR describe any significant impacts that cannot be avoided, including those effects that can be mitigated but not reduced to less-than-significant levels. As indicated in Chapter 3, *Environmental Impact Analysis*, of this Draft Program EIR, the Project would result in significant and unavoidable impacts to aesthetics, agricultural resources, and cultural resources, which are discussed below and are summarized in Chapter 5, *Other CEQA Considerations*.

ES.3.1 Aesthetics

The Project would result in potentially significant impacts related to direct and indirect substantial adverse effects to public scenic vistas associated with the future development of Tier 3 and Tier 4 solar energy facilities (Impact AV-1). While mitigation would reduce some of the impacts, because the specific locations and designs for future projects are unknown at this time, potentially significant and unavoidable impacts could result even with implementation of MM AV-1.

The Project would result in potentially significant impacts related to local or state scenic corridors (Impact AV-2). Depending on the scale and location with respect to scenic resources in the state and local scenic corridors, significant and unavoidable impacts could result. Development standards and implementation of MM AV-1 would reduce potential conflicts with visual and aesthetic resources in identified scenic corridors. However, even with implementation of applicable standards and mitigation measures, impacts would be significant and unavoidable.

Future solar energy projects could degrade the existing visual character or quality of public views or conflict with applicable regulations governing scenic quality (Impact AV-3). While MM AV-1would reduce some adverse visual impacts, future solar energy projects could degrade the existing visual character or quality of public views or conflict with applicable regulations governing scenic quality. Therefore, residual impacts would be significant and unavoidable.

With regard to cumulative impacts, the Project in combination with future growth and related projects, would result in significant and unavoidable aesthetic impacts, related to public scenic vistas, local or state scenic corridors, and visual character or quality of public views or conflicts with applicable regulations governing scenic quality. The Project's contribution to this potentially significant cumulative impact would be cumulatively considerable.

ES.3.2 Agricultural Resources

Future Tier 3 and Tier 4 solar energy facilities enabled under the Project could directly convert farmland into non-agricultural uses or otherwise impair agricultural land productivity through constructing, operating, and maintaining facilities on agricultural land (Impact AG-1). Although the zoning code amendments and mitigation measures would reduce some of the designated farmland impacts to insignificant levels with implementation of MM AG-1 for those Tier 3 or 4 facilities that are decommissioned, the effectiveness at reducing all impacts is unknown, and the amendments as proposed do not require or guarantee decommissioning within a certain time frame. Therefore, even with implementation of MM AG-1, impacts would remain significant and unavoidable.

The Project could also conflict with existing agricultural zoning or Williamson Act contracts (Impact AG-2). Compliance with the Uniform Rules and proposed development standards would offset most impacts and help preserve the viability of agricultural lands. The Uniform Rules amendments would support the planning for shared (agrivoltaics) uses on agricultural preserve lands and plan for land restoration or remediation if or when the solar energy facility is terminated. Implementation of MM AG-1 would document pre-construction agricultural conditions on designated Farmlands and provide a baseline for decommissioning. Together, the Uniform Rules and development standards (as amended by the Project) and MM AG-1 would reduce potentially significant impacts to agricultural preserves and zoning conflicts. However, the proposed amendments and MM AG-1 do not require decommissioning within a certain time frame. Additionally, landowners may elect to cancel or unenroll Williamson Act contracts to develop Tier 3 or 4 facilities without being subject to the Uniform Rules. Therefore, even with implementation of MM AG-1, impacts would remain significant and unavoidable.

With regard to cumulative impacts, the Project would allow solar energy development that could involve cumulative effects resulting in the loss of or conversion of agricultural lands to non-agricultural uses, or otherwise reduce productivity for remaining agricultural lands due to land use conflicts. Therefore, the Project, in combination with future development and related projects in the unincorporated County, would result in a potentially significant impact to agricultural resources. Even with implementation of MM AG-1, the Project would incrementally contribute to a cumulative loss of farmland and impacts would be cumulatively significant and unavoidable.

ES.3.3 Cultural Resources

Implementation of MMs CR-2 through CR-5 would reduce many of the potential direct and indirect adverse effects to archaeological and unique archaeological resources associated with the Project. However, given the high cultural sensitivity of the Project area, there is the potential for unintended impacts to unknown resources. Further, because the specific locations and designs for future projects are unknown at this time, impacts are considered significant and unavoidable.

Implementation of MMs TCR-1 through TCR-3 would reduce direct and indirect adverse effects to tribal cultural resources associated with Tier 2 solar energy system and Tiers 3 and 4 solar energy facility Projects. However, given the high sensitivity of the Project area, there is the potential for unintended impacts to unknown tribal cultural resources. Further, because the specific locations and designs for future projects are unknown at this time, impacts are considered significant and unavoidable. Similarly, implementation of MM PR-1 through PR-4 would reduce potential direct and indirect adverse effects to unique paleontological resources or sites, but due to the unknown number, locations, and designs of future Tier 3 and 4 facilities, impacts are considered significant and unavoidable.

Even with implementation of MMs CR-1 through CR-5 and similar anticipated mitigation requirements for related projects in areas of heightened sensitivity within unincorporated Santa Barbara County, the Project may still result in a cumulatively considerable contribution to archaeological and unique archaeological resources. With regard to tribal cultural resources, even with implementation of MMs TCR-1 through TCR-3 and similar anticipated mitigation requirements for related projects in areas of heightened sensitivity within unincorporated Santa Barbara County, the Project may still result in a cumulatively considerable contribution to tribal cultural resource impacts. Therefore, the Project would contribute to a significant and unavoidable cumulative impact. In addition, the incremental impact of the future solar energy facilities enabled by the Project, combined with those of the cumulative projects, could result in a cumulative impact on paleontological resources. Although, implementation of MMs PR-1 through PR-4 would lessen the Project's contribution toward cumulative effects on paleontological resources, impacts could be cumulatively considerable, and the impact would be significant.

ES.4 Summary of Project Alternatives

CEQA Guidelines section 15126.6(a) states that an EIR must describe and evaluate a reasonable range of alternatives to the project that could feasibly attain most of the project's basic objectives but avoid or substantially lessen any identified significant adverse environmental effects of the project. An EIR is not required to consider every conceivable alternative to a project or alternatives that are infeasible. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation.

CEQA also requires an EIR to evaluate a "no project" alternative to allow decision-makers to compare impacts of approving a project with the impacts of not approving it. The alternatives development process, alternatives eliminated from further consideration, and alternatives considered in the EIR are described in greater detail in Chapter 4, *Alternatives*.

ES.4.1 Alternative 1 – No Project Alternative

Consistent with Section 15126.6(e)(2) of the State CEQA Guidelines, the No Project Alternative represents what would be reasonably expected to occur in the foreseeable future if the Project were not adopted. Under the No Project Alternative, the proposed amendments discussed in Chapter 2 would not be approved. The proposed amendments to the County's Land Use Element, Coastal Land Use Plan, County LUDC, Montecito LUDC, Article II Coastal Zoning Ordinance, and Uniform Rules for Agricultural Preserves and Farmland Security Zones would not be incorporated into the County's plans

and codes. Given this, utility-scale solar facilities would only be allowed in the 600-acre overlay area, and the process for permitting and developing utility-scale solar systems would not be streamlined.

ES.4.2 Alternative 2 – Reduction of Solar on Williamson Act-Contracted Lands

Under Alternative 2, Reduction of Solar on Williamson Act-Contracted Lands, the location and requirements for Tier 1 and Tier 2 would be the same as under the Project. In general, Alternative 2 would limit or prevent the development of Tier 3 or 4 facilities within certain Williamson Act contracted lands, thereby reducing the overall acres that could be developed with Tier 3 and Tier 4 solar energy facilities. Alternative 2 would not allow Tier 3 and Tier 4 facilities in lands that qualify as a "Prime" contract under the County's Williamson Act Uniform Rules. Alternative 2 would allow solar energy facilities on some contracted lands designated as "Nonprime," however, Alternative 2 would have specific stipulations. Tier 3 and 4 facilities would be limited to agricultural preserve contract premises that total 500 acres or more, and Tier 4 facility footprints could not exceed 100 acres in size. In total, under Alternative 2, Tier 3 and Tier 4 facilities could be located on approximately 285,691 acres of Williamson Act-contracted land, which would represent a reduction of approximately 216,198 acres (or approximately 43 percent reduction) compared to the Project.

ES.4.3 Alternative 3: Removal of Utility-Scale Solar in Coastal Areas

Alternative 3, Removal of Utility-Scale Solar in Coastal Areas, would reduce the areas in the unincorporated County where utility-scale solar energy facilities (Tier 4) would be allowed. Under Alternative 3, only solar energy systems (Tiers 1 and 2) and community-scale solar energy facilities (Tier 3) would be allowed in the Coastal Zone. Under the Project, there are approximately 59,374 acres within the Coastal Zone where zoning amendments would allow Tier 1-4 facilities. There are no parcels zoned M-1, M-2, and M-CR in the Coastal Zone. None of the M-RP or PI zoned parcels in the Coastal Zone are large enough to support Tier 4 facilities. Some parcels zoned AG-I, AG-II, and PU would be large enough for Tier 4 facilities, under the Project. There are 5,955 acres zoned for AG-I, 53,066 acres zoned for AG-II, and 322 acres zoned for PU. Alternative 3 would prevent Tier 4 facilities from being developed within the Coastal Zone on these acreages, even if the zoning designation allowed for it and the parcel was large enough. In total, Alternative 3 would reduce the land available for Tier 4 facility development by eight percent.

ES.5 Summary of Environmental Impacts and Mitigation Measures

Pursuant to CEQA Guidelines Section 15123(b)(1), **Table ES-1**, *Summary of Impacts, Mitigation Measures*, *and Residual Impacts*, summarizes the environmental impacts of the Project and the required mitigation measures to eliminate or reduce the potential significant environmental impacts of the Project. The residual impact after mitigation is also identified. Detailed discussions of each of the identified impacts and mitigation measures, including pertinent support data, can be found in the specific resource section in Chapter 3 of this Program EIR.

TABLE ES-1
SUMMARY OF POTENTIAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
Aesthetics			
Impact AV-1: Future solar energy systems and facilities enabled and streamlined for permitting under the Project could potentially result in substantial adverse effects on public scenic vistas.	Potentially significant	**MM AV-1: Appearance and Measures to Reduce Visual Effects.** The County shall require Design Review approval for Tier 3 or 4 solar energy facilities proposed in a viewshed of a state or local scenic highway corridor. The applicant/owner shall provide for County review visual photo simulations, site plan, aerial imagery, and other materials of the proposed solar energy facility from key observation points as a site-specific evaluation to demonstrate from key perspectives the approximate appearance of a proposed facility and its related infrastructure. Locations for key observation points shall be determined through consultation with the County and land managers with jurisdiction, as appropriate, over the specific locations proposed. Site-specific actions may be enhanced or modified during project-specific County reviews and permitting for each facility proposed in the future. The following types of actions are appropriate for facility applicant/owner to consider to avoid, minimize, and mitigate potential aesthetics and visual quality impacts. In addition to visual simulation requirements, the applicant/owner shall submit a narrative to demonstrate how the appearance of solar facilities would not interfere with public scenic views. The application narrative shall describe the site-specific siting and design methods planned for the solar energy facility to demonstrate how the siting and design of the facility will reduce adverse visual impacts. Suggested siting and design considerations shall include, but are not limited to the following listed measures. Measures to reduce visual dominance in the landscape: • Avoid locating facilities where placement would alter the visual setting and reduce the historic significance or function. • Avoid locating facilities in areas of high scenic value or in scenic corridors, as identified in the County Comprehensive Plan. Site solar energy facilities outside the viewsheds of highly scenic value areas, scenic corridors, highly sensitive viewing locations, and/or areas with limited visual absorption capability and/or high scenic integrity. If they must be sited within viewsheds of scenic resources, they should be as far away as possible, as visual impacts generally diminish as viewing distance increases. • Preserve existing rocks, vegetation, and drainage patterns to the maximum extent possible. • Consult with the appropriate land management agencies, planning entities, Tribes, and the local public early to provide advanced input on the identification	Significant and unavoidable

TABLE ES-1
SUMMARY OF POTENTIAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		of important visual, historic, cultural or tribal cultural resources near a proposed facility site and on the siting and design process to foster communication with interested parties and rectify potential conflicts. Evidence of the applicant/project owner's consultation efforts may be requested by County staff to support permit applications. • Use GIS tools, the County Scenic Values Model, and visual impact simulations for conducting project level visual analyses (including mapping), analyzing the visual characteristics of landscapes, visualizing the potential impacts of facility siting and design. • Utilize topography and vegetation as screening devices to limit public views of the facility from visually sensitive areas. • Avoid siting near prominent landscape features (e.g., peaks and waterfalls, coastal scenic views). • Avoid siting higher profile structures on ridgelines, summits, or other locations where structures would be silhouetted against the sky from important viewing locations or scenic vistas. Avoid siting interconnections/gen-tie lines and access roads (associated with solar facilities) along ridge tops or through valley bottoms. • Site linear features to follow natural land contours rather than straight lines, particularly up slopes. Fall-line cuts should be avoided. Site facilities to take advantage of natural topographic breaks and avoid siting on steep slopes. • Where array fields would be bisected by public roadways, railways, trails, and other linear features used by the public, set the edges of the solar array fields on either side of the feature back enough so as not to create a visual "tunnel" effect. • In oak woodlands, chaparral areas or shrublands, linear facilities should follow the edges of clearings rather than pass through their center. Limit tree removal to the greatest extent feasible; openings in vegetation for facilities, structures, and roads should mimic the size, shape, and characteristics of naturally occurring openings. • Match the siting and design of facilities, structures, roads, and other elements with the existing landscape. Added features should be visually subordinate to the landscape. • Provide visual order and unity among clusters of solar panel arrays to avoid visual disruptions.	

TABLE ES-1
SUMMARY OF POTENTIAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		• Where screening topography and vegetation are absent, use natural-looking earthwork berms and vegetative or architectural screening to minimize visual impacts. Vegetative screening can be particularly effective along roadways. • Set structures, roads, and other facility elements as far back from road, trail, and river crossings as possible to avoid a visual tunnel effect and use vegetation to screen views from crossings. Measures for siting interconnections, gen tie lines and access roads: • Choose locations for interconnection and gen-tie line and right-of-way road crossings of other roads, streams, and other linear features within a corridor to avoid areas of high scenic value and other visually sensitive areas and to minimize disturbance to vegetation and landforms. The rights-of-way should cross linear features (e.g., trails, roads, and rivers) at right angles whenever possible to minimize the viewing area and duration. • Co-locate interconnector and gen-tie lines and roads within a corridor to use existing/shared rights-of-way, existing/shared access and maintenance roads, and other infrastructure, or place gen-tie lines underground in order to reduce visual impacts. Minimize the number of structures required or co-locate to share pads, fences, access roads, lighting, etc. • Choose low-profile structures for solar panels, ancillary buildings, and other structures to reduce their visibility in the landscape. • Minimize signage. Paint or coat reverse sides of signs to reduce color contrasts with the existing landscape. Verify that proposed signage conforms to community land use requirements and County codes. • Design structures and roads to minimize and balance cuts and fills. **MM AV-2: Measures to Reduce Construction-Related Visual Impacts.** The County shall require Tier 3 and 4 solar energy facilities to incorporate measures to reduce potential visual impacts from construction-related activities. The applicant/ owner shall incorporate the following measures into their site plans prior to permit approval and implement at the conclusion of construction as applicable. P&D staff shall confirm implementation of the measures prior to Final Building Inspection Clearance. • Restore disturbed surfaces to their original contours as closely as possible and revegetate immediately at the conclusion of construction and decommissioning. • Slash from vegetation removal should be mulched and spread to cover fresh soil disturbances (preferred) or should be buried. Topsoil from cut/fill activities should be segregated and spread on freshly disturbed areas to reduce color	

TABLE ES-1
SUMMARY OF POTENTIAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		contrast and aid rapid revegetation. Piles should not be left in sensitive viewing areas. • Round road-cut slopes and vary the cut/fill pitch to reduce contrasts in form and line. • Excess fill material should not be disposed of downslope in order to avoid creating color contrast with existing vegetation/soils. Minimize color and form contrast from fill piles. • Implement dust abatement measures in arid environments to minimize the impacts of vehicular and pedestrian traffic, construction, and wind on exposed surface soils.	
Impact AV-2: Future solar energy facilities enabled and streamlined for permitting under the Project could substantially damage scenic resources, such as trees and rock outcroppings within a local or State Scenic Highway corridors.	Potentially significant	**MM AV-1: Appearance and Measures to Reduce Visual Effects** **MM AV-2: Measures to Reduce Construction-Related Visual Impacts.**	Significant and unavoidable
Impact AV-3: The Project could potentially degrade the existing visual character or quality of public views of a site and its surroundings in rural areas or potentially conflict with zoning or other regulations governing scenic quality in urban areas, including policies and development standards in the County's Comprehensive Plan, Coastal Land Use Plan and Community Plans.	Potentially significant	**MM AV-1: Appearance and Measures to Reduce Visual Effects** **MM AV-2: Measures to Reduce Construction-Related Visual Impacts**	Significant and unavoidable
Impact AV-4: The Project could result in a new source of substantial light and glare that may adversely affect day or nighttime views.	Potentially significant	**MM AV-1: Appearance and Measures to Reduce Visual Effects** **MM AV-2: Measures to Reduce Construction-Related Visual Impacts** **MM AV-3: Measures to Reduce Reflection, Contrast, and Glare.** The County shall require Tier 3 and 4 solar energy facilities to minimize glare, color contrast, and reflectivity to the extent feasible. The applicant/owner shall incorporate the following measures into their construction and operational plans: • Paint grouped structures the same color to reduce visual complexity and color contrast. • Use materials and surface treatments that repeat and/or blend with the existing landscape.	Insignificant with mitigation

TABLE ES-1
SUMMARY OF POTENTIAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		• Use nonreflective paints and coatings on visible structures to reduce reflection and glare. Paint structures before or immediately after installation. • Use non-specular conductors and nonreflective coatings on insulators for interconnector and gen-tie lines, as appropriate. • Establish a toll-free number or website comment form for the public to report complaints related to glare from solar panels. If a complaint is received regarding glare from panels, investigate to determine whether the complaint is legitimate and whether the facility is the source of the glare. If it is determined that the facility is the source of glare and it is causing human health or safety hazards (e.g., road or air travel concerns), take all feasible measures to reduce the glare.	
Cumulative	Potentially significant	MM AV-1 though MM AV-3	Significant and unavoidable
3.2 Agriculture and Forestry Resources			
Impact AG-1: Future solar energy facilities enabled under the Project could potentially convert Prime Farmland, Unique Farmland, Farmland of Statewide or Local Importance to non-agricultural uses or otherwise impair agricultural land productivity.	Potentially significant	**MM AG-1: Decommissioning Plan Agricultural Viability Analysis.** For Tier 3 and 4 facilities proposed to be located on Prime Farmland, Unique Farmland, or Farmland of Statewide or Local Importance, (as defined by the California Department of Conservation), the owner/applicant shall perform a pre-project agricultural viability analysis to document the baseline conditions for agriculture and clarify planned solar or agrivoltaics development on the parcels. The analysis shall consist of a Land Evaluation and Site Assessment (LESA) for the subject parcels proposed for solar facility use. The analysis shall be prepared using the standard U.S. Department of Agriculture LESA system methodology (USDA 2022 or successor) or a similar method recognized by the U.C. Cooperative Extension or other locally recognized agricultural standard, subject to County approval. The analysis shall be submitted to the County and shall include, but not be limited to, the following information: • A list of crop history for the past 10 years, including a statement whether irrigated or dry farming practices were in effect; estimated annual water use and source (as applicable, if known). • Specify whether the land was used for organic farming; under organic certification; or if integrated pest management practices were utilized at the subject parcels. • Site photos; • A description of the proposed use of the parcels (or a site plan); • A brief description of neighboring land uses and access considerations;	Significant and unavoidable

TABLE ES-1
SUMMARY OF POTENTIAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		• A brief description of any proposed (planned) shared agricultural and solar site development (agrivoltaics use); and • The decommissioning plan shall require the planned conservation of topsoil (as part of the planned solar development) to reestablish agricultural viability following the solar facility term of use.	
Impact AG-2: Future solar facilities enabled under the Project would potentially conflict with existing zoning for agricultural use, or a Williamson Act contract.	Potentially significant	**MM AG-1: Decommissioning Plan Agricultural Viability Analysis.**	Insignificant with mitigation
Impact AG-3: Future solar facilities enabled under the Project could potentially involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use.	Insignificant	No mitigation required	Insignificant
Cumulative	Potentially Significant	**MM AG-1: Decommissioning Plan Agricultural Viability Analysis.**	Significant and unavoidable
3.3 Air Quality			
Impact AQ 1: Implementation of the Project would result in insignificant impacts in regard to conflict with or interference with the applicable air quality plan.	Insignificant	No mitigation required	Insignificant
Impact AQ 2: Implementation of the Project would result in an insignificant cumulatively considerable net increase of ROC, NO_X, or PM10 for which the SCCAB is in nonattainment for an applicable federal or state ambient air quality standard.	Insignificant	No mitigation required	Insignificant
Impact AQ 3: Implementation of the Project could expose sensitive receptors to substantial pollutant concentrations and impacts would be potentially significant.	Potentially significant	**MM AQ 1: Fugitive Dust Control.** Dust control measures outlined below shall be implemented where they are applicable and feasible. The list shall not be considered all-inclusive, and any other measures to reduce fugitive dust emissions not listed shall be encouraged. • *Land Preparation, Excavation and/or Demolition.* The following dust control measures shall be implemented:	Insignificant with mitigation

TABLE ES-1
SUMMARY OF POTENTIAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		a) Dust generated by the development activities shall be kept to a minimum with a goal of retaining dust on the site. b) During clearing, grading, earth moving, excavation, or transportation of cut or fill materials, use water trucks or sprinkler systems to prevent dust from leaving the site and to create a crust after each day's activities cease. c) During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. d) Wet down the construction area after work is completed for the day and whenever wind exceeds 15 mph. e) When wind exceeds 15 mph, have site watered at least once each day including weekends and/or holidays. f) Order increased watering as necessary to prevent transport of dust off-site. g) Cover soil stockpiled for more than two days or treat with soil binders to prevent dust generation. Reapply as needed. h) If the site is graded and left undeveloped for over four weeks, the Owner/ Applicant shall immediately: (i) Seed and water to re-vegetate graded areas; and/or (ii) Spread soil binders; and/or; (iii) Employ any other method(s) deemed appropriate by P&D or APCD. • *Site Construction.* After clearing, grading, earth moving and/or excavating is completed within any portion of the project sites, the following dust control practices shall be implemented: - Once initial leveling has ceased, all temporarily open and inactive soil areas within the construction site shall be (1) seeded and watered until plant growth is evident, (2) treated with a dust palliative, or (3) watered twice daily until soil has sufficiently crusted to prevent fugitive dust emissions. - Dependent on specific site conditions (season and wind conditions), revegetation shall occur in those areas so planned as soon as practical after installation of the solar panels. A native seed mix of grass and flowers shall also be added to the spread topsoil to enhance regrowth. - All active disturbed soil areas shall be sufficiently watered at least twice daily or have dust palliatives applied to prevent excessive dust. • *Vehicular Activities*. During all phases of construction, the following vehicular control measures shall be implemented: - On-site vehicle speeds on unpaved surfaces shall be limited to 15 miles per hour.	

TABLE ES-1
SUMMARY OF POTENTIAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		- All areas with vehicle traffic on unpaved surfaces shall be paved, treated with dust palliatives, or watered a minimum of twice daily. - Streets adjacent to the project sites shall be kept clean, and project-related accumulated silt shall be removed. - Access to the project sites shall be by means of an apron into the project sites from adjoining surfaced roadways. The aprons shall be surfaced or treated with dust palliatives. If operating on soils that cling to the wheels of vehicles, a grizzly, wheel washer, or other such device shall be used on the road exiting the project sites, immediately prior to the pavement, in order to remove most of the soil material from vehicle tires. **MM AQ-2: Valley Fever.** During heavy grading where the top 12 inches of soil would be disturbed, and in locations with potential Valley Fever fungal spores (i.e., disturbance of the top soil of undeveloped land to a depth of about 12 inches; dry, alkaline, sandy soils; virgin, undisturbed, non-urban areas; windy areas; and archaeological resources probable or known to exist in the area (Native American midden sites), construction contractors will comply with the following measures to reduce potential Valley Fever impacts: • Require crews to use respirators during project clearing, grading, and excavation operations in accordance with California Division of Occupational Safety and Health regulations. • Require that the cabs of grading and construction equipment be air-conditioned or enclosed with sufficient ventilation and particulate matter filtration systems. • Require crews to work upwind from excavation sites where possible. • Where acceptable to the fire department, control weed growth by mowing instead of disking, thereby leaving the ground undisturbed and with a mulch covering. • During rough grading and construction, ensure that the access way into the project site from adjoining paved roadways is paved or treated with environmentally safe dust control agents.	
Impact AQ 4: Implementation of the Project would not result in other emissions, such as odors, adversely affecting a substantial number of people.	Insignificant	No mitigation required	Insignificant
Cumulative	Potentially significant	**MM AQ-1: Fugitive Dust Control.** **MM AQ-2: Valley Fever.**	Insignificant with mitigation

TABLE ES-1
SUMMARY OF POTENTIAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
Biological Resources			
Impact BIO-1: Future solar energy facilities enabled for permitting under the Project could potentially result in a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	Potentially significant	**MM BIO-1: Construction Activities and Staging Areas for Tier 2 Solar Energy Systems.** All site preparation, ground disturbances, construction activities, staging of equipment, and structural development shall be limited to areas of the site that have been previously disturbed or are developed in order to avoid potential sensitive biological resources. The construction staging and equipment laydown areas shall be designated on the site plans. The construction staging and equipment laydown areas shall be located at least 100 feet from any sensitive biological resources. No field alteration to plans shall allow construction, storage or staging outside of these designated areas. The County shall incorporate the requirements of this mitigation measure as an objective development standard into the Utility-Scale Solar Ordinance prior to final adoption of the ordinance. P&D building inspectors and/or compliance monitoring staff shall ensure that construction staging and equipment laydown areas are confined to the areas designated on the site plans. **MM BIO-2: Nesting Birds.** For construction of all future Tier 2, Tier 3, and Tier 4 solar energy facilities, if the site provides suitable habitat for nesting birds, and construction is scheduled to commence during the avian nesting season (February 1–August 31 for songbirds, and January 15 to August 31 for raptors), then a qualified biologist(s) shall conduct two nesting bird surveys to identify any active nests within the work areas and a 500-foot buffer. The first survey shall occur within 7 days prior to initiation of construction activities, and the second survey shall occur no more than 72 hours prior to construction activities. Surveys shall be conducted at the appropriate time of day during appropriate weather conditions, as determined by a qualified biologist(s). Surveys shall encompass all suitable areas including trees, shrubs, bare ground, burrows, cavities, and structures. Survey duration shall take into consideration the size of the work area; density and complexity of the habitat; number of survey participants; survey techniques employed; and shall be sufficient for complete and accurate data collection. Pre-construction surveys shall focus on both direct and indirect evidence of nesting including nest locations and nesting behavior (e.g., copulation, carrying of food or nest materials, nest building, removal of fecal sacks, flushing suddenly from atypically close range, agitation, aggressive interactions, feigning injury or distraction displays, or other behaviors that indicate nesting). If a nest is suspected but not confirmed, the qualified biologist(s) shall establish a no-disturbance buffer until additional surveys can be completed or until the location can be inferred based on observations. The qualified biologist(s) shall not risk	Insignificant with mitigation

TABLE ES-1
SUMMARY OF POTENTIAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		failure of the nest to determine the exact location or status of the nest and will make every effort to limit potential predation as a result of the survey/monitoring efforts (e.g., limit number of surveyors, limit time spent at/near nest, scan the work areas for potential nest predators before approaching, immediately depart nest area if indicators of stress or agitation are displayed). If a nest is observed, but thought to be inactive, the qualified biologist(s) shall monitor the nest for one hour (four hours for raptors during the non-breeding season) prior to approaching the nest to determine status. The qualified biologist(s) shall use their best professional judgement regarding the monitoring period and whether approaching the nest is appropriate. If an active nest is detected, a suitable avoidance buffer shall be established by the qualified biologist(s) in the field. Construction activities shall not occur within the buffer until a qualified biologist(s) determines that the nest is no longer active (e.g., chicks have fledged). Appropriate buffer distances are generally 300 feet for passerine species and up to 500 feet for listed special-species and raptors; however, these may be increased or reduced at the discretion of the qualified biologist(s) depending on site-specific factors such as the location of the nest, species tolerance to human presence, and the types of construction-related noises, vibrations, and human activities that are expected occur. The buffer shall be delineated to ensure that its location is known by all persons working within the vicinity but shall not be marked in such a manner that it attracts predators. Once the buffer is established, the qualified biologist(s) shall document baseline behavior, stage of reproduction, expected fledge date, and existing work area conditions including vertical and horizontal distances from proposed work areas, visual or acoustic barriers, and existing level of disturbance. The qualified biologist(s) shall monitor the nest daily at the onset of construction activities and at the onset of any changes in construction activities (e.g., increase in number or type of equipment, change in equipment usage, etc.) to determine the efficiency of the buffer. If the qualified biologist(s) determines that construction activities may be causing an adverse reaction, the qualified biologist(s) shall adjust the buffers accordingly. If construction temporarily ceases for a period greater than 7 days, and activities expect to recommence during the avian nesting season, the work areas and 500-foot buffer shall be resurveyed. If nesting birds are present within 500 feet of the work areas, construction WEAP training shall be implemented by the qualified biologist(s) during construction activities to avoid or minimize potential impacts to nesting birds (see MM BIO-3: Construction Worker Environmental Awareness Program) and monitoring may be recommended for any work in the vicinity of nest avoidance buffers if determined necessary by the qualified biologist(s) (per MM BIO-8: Qualified Biological Monitor).	

TABLE ES-1
SUMMARY OF POTENTIAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		The applicant/owner, under the direction of the qualified biologist(s), may also take steps to discourage nesting within the work areas including moving equipment and materials daily, covering material with tarps or fabric, and securing open pipes and construction materials. The qualified biologist(s) shall ensure that none of the deterrent materials pose an entanglement risk to birds or other species. **MM BIO-3: Vegetation Mapping and Habitat Assessment.** Applicants for Tier 3 or Tier 4 solar energy facilities shall have a biological resource assessment prepared as part of the permit application, which shall include, at a minimum, vegetation mapping and a habitat assessment of the work area and 500-foot buffer conducted by a qualified biologist. Vegetation mapping shall be conducted using The Manual of California Vegetation, second edition (Sawyer, Keeler-Wolf, & Evens, 2009) or the most updated version. Any suitable habitat identified to support special-status plants, invertebrates, fish, amphibians, reptiles, birds, and/or mammals shall be identified and mapped. In addition, any sensitive natural communities, aquatic resources, wildlife corridors, habitat for nesting birds, and protected native trees shall be identified and mapped. If any suitable habitat for special-status species, suitable habitat for nesting birds, sensitive natural communities, aquatic resources, wildlife corridors, or protected trees is determined to be present within work areas or a 500-foot buffer, then siting of future Tier 3 or Tier 4 solar energy facility projects should avoid sensitive biological resources to the maximum extent feasible. Based on the site-specific conditions and the project-specific design proposed, one or more of the following mitigation measures shall be implemented, as applicable. **MM BIO-4: Special-Status Plant Species.** For construction of future Tier 3 or Tier 4 solar energy facilities, if suitable habitat for special-status plant species is identified to be present within work areas and/or a 500-foot buffer during the Habitat Assessment, a special-status plant survey of the work area and 500-foot buffer, focusing on the special-status plant species with a moderate to high potential to occur within the Project area (see Appendix C of the Program EIR), shall be conducted by a qualified biologist(s) prior to construction. The surveys shall take place during the appropriate blooming period for each species in accordance with CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (2018). If any special-status plant species are observed during the focused surveys, an appropriate setback buffer of at least 50 feet shall be established and delineated by a qualified biologist(s) and these species shall be avoided by construction activities. If avoidance of the special-status plant species is not feasible and impacts to special-status plants may be significant, a mitigation strategy for special-status plant species that may be impacted shall be developed by a qualified biologist.	

TABLE ES-1
SUMMARY OF POTENTIAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		The mitigation strategy may include partial avoidance; preservation; and/or on-site or off-site restoration, translocation, and/or seed collection to create a similar population (e.g., based on number of individual plants, similar density over area, or both). If restoration and/or translocation is needed, a restoration/revegetation plan must be prepared and approved by CDFW. At a minimum, the plan shall specify the following: • A summary of impacts; • The location of the mitigation site; • Methods for harvesting seeds or salvaging and transplanting individuals to be impacted; • Measures for propagating plants or transferring living plants from the salvage site to the mitigation site; • Site preparation procedures for the mitigation site; • A schedule and action plan to maintain and monitor the mitigation site; • Performance standards by which to measure the success of the mitigation; and • Contingency measures, such as replanting or weeding, if mitigation efforts are not successful. The Plan may also contain other conservation measures, such as the following: The upper four inches of topsoil during excavations shall be stockpiled separately and used to restore any disturbed areas. Actions shall be taken to ensure seedbank and topsoil remains viable for plant propagation (i.e., return to area in the same season as was removed, height of stockpiles minimized to the extent feasible, protect stockpiles from wind erosion or other damage, soil not treated with pesticides, and/or any cover, if added, would not result in soil sterilization). If construction results in potential direct or indirect impacts to endangered/ threatened plant species, the applicant/owner shall consult with USFWS and/or CDFW to ensure compliance with the Federal Endangered Species Act and/or California Endangered Species Act, which may include obtaining a "take" permit (e.g., Biological Opinion from USFWS, CESA Section 2081 Incidental Take Permit or CESA Section 2080.1 Consistency Determination from CDFW) and mitigation for permanent impacts (e.g., at a minimum mitigation-to-impact ratio of 1:1 or greater). **MM BIO-5: Construction Worker Environmental Awareness Program (WEAP).** For construction of future Tier 3 or Tier 4 solar energy facilities, if any sensitive biological resources (i.e., suitable habitat for special-status species, suitable habitat for nesting birds, sensitive natural communities, aquatic resources, wildlife corridors, or protected native trees are determined to be present within	

TABLE ES-1
SUMMARY OF POTENTIAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		future solar energy facilities sites and/or a 500-foot buffer during the Habitat Assessment, the applicant/owner shall retain a qualified biologist(s) to conduct a pre-construction WEAP training for all personnel entering the work area where sensitive species and/or their habitats may be present. The WEAP shall inform workers in recognizing special-status species, their habitat, regulated biological resources known to occur or to potentially occur within the future solar facilities sites, avoidance buffers and measures necessary to avoid and/or minimize potential impacts to biological resources, and what to do if the species is observed. • All personnel associated with construction shall attend the WEAP training prior to initiation of construction activities (including, but not limited to, site preparation, staging and mobilization, vegetation clearance/mowing/trimming, grading, and excavation). The training shall include information about the special-status species potentially occurring within the work areas, identification of special-status species and their habitats, a description of the regulatory status and general ecological characteristics of special-status species, and a review of the limits of construction and measures required to avoid and/or minimize impacts to biological resources within the work area. A fact sheet conveying this information and pertinent contacts shall also be prepared for distribution to all contractors, their employees, and other personnel involved with construction. • Interpretation shall be provided for non-English speaking workers. • All employees entering the work areas shall be required to sign a form provided by the qualified biologist(s) documenting they have attended the WEAP and understand the information presented to them. The signed form shall be provided to the applicant/owner as documentation of training completion. The crew foreman shall be responsible for ensuring crew members adhere to the guidelines and restrictions designed to avoid impacts to special status species and other regulated biological resources. If new personnel are brought onto the work area after completion of the initial WEAP training, the training shall be conducted for all new personnel before they enter the work area where sensitive species and/or their habitats may be present. **MM BIO-6: Invasive Plant Species Control Measures.** For construction of future Tier 3 or Tier 4 solar energy facilities, the applicant/owner shall conduct activities in a manner that prevents the introduction, transfer, and spread of invasive plant species from one work area and/or watershed to another. Prevention best practices and guidelines for controlling the spread of invasive plants can be found on the California Invasive Plant Council's website (https://www.cal-ipc.org/). The applicant/owner shall require construction contractors to ensure that equipment is free of invasive plant seeds, propagules, and any material which may contain them (e.g., soil). For purposes of this mitigation measure, invasive plant species	

TABLE ES-1
SUMMARY OF POTENTIAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		shall include all species with a Cal-IPC rating of moderate or high. Prior to entering the work areas, equipment shall be inspected to confirm it is free of mud, dirt, and debris. For larger work areas that would be accessed via non-paved roads, tire track stations shall be installed at the work area entrances and exits, where appropriate. Staging areas and access routes shall avoid weed infestations, and infestations within the work area(s) shall be flagged and avoided to the maximum extent feasible. Only certified weed-free materials (e.g., fiber rolls, straw, and fill) shall be used during construction of future solar energy facilities. Compliance reporting summarizing the invasive plant species control measures implemented for the project should be submitted to the County. **MM BIO-7: General Construction Best Management Practices.** For construction and decommissioning of all future Tier 3 or Tier 4 solar energy facilities, the applicant shall require construction contractors to adhere to the following general construction best management practices: • To minimize the risk of vehicle collisions with wildlife and minimize dust, construction vehicles shall limit speed to 10 miles per hour within the unpaved limits of construction. • All open trenches or excavations shall be fenced and/or sloped to prevent entrapment of wildlife species or have wildlife ramps available to allow for escape. • All food-related trash items such as wrappers, cans, bottles, and food scraps generated during construction activities shall be disposed of in closed containers only and removed daily from the work area. • No deliberate feeding of wildlife shall occur. • No pets shall be allowed within work areas. • No firearms shall be allowed within work areas. • Storage and staging areas shall be located outside of sensitive habitat and sensitive biological resources areas in accordance with the County's standard condition (i.e., storage areas shall be located at least 100 feet from any storm drain, waterbody, or sensitive biological resources). All vehicle and equipment maintenance shall be performed in designated staging areas. • Access to the construction area shall be limited to established work hours. • Construction activities shall not be conducted at night (i.e., between dusk and dawn) within 500 feet of sensitive biological resources or wildlife corridors. Any nighttime lighting needed (e.g., security lighting) shall be shielded and directed downwards to minimize light spillover and/or glare.	

TABLE ES-1
SUMMARY OF POTENTIAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		• All construction equipment used within work areas shall be properly maintained to avoid leaks of oil, fuel, or residues. • Construction contractors shall equip construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards to reduce construction equipment noise to the maximum extent possible. The construction contractor will place all stationary construction equipment so that noise emitted is directed away from sensitive biological resources, and stage equipment in areas that will create the greatest distance between construction-related noise sources and sensitive biological resources. • Provisions shall be in place to remediate accidental spills from construction equipment or other construction activities. All vehicle maintenance/fueling/staging shall occur a minimum of 100 feet away from any riparian habitat or water body. Suitable containment procedures shall be implemented to prevent spills. A minimum of one spill kit shall be available at each work location near riparian habitat or water bodies. • No equipment shall be permitted to enter wetted portions of any affected drainage channel unless authorized by a permit from USACE, RWQCB, and/or CDFW. • If the construction of future solar energy facilities has the potential to degrade water quality, water sampling shall be implemented to identify the pre-construction baseline, and to monitor during construction for comparison to the baseline. • Any worker who inadvertently injures or kills a special-status species or finds one dead, injured, or entrapped shall immediately report the incident to the construction foreman or biological monitor. The construction foreman or biological monitor shall immediately notify the applicant/owner, who then shall immediately inform CDFW. • Upon completion of construction of the future solar energy facilities, a qualified biologist(s) shall prepare a Final Compliance report documenting compliance activities implemented during construction, including the pre-construction survey results. **MM BIO-8: Qualified Biological Monitor.** For construction and/or decommissioning of future Tier 3 or Tier 4 solar energy facilities, the applicant/ owner shall retain a qualified biological monitor(s) with relevant experience with the biological resources and regulations in the County if any sensitive biological resources (i.e., suitable habitat for special-status species, suitable habitat for nesting birds, sensitive natural communities, aquatic resources, or protected native trees) are determined to be present within future solar facilities sites and/or 500-foot buffer during the Habitat Assessment. The qualified biologist(s) shall be	

TABLE ES-1
SUMMARY OF POTENTIAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		onsite during all ground-disturbing and vegetation removal activities in areas of sensitive biological resources. The qualified biologist(s) shall also monitor any implemented exclusion buffers for work occurring near sensitive biological resources weekly or as needed, and check potential, atypical, and known nests/ burrows/burrow complexes/dens every two weeks while construction activities are occurring within suitable habitat for special-status species. The qualified biologist(s) shall recommend appropriate setback buffers for protection of sensitive biological resources, where necessary, and shall have the authority to temporarily stop work if any special-status species are observed that may be impacted by construction activities. **MM BIO-9: Revegetation Plan.** For construction of future Tier 3 or Tier 4 solar energy facilities, for temporary impacts to natural communities to be returned to pre-work conditions, or for decommissioning, a Revegetation Plan(s) (one or more) shall be prepared by a qualified biologist(s) prior to starting construction of the future Tier 3 and Tier 4 facilities and shall be implemented by the applicant/owner following completion of construction. The Revegetation Plan shall guide and ensure successful restoration of self-sustaining habitats, and shall include, at a minimum, the following: • A native planting palette appropriate for each vegetation type being restored and appropriate to local conditions. • Qualitative and quantitative monitoring methods to ensure that performance standards are tracked and met for a minimum 3-year period or until pre-work conditions are restored to equivalent or better condition. **MM BIO-10: Listed Endangered/Threatened Wildlife Species.** For construction of future Tier 3 or Tier 4 solar energy facilities, if suitable habitat for listed endangered/threatened wildlife species are determined to be present within work areas and/or 500-foot buffer during the Habitat Assessment (including but not limited to suitable habitat for Crotch's bumble bee, vernal pool fairy shrimp, monarch butterfly, Kern primrose sphinx moth, tidewater goby, unarmored threespine stickleback, steelhead trout, California tiger salamander, arroyo toad, foothill yellow-legged frog, California red-legged frog, western spadefoot, southwestern pond turtle, blunt-nosed leopard lizard, tricolored blackbird, burrowing owl, western snowy plover, southwestern willow flycatcher, California condor, bald eagle, Belding's savannah sparrow, light-footed Ridgway's rail, bank swallow, California least tern, least Bell's vireo, Nelson's antelope squirrel, giant kangaroo rat, and San Joaquin kit fox), then protocol surveys shall be conducted by a qualified biologist(s) in accordance with the most recent applicable USFWS and/or CDFW protocol guidelines, if applicable (see CDFW's Survey and Monitoring Protocols and Guidelines (CDFW n.d.)). For listed special-status	

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Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		species that do not have established protocol survey guidelines, a focused survey methodology shall be established by a qualified biologist(s) in accordance with industry best practices and in coordination with USFWS and/or CDFW. Special-status species observed will be reported to the California Natural Diversity Database (CNDDB). If endangered/threatened wildlife species are observed during the protocol or focused surveys, an appropriate setback buffer (e.g., 500 feet or other appropriate buffer), as recommended by the qualified biologist, shall be established and the project design shall be sited to avoid direct and indirect impacts to occupied habitat to the maximum extent feasible. In addition to avoiding direct mortality of these endangered/threatened wildlife species and direct impacts to occupied habitats, additional avoidance and minimization measures may be required, including: • Conducting pre-construction surveys (e.g., within 7 days prior to initial ground disturbance or vegetation clearing, or multiple pre-construction surveys may be required if recommended by USFWS and/or CDFW). For endangered/threatened avian species, pre-construction surveys should at a minimum follow the County's Standard Condition Bio-23 that requires nesting bird surveys no more than one week (7days) prior to commencement of vegetation removal, grading, or other construction activities. • Requiring construction monitoring (e.g., conducting weekly surveys within suitable habitat and a 50-foot buffer for western snowy plover, and conducting daily preconstruction surveys and/or consistent monitoring for light-footed Ridgway's rail). • Establishing a suitable avoidance buffer around known territories (e.g., establishing a 250-foot avoidance buffer around suitable vernal pools and seasonal wetlands/swale habitat for California tiger salamander and/or western spadefoot, establishing a 700-foot avoidance buffer around tidal marsh area for the protection of light-footed Ridgway's rail, and establishing 100 foot buffers for dens and 200-foot buffers around natal dens for San Joaquin kit fox). • Restricting construction activities within suitable habitat (e.g., limiting construction activities within 250 feet of intermittent or perennial waterways suitable for California tiger salamander and/or arroyo toad to compacted soils immediately adjacent to the roadway with no burrows, and prohibiting disturbance of substrates within California tiger salamander and/or arroyo toad suitable habitat). • Restricting activities around certain times of year (e.g., limiting construction to May 1-Janurary 15 within suitable habitat for Kern primrose sphinx moth, limiting construction to May 1-October 31 within suitable upland and aquatic habitat for California tiger salamander and western spadefoot, limiting	

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SUMMARY OF POTENTIAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		construction to June 1-October 15 within 250-feet of suitable vernal pool and seasonal wetland/swale habitat for California tiger salamander and western spadefoot, limiting construction to May 1-October 31 within suitable habitat for California red-legged frog, limiting construction to September 1-January 31 within suitable habitat light-footed Ridgway's rail, limiting construction to September 1-January 31 within suitable habitat for burrowing owl, limiting construction to September 1-March 1 within suitable habitat for southwestern willow flycatcher, and limiting construction to September 1-February 28 within suitable habitat for western snowy plover). • Restricting activities during certain conditions (e.g., prohibiting construction activities in or adjacent to suitable light-footed Ridgway's rail habitat within two hours before or after high tides). If impacts cannot be feasibly avoided and construction could result in potential direct or indirect impacts to endangered/threatened wildlife species and/or occupied habitats, the applicant shall consult with USFWS and CDFW to ensure compliance with the Federal Endangered Species Act and/or California Endangered Species Act, which may include obtaining a "take" permit (e.g., Biological Opinion from USFWS, CESA Section 2081 Incidental Take Permit or CESA Section 2080.1 Consistency Determination from CDFW) and mitigation for permanent impacts to occupied habitat (e.g., at a minimum mitigation-to-impact ratio of 2:1 or greater). **MM BIO-11: Non-Listed Special-Status Wildlife Species.** For construction of future Tier 3 or Tier 4 solar energy facilities, if suitable habitat for non-listed special-status species is determined to be present within work areas and/or 500-foot buffer during the Habitat Assessment (including suitable habitat for American bumble bee, arroyo chub, Coast Range newt, northern California legless lizard, California legless lizard, California glossy snake, coastal whiptail, coast horned lizard, coast patch-nosed snake, two-striped gartersnake, Cooper's hawk, southern California rufous-crowned sparrow, grasshopper sparrow, golden eagle, Bell's sparrow, short-eared owl, ferruginous hawk, white-tailed kite, California horned lark, prairie falcon, American peregrine falcon, double-crested cormorant, California brown pelican, yellow warbler, pallid bat, Townsend's big-eared bat, western mastiff bat, western red bat, San Diego desert woodrat, Tulare grasshopper mouse, and American badger), then prior to construction within 500 feet of areas that could support non-listed special-status wildlife species, the following measures shall be applicable to the future solar energy facilities: • Pre-construction clearance surveys shall be conducted by a qualified biologist(s) within 7 days prior to the start of construction (including staging and mobilization). The surveys shall cover the entire work area plus a minimum	

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Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		200-foot buffer, if feasible, and shall identify all special-status wildlife species that may occur within work areas and/or 200-foot buffer. • If any special-status animal species are present within or near work areas, a WEAP training shall be implemented by the qualified biologist(s) during construction activities to avoid and/or minimize potential impacts to these species (see MM BIO-3: Construction Worker Environmental Awareness Program). • If any special-status animal species are present within or near work areas, an appropriate setback buffer, as recommended by the qualified biologist, shall be established. • A qualified biologist(s) shall be present during all initial ground disturbing activities, including vegetation removal. • All trenches, pipes, culverts or similar structures shall be inspected for animals prior to burying, capping, moving, or filling. At the end of each workday, excavations shall be secured with cover or a ramp to prevent wildlife entrapment. • Any non-listed special-status species observed by the qualified biologist(s) or construction crew shall be allowed to move out of harm's way or shall be relocated from the work area either through direct capture or through passive exclusion by a qualified biologist(s) with appropriate permits. • Any special-status species observed will be reported to the CNDDB. **MM BIO-12: Bats.** For construction of future Tier 3 or Tier 4 solar energy facilities, if suitable habitat for bat species is determined to be present within work areas and/or 500-foot buffer during the Habitat Assessment, then prior to construction within 500 feet of areas that could support bat species, the following measures shall be applicable to the future solar energy facilities: • To determine if daytime, nighttime, wintering (hibernacula), and/or maternity roost sites are present, a qualified biologist(s) with relevant experience and training shall conduct presence/absence surveys for bats during each season prior to the start of construction. Surveys shall be conducted during favorable weather conditions to understand the extent of bat usage. Each survey shall consist of one dusk emergence survey (start one hour before sunset and last for three hours) and one daytime visual inspection of all potential roosting habitats within work areas. Visual inspections shall focus on the identification of bat signs (i.e., individuals, guano, urine staining, corpses, feeding remains, scratch marks, and/or bats squeaking and chattering). Surveys shall be conducted using acoustic detectors and by searching tree cavities, crevices, and other areas	

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Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		where bats may roost. Bat detectors, bat call analysis, and visual observation shall be used during all dusk emergence surveys. • If active hibernacula or maternity roosts are identified in the work areas and/or 500-foot buffer, Project construction shall only occur between September 1 and March 31, outside of the maternity roosting season when young bats are present but are not yet ready to fly out of the roosts. Maternity roosts shall not be evicted, excluded, removed, or disturbed. A minimum 500-foot no-disturbance buffer shall be provided around hibernacula. Buffers shall remain in place until the end of construction activities or until a qualified bat biologist determines that the hibernacula are no longer active, and construction activities shall not occur between 30 minutes before sunset and 30 minutes after sunrise. Hibernacula roosts shall not be evicted, excluded, removed, or disturbed. • Exclusion devices may be installed to discourage bats from occupying the work areas outside of the maternity season in consultation with the CDFW. Netting shall not be used as an exclusion material. If a roost is determined by a qualified biologist(s) to be used by a large number of bats (large hibernaculum), bat boxes shall be installed near the work areas prior to installing exclusion devices. The number of bat boxes installed will depend on the size of the hibernaculum and shall be determined through consultations with the CDFW. If a maternity colony has become established, all construction activities shall be postponed within a 500-foot buffer around the maternity colony until it is determined by a qualified biologist(s) that the young have dispersed. Once it has been determined that the roost is clear of bats, the roost shall be removed immediately. • Any exclusion devices shall be designed to avoid entrapment of birds or bats and allow exit from, but not entry to, the exclusion area. Exclusion devices shall be installed between September 30 and February 1 and removed at the end of construction. A qualified bat biologist(s) shall be present upon exclusion device installation and repair to survey for and ensure that birds and bats are not trapped behind exclusion devices. • Exclusion monitoring shall occur daily by a qualified biologist(s)to determine effectiveness of devices. Any exclusion device repair must be completed within three days of observation under supervision of a qualified biologist(s) to ensure that bat entrapment does not occur. **MM BIO-13: Critical Habitat.** For construction of future Tier 3 or Tier 4 solar energy facilities on lands designated as critical habitat (see Draft Program EIR Figure 3.4-3), if critical habitat will potentially be impacted by construction, but there is no "federal nexus" (e.g., impacts to a federally listed species, impacts to USACE waters or wetlands, federal funding), then no further mitigation is	

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Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		necessary. However, if critical habitat will potentially be impacted by construction; there is a federal nexus; and the habitat to be impacted contains PCEs to support the federally-listed species (as defined in the Federal Register designating critical habitat for that species), then consultation with the USFWS shall be required and may include mitigation for permanent impacts to critical habitat (e.g., at a minimum mitigation-to-impact ratio of 1:1 or greater, or as determined by the USFWS).	
Impact BIO-2: Future solar energy facilities enabled for permitting under the Project could potentially result in a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.	Potentially significant	**MM BIO-1: Construction Activities and Staging Areas for Tier 2 Solar Energy Systems.** **MM BIO-3: Vegetation Mapping and Habitat Assessment.** **MM BIO-5: Construction Worker Environmental Awareness Program.** **MM BIO-6: Invasive Plant Species Control Measures.** **MM BIO-7: General Construction Best Management Practices.** **MM BIO-8: Qualified Biological Monitor.** **MM BIO-9: Revegetation Plan.** **MM BIO-14: Sensitive Natural Communities.** For construction of future Tier 3 or Tier 4 solar energy facilities, if any sensitive natural communities are determined to be present within work areas and/or 500-foot buffer during the Habitat Assessment, solar energy facilities shall be designed to avoid sensitive natural communities to the maximum extent feasible. Sensitive natural communities identified for avoidance shall be demarcated (e.g., using brightly colored flagging) and avoided during construction. The marked boundaries shall be maintained for the duration of construction activities in each work area and shall be clearly visible to personnel on foot and by heavy equipment operators. If sensitive natural communities can be avoided, then no further mitigation is necessary. If future solar facilities cannot be sited to avoid permanent impacts to sensitive natural communities, impacts to sensitive natural communities shall be mitigated by one of the methods mentioned below in a way that exceeds the biological value of that which is destroyed at a minimum 1:1 impact-to-mitigation ratio. This may include, but is not limited to: • The purchase of credits from a mitigation bank or in-lieu fee program; • On- and/or off-site land acquisition and preservation; and/or • On- and/or off-site creation, restoration, and/or enhancement of sensitive natural communities.	Insignificant with mitigation

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Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		If compensatory mitigation is to occur on- or off-site (i.e., not a mitigation bank or in-lieu fee program), a Sensitive Natural Community Mitigation and Monitoring Plan shall be prepared by a qualified biologist/restoration ecologist. The plan shall include details related to implementation requirements (e.g., seeding, planting, and/or staking of sensitive natural community species; salvage/dispersal of duff and seed bank; and/or removal of invasive, non-native species), performance standards, maintenance requirements, success criteria (e.g., less than 5 percent invasive species cover), and future monitoring requirements (e.g., five years of monitoring or until success criteria have been met).	
Impact BIO-3: Future solar energy facilities enabled for permitting under the Project could potentially result in a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means.	Potentially significant	**MM BIO-1: Construction Activities and Staging Areas for Tier 2 Solar Energy Systems.** **MM BIO-3: Vegetation Mapping and Habitat Assessment.** **MM BIO-5: Construction Worker Environmental Awareness Program.** **MM BIO-6: Invasive Plant Species Control Measures.** **MM BIO-7: General Construction Best Management Practices.** **MM BIO-8: Qualified Biological Monitor.** **MM BIO-9: Revegetation Plan.** **MM BIO-15: Aquatic Resources.** For construction of future Tier 3 or Tier 4 solar energy facilities, if any aquatic resources are determined to be present within work areas and/or a 500-foot buffer during the Habitat Assessment, an aquatic resources delineation shall be conducted to determine the limits of potential jurisdictional aquatic resources within the vicinity of the system or facility. The solar energy system or facility shall be designed to avoid aquatic resources to the maximum extent feasible. Aquatic resources and an appropriate avoidance buffer to be determined by a qualified biologist, which should be consistent with applicable County resource protection policies and with the County's Standard Condition Bio-07 that requires a habitat setback (e.g., typically 50 to 100 feet depending on the resource and project type) from either side of sensitive riparian habitat areas or as noted in the current Standard Conditions at the time of Project implementation, shall be demarcated (e.g., using brightly colored flagging) and avoided during construction. The marked boundaries shall be maintained for the duration of construction activities in each work area and shall be clearly visible to personnel on foot and by heavy equipment operators. If aquatic resources can be avoided, then no further mitigation is necessary. If aquatic resources will potentially be impacted by construction, then the appropriate regulatory permits shall be obtained (e.g., CWA Section 404 Nationwide	Insignificant with mitigation

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Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		Permit from the USACE, CWA Section 401 Water Quality Certification or Porter-Cologne Act Waste Discharge Requirement permit from the RWQCB, and Streambed Alteration Agreement permit under Section 1602 of the California Fish and Wildlife Code from the CDFW). The following would be incorporated, as a minimum, into the permitting, subject to approval by the regulatory agencies: • On- and/or off-site creation, restoration and/or enhancement of USACE/RWQCB jurisdictional wetlands, waters of the U.S., and/or waters of the State at a ratio no less than 2:1 for permanent impacts, and for temporary impacts, restore impact area to pre-work conditions (i.e., pre-work contours and revegetate with native species, where appropriate). Off-site creation, restoration, and/or enhancement at a ratio no less than 2:1 may include the purchase of mitigation credits at an agency-approved off-site mitigation bank or in-lieu fee program. • On- and/or off-site creation, restoration, and/or enhancement of CDFW/CCC jurisdictional streambed and associated riparian habitat at a ratio no less than 2:1 for permanent impacts, and for temporary impacts, restore impact area to pre-work conditions (i.e., pre-work contours and revegetate with native species, where appropriate). Off-site creation, restoration, and/or enhancement at a ratio no less than 2:1 may include the purchase of mitigation credits at an agency-approved off-site mitigation bank or in-lieu fee program.	
Impact BIO-4: Future solar energy systems and facilities enabled for permitting under the Project could interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	Potentially significant	**MM BIO-1: Construction Activities and Staging Areas for Tier 2 Solar Energy Systems.** **MM BIO-2: Nesting Birds.** **MM BIO-3: Vegetation Mapping and Habitat Assessment.** **MM BIO-5: Construction Worker Environmental Awareness Program.** **MM BIO-6: Invasive Plant Species Control Measures.** **MM BIO-7: General Construction Best Management Practices.** **MM BIO-8: Qualified Biological Monitor.** **MM BIO-9: Revegetation Plan.** **MM BIO-12: Bats.** **MM BIO-16: Wildlife Connectivity.** If the results of the Habitat Assessment identify a wildlife corridor or important habitat linkage within the work area and/or 500-foot buffer, then future solar energy facilities would be designed to include mitigation as determined by a qualified biologist, such a minimum setback of 100 feet or greater from the wildlife movement corridor or habitat linkage.	Insignificant with mitigation

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SUMMARY OF POTENTIAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
Impact BIO-6: Future solar energy systems and facilities enabled for permitting under the Project could conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.	Potentially significant	**MM BIO-1: Construction Activities and Staging Areas for Tier 2 Solar Energy Systems.** **MM BIO-2: Nesting Birds.** **MM BIO-3: Vegetation Mapping and Habitat Assessment.** **MM BIO-4: Special-Status Plant Species.** **MM BIO-5: Construction Worker Environmental Awareness Program.** **MM BIO-6: Invasive Plant Species Control Measures.** **MM BIO-7: General Construction Best Management Practices.** **MM BIO-8: Qualified Biological Monitor.** **MM BIO-9: Revegetation Plan(s).** **MM BIO-10: Listed Endangered/Threatened Wildlife Species.** **MM BIO-11: Non-Listed Special Status Wildlife Species.** **MM BIO-12: Bats.** **MM BIO-13: Critical Habitat.** **MM BIO-14: Sensitive Natural Communities.** **MM BIO-15: Aquatic Resources.** **MM BIO-16: Wildlife Connectivity.**	Insignificant with mitigation
Impact BIO-6: Future solar energy systems and facilities enabled for permitting under the Project could conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.	No impact	N/A	No impact
Cumulative	Potentially significant	MM BIO-1 through MM BIO-16	Insignificant with mitigation
Cultural, Paleontological, and Tribal Resources			
Impact CR-1: Future solar energy systems and facilities enabled under the Project could potentially result in an adverse change in the significance of a historical resource pursuant to Section 15064.5.	Potentially significant	**MM CR-1: Historical Resources.** The County's Standard Conditions of Approval require that a County P&D-qualified architectural historian be retained to perform significance assessments, identify appropriate preservation treatments, and document historic buildings as appropriate (CulRes-10 and CulRes-11). A County P&D-qualified architectural historian should be retained in order to implement MM CR-1. Qualified architectural historians meet or exceed the Secretary of the	Insignificant with mitigation

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SUMMARY OF POTENTIAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		Interior's Professional Qualification Standards in architectural history and/or history and are listed on the County's Pre-Approved Consultant List. ***Tier 1 and 2*:** Prior to issuance of a building permit for a Tier 1 or Tier 2 solar energy system, County P&D staff shall identify properties with structures or features that are 50 years in age or older for review as follows: • Should a property be determined to be listed on the National Register of Historic Places, California Register of Historical Resources, as a County Landmark or Place of Historic Merit, alterations should follow the County's Standard Conditions of Approval CulRes-10 and CulRes-11 as appropriate. • Should a property over 50 years in age not have been previously identified as a historic resource, unless waived by the Director, a Phase 1 historic resources evaluation shall be prepared by a P&D-qualified architectural historian to determine if the property meets the eligibility standards as a historic resource, pursuant to CEQA in accordance with the County's Environmental Thresholds process for significance determination of historic sites/resources. If a property is determined not to be a historic resource as part of the historic resources evaluation, a Building Permit may be issued. • Should a property be determined eligible as a historic resource, then a Phase 2 assessment shall be prepared by a P&D-qualified architectural historian to ensure that proposed Tier 1 and Tier 2 modifications will not impact the historic integrity of the building and would be in conformance with the County's Environmental Thresholds and Guidelines Manual process for significance determination of historic sites/resources (including Appendix B to the Manual regarding Fieldwork and Reporting Guidelines for Cultural Resources). A Phase 2 study for Tier 1 and 2 installations may be waived by the P&D Director based upon the Phase 1 evaluation conclusions. ***Tier 3 and 4*:** As part of the permit review process for Tier 3 or Tier 4 solar energy facility projects, properties should be reviewed to determine if a listed historic resource, or a potentially eligible historic resource is present within a 0.50-mile radius of the property for proposed Tier 3 and Tier 4 solar energy facilities. Based on the applicant/owner prepared site plan available databases and repositories shall be reviewed in order to determine whether known historic resources and/or potential historic districts are located within a 0.50-mile radius of the proposed site. Listed historic resources in the Project area include those as on the National Register of Historic Places, California Register of Historical Resources, or are a County Landmark or Place of Historic Merit. Additional recorded built environment databases, including the BERD, County database, and CCIC data should be consulted to determine if a property has previously been identified as an eligible or potentially eligible historic resource at the project level.	

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Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		• Should a property with structures or features over 50 years in age not have been previously identified as a historic resource, a Phase 1 historic resources evaluation shall be prepared by a P&D-qualified architectural historian to determine if the property meets the eligibility standards as a historic resource, pursuant to CEQA. Should a property be determined eligible as a historic resource, be listed as on the National Register of Historic Places, California Register of Historical Resources, as a County Landmark or Place of Historic Merit, or be located within a 0.5-mile radius of an identified historical resource and be subject to Project impacts, then a Phase 2 letter report shall be prepared by a P&D-qualified architectural historian to ensure that proposed Tier 3 and Tier 4 solar energy facilities will not impact the historic integrity of the resource and would be in conformance with the County's Environmental Thresholds process for significance determination of historic sites/resources after the following are analyzed: - Realign or redesign the proposed solar energy facility to avoid impacts on known historic resources where possible. The solar energy facility shall be designed in such a way that disturbance to the building and/or site will be minimally intrusive to historic resources. When possible, new solar facilities should be sited in such a manner as to avoid visual intrusion from the property's public right-of-way. New facilities proposed to be located within or adjacent to historic resources (including buildings, structures, landscapes, districts, and sites) should be constructed, operated, and maintained in such a way that will be minimally intrusive to the historic resource and will not damage or destroy the resource's character-defining features. Further, when installing solar energy facilities within a 0.50-mile radius of historic properties, historic resource avoidance and installation guidance from the National Park Service's technical guidance entitled "Solar Panels on Historic Properties" should be followed and the Secretary of the Interior's Standards for the Treatment of Historic Properties (Standards) are encouraged to be reviewed to ensure that proposed -installations are consistent with Standards 9 and 10. - If avoidance of a significant architectural/built environment resource is not feasible, Phase 3 mitigation for historic resources shall be implemented, in conformance with the County's Environmental Thresholds process for significance determination of historic sites/resources. Additional mitigation options may include, but are not limited to, documentation of the resource, specific design and siting plans for historical resources and historic districts, or in the case of Tier 3 and 4 solar energy facilities, plans for alteration or adaptive re-use of a historical resource that are in conformance with County Standard Conditions of Approval CulRes-10 and CulRes-11.	

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SUMMARY OF POTENTIAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
Impact CR-2: Future solar energy systems and facilities enabled under the Project could potentially result in an adverse change in the significance of an archaeological or unique archaeological resource pursuant to Section 15064.5.	Potentially significant	**MM CR-2: Stop Work at Encounter.** The applicant/owner or contractors shall stop or redirect work immediately in the event archaeological remains are encountered during grading, construction, landscaping or other construction-related activity. The applicant/owner shall immediately contact P&D staff and retain a P&D-approved archaeologist and Native American representative to evaluate the significance of the find in compliance with the provisions of the County Archaeological Guidelines and conduct appropriate mitigation funded by the applicant/owner. **MM CR-3: Cul Phases 1, 2, and 3.** For proposed Tier 2 projects proposing ground disturbance in previously undeveloped areas, and for all Tier 3 and 4 solar energy projects, all ground disturbances shall be subject to a Phase 1 archaeological survey in compliance with the provisions of the County Archaeological Guidelines. If significant resources are encountered and potential impacts are unavoidable, the applicant/owner shall have a P&D approved archaeologist prepare and complete a Phase 2 subsurface testing program in coordination with P&D. If the Phase 2 program finds that one is warranted, the applicant/owner shall have a P&D approved archaeologist prepare and complete a Phase 3 data recovery excavation consistent with County Archaeological Guidelines. All work shall be funded by the applicant/owner. The applicant/owner shall submit the required archaeological studies for P&D review and approval. The applicant/owner shall include as notes or depictions all plan components, graphically depicting all those related to earth movement, construction, and temporarily and/or permanently installed protection measures. Any required archaeological studies shall be submitted to P&D prior to the issuance of grading/building permits. The applicant/owner shall install any required resource protection measures or carry out required recovery onsite prior to issuance of grading/building permits and the pre-construction meeting. **MM CR-4: Cultural Resource Monitor.** If warranted, based on the results of the Phase 1 and 2 cultural resource investigations, for proposed Tier 3 and Tier 4 solar energy projects, the applicant/owner shall have all earth disturbances including scarification and placement of fill within the archaeological site area monitored by a P&D approved archaeologist and a Native American consultant in compliance with the provisions of the County Archaeological Guidelines. Prior to the issuance of grading/building permits, the applicant/owner shall submit for P&D review and approval, a contract or Letter of Commitment between the Owner/Applicant and the archaeologist, consisting of a project description and scope of work, and once approved, shall execute the contract. The Owner/Applicant shall provide P&D compliance monitoring staff with the name and contact information for the assigned on-site monitor(s) prior to grading/building permit issuance and pre-construction meeting. P&D compliance monitoring staff shall confirm monitoring	Significant and unavoidable

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SUMMARY OF POTENTIAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		by archaeologist and Native American consultant and P&D grading inspectors shall spot check field work. **MM CR-5: Cultural Resource Buffer.** If the Phase 1 and 2 cultural resource investigations identify the presence of an archaeological site in the project vicinity, the applicant/owner shall temporarily fence the archaeological site and 50 foot buffer area with chain link fencing flagged with color or other material authorized by P&D where ground disturbance is proposed within 100 feet of the site and a buffer. P&D compliance monitoring staff shall verify installation of fencing by reviewing photo documentation or by site inspection prior to approval of grading permits and ensure fencing remains in place throughout grading and construction through site inspections.	
Impact CR-3: Future solar energy systems and facilities enabled under the Project could potentially disturb human remains, including those interred outside of dedicated cemeteries.	Potentially significant	**MM CR-6: Encountering Human Remains.** For proposed Tier 2, 3, and 4 solar energy projects, the applicant/owner or contractors shall stop or redirect work immediately in the event human remains are encountered during earthwork, grading, construction or other construction-related activity. If human remains are discovered, the County Coroner must be notified within 48 hours, and no further disturbance to the site shall take place where the remains were found. If the remains are determined by the coroner to be Native American, the coroner is responsible for contacting the California Native Heritage Commission (NAHC) within 24 hours. The NAHC, pursuant to PRC Section 5097.98, will immediately notify those persons it believes to be most likely descended from the deceased Native Americans so they can inspect the burial site and make recommendations for treatment or disposal.	Insignificant with mitigation
Impact CR-4: Future solar energy systems and facilities enabled under the Project could potentially result in an adverse change in the significance of a Tribal Cultural Resource pursuant to Section 15064.5.	Potentially significant	**MM TCR-1: Retention of a Native American Representative.** The applicant/ owner shall retain a P&D-approved Native American Representative to carry out all mitigation related to tribal cultural resources as required for proposed Tier 2, 3 and 4 solar energy projects in accordance with MMs CR-2 through CR-5. For Tier 2 solar energy system projects, this is limited to the circumstances in which MM CR-2 is applicable (i.e., unanticipated discovery of an archaeological or unique archaeological resource that may qualify as tribal cultural resource as well as known tribal cultural resources) and shall be conducted pursuant to the language therein. For Tier 3 and 4 solar energy facility projects, this shall occur prior to the commencement of ground-disturbing activities, and a tribal cultural resources sensitivity training session shall be held for those construction personnel who will be directly involved in the ground disturbing activities. The training session shall be carried out by the P&D-approved Native American Representative or their appointee and shall focus on how to identify tribal cultural resources that	Significant and unavoidable

TABLE ES-1
SUMMARY OF POTENTIAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		may be encountered during ground disturbing activities and the procedures to be followed in such an event. **MM TCR-2: Native American Monitor.** For Tier 3 and 4 solar energy facility projects, the Native American Representative or their appointee shall conduct Native American monitoring during project-related ground disturbance in accordance with MM CR-4 above. Native American monitoring shall include the completion of daily monitoring logs that provide descriptions of the relevant ground-disturbing activities observed by the monitor; the types of construction activities performed; locations of ground-disturbing activities; soil types; cultural-related materials; and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs shall identify and describe any discovered tribal cultural resources, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs shall be provided to the County upon written request to the Tribe. **MM TCR-3: Tribal Cultural Resource Buffer.** For Tier 3 and 4 solar energy facility projects, in the event of a discovery of potential tribal cultural resources, the County P&D-approved Archaeologist identified in MMs CR-2 and CR-3 [after consultation with the Native American Monitor] shall have the authority to temporarily divert, redirect, or halt ground-disturbance activities to allow identification, evaluation, and potential recovery of such potential resources. After consulting with the Native American Monitor and the County, the P&D-approved Archaeologist shall establish an appropriate buffer area in accordance with industry standards, reasonable assumptions regarding the potential for additional discoveries in the vicinity, and safety considerations for those making an evaluation and potential recovery of the discovery. This buffer area shall be established around the find where ground-disturbing activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. Within three (3) business days of such discovery, a meeting shall take place between the Qualified Archaeologist, the Tribe, and the County to discuss the significance of the find and whether it qualifies as a tribal cultural resource pursuant to Public Resources Code Section 21074(a). If, as a result of the meeting and after consultation with the Tribe and the P&D-approved Archaeologist, the County determines, based on substantial evidence, that the resource is in fact a tribal cultural resource, the P&D-approved Archaeologist shall develop a reasonable and feasible treatment plan, with input from the Tribe as necessary, and with the concurrence of the County. The treatment measures in the treatment plan shall be in compliance with any applicable federal, State, or local laws, rules or regulations.	

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Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		The treatment plan shall also include measures regarding the curation of the recovered resources. The applicant/owner or contractor may recommence ground disturbance activities inside of the specified radius of the discovery site only after it has complied with all of the recommendations developed and approved pursuant to the process set forth in the above paragraphs. The recovered tribal cultural resources may be placed in the custody of the Tribe, who may choose to use them for their educational purposes or they may be curated at a public, non-profit institution with a research interest in the materials. If neither the Tribe nor an institution accepts the resources, they may be donated to a local school or historical society in the area for educational purposes. Notwithstanding the above paragraph, any information determined to be confidential in nature by the County, shall be excluded from submission to the CCIC or the general public under the applicable provisions of the California Public Records Act, Sections 7927.000 and 7929.005.	
Impact CR-5: Future solar energy systems and facilities enabled under the Project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	Potentially significant	**MM PR-1: Paleontological Resources.** Prior to permit issuance for proposed Tier 3 and 4 solar energy projects, if paleontological resources are predicted using the standards of the Society of Vertebrate Paleontology (2010) in locations in which the solar energy facilities would be located, recommendations shall be implemented, which may include, but would not be limited to, the following: • The Applicant shall retain a paleontologist who meets the Society of Vertebrate Paleontology's (SVP, 2010) definition for qualified professional paleontologist (Qualified Paleontologist) to carry out all mitigation related to paleontological resources. • Prior to the start of ground-disturbing activities, the Qualified Paleontologist or their designee shall conduct construction worker paleontological resources sensitivity training for all construction personnel. Construction personnel shall be informed on how to identify the types of paleontological resources that may be specifically encountered in the rock units in the construction area, the proper procedures to be enacted in the event of an inadvertent discovery of paleontological resources, and safety precautions to be taken when working with paleontological monitors. **MM PR-2: Paleontological Monitoring.** If necessary, for proposed Tier 3 and 4 solar energy projects, paleontological monitoring shall be conducted during ground-disturbing activities in those regions identified has having a high potential to host significant paleontological resources. Monitoring shall be conducted by a qualified paleontological monitor (SVP, 2010) working under the direct supervision of the Qualified Paleontologist. Monitoring shall consist of visually	Significant and unavoidable

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Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		inspecting fresh exposures of rock for larger fossil remains and, where appropriate, collecting sediment samples to wet or dry screen to test promising horizons for smaller fossil remains. If the Qualified Paleontologist determines that full-time monitoring is no longer warranted, based on the specific geologic conditions at the surface or at depth, the Qualified Paleontologist may recommend that monitoring be reduced to periodic spot-checking or cease entirely. **MM PR-3: Procedures for Paleontological Resource Recovery.** If a potential fossil is found, the paleontological monitor shall be allowed to temporarily divert or redirect grading and excavation activities in the area of the exposed fossil to facilitate evaluation of the discovery. A buffer area pf 50-foot radius shall be established around the find where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. If a fossil is determined to be significant, the Qualified Paleontologist shall implement a paleontological salvage program to remove the resources from their location, following the guidelines of the SVP (2010). Any fossils encountered and recovered shall be prepared to the point of identification, catalogued, and curated at a public, non-profit institution with a research interest in the material and with retrievable storage, such as the Santa Barbara Museum of Natural History or the Natural History Museum of Los Angeles County, if such an institution agrees to accept the fossils. If no institution accepts the fossil collection, they shall be donated to a local school in the area for educational purposes. Accompanying notes, maps, and photographs shall also be filed at the repository and/or school. If construction personnel discover any potential fossils during construction while the paleontological monitor is not present, regardless of the depth of work or location, work at the discovery location shall cease in a 50-foot radius of the discovery until the Qualified Paleontologist has assessed the discovery and recommended and implemented appropriate treatment as described earlier in this measure. **MM PR-4: Paleontological Resource Monitoring Report.** At the conclusion of paleontological monitoring, the Qualified Paleontologist shall prepare a report summarizing the results of the monitoring and salvage efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance. The report shall be submitted by the implementing agency to the relevant repository, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the project and required mitigation measures.	
Cumulative	Potentially significant	MMs CR-1 through CR-6, MMs TCR-1 through TCR-3, and MMs PR-1 through PR-4	Significant and unavoidable

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SUMMARY OF POTENTIAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
Energy			
Impact ENG 1: Implementation of the Project could result in a potentially significant environmental impact if energy (electricity, natural gas, or transportation) used during construction or operation results in the wasteful, inefficient, or unnecessary consumption of energy resources	Insignificant	No mitigation required	Insignificant
Impact ENG 2: Implementation of the Project could conflict with or obstruct a state or local plan for renewable energy or energy efficiency if, during construction or operation, the Project doesn't comply with applicable rules or regulations, resulting in a significant impact.	Insignificant	No mitigation required	Insignificant
Cumulative	Insignificant	No mitigation required	Insignificant
Greenhouse Gas Emissions			
Impact GHG 1: Implementation of the Project could generate GHG emissions, directly or indirectly, that exceed the County of Santa Barbara or SBCAPCD screening thresholds or significance thresholds resulting in a significant impact on the environment.	Potentially significant	**MM GHG-1:** For Tier 3 and Tier 4 solar energy facilities, construction and decommissioning GHG emissions shall be evaluated based on project-specific information and compared to the County of Santa Barbara Environmental Thresholds and Guidelines Manual brightline threshold as applicable. If project-level emissions exceed the applicable threshold, GHG emissions shall be reduced to below the threshold. Any reduction of GHG emissions used for compliance purposes (e.g., carbon credits) must be real, permanent, quantifiable, verifiable, enforceable, and additional pursuant to Health and Safety Code (HSC) §38562(d)(1) and (2). Project applicants shall submit to County Planning and Development for review and approval documentation on GHG quantification, contractor equipment and fuel specifications, or other documents to ensure GHG reductions are consistent with HSC §38562(d)(1) and (2). Measures to reduce emissions shall include, but not be limited to, one or more of the following: • Use commercially available and feasible low or zero carbon technology construction equipment and/or trucks or vehicles in place of diesel-fueled models. Example technologies may include compressed natural gas, electric, hybrid-electric, fuel cell, or other commercially available technologies. Feasible means the equipment, trucks, or vehicles are capable of performing the construction activities in a comparable manner to diesel-fueled models (with respect to time, safety, equipment power requirements, etc.) and which results in appreciable GHG reductions.	Insignificant with mitigation

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Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		• Purchase carbon credits from a reputable carbon market. Priority should be given to those credits generated within the County of Santa Barbara, and in decreasing preference, credits generated within the region, in-state, and out-of-state. • Measures that result in appreciable GHG reductions such as, but not limited to: reducing truck trips or trip lengths for material hauling and transport, reducing construction worker commuting trips or trip lengths, or other similar types of measures.	
Impact GHG 2: Implementation of the Project would not contribute to cumulative GHG impacts since the Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.	Insignificant	No mitigation required	Insignificant
Cumulative	Insignificant	No mitigation required	Insignificant
Hazards and Hazardous Materials			
Impact HAZ-1: Future solar energy systems and facilities enabled under the Project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	Insignificant	No mitigation required	Insignificant
Impact HAZ-2: Future solar energy systems and facilities enabled under the Project could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	Insignificant	No mitigation required	Insignificant
Impact HAZ-3: Future solar energy systems and facilities enabled under the Project could emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	Insignificant	No mitigation required	Insignificant

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SUMMARY OF POTENTIAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
Impact HAZ-4: Future solar energy systems and facilities enabled under the Project could be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, could create a significant hazard to the public or the environment.	Potentially significant	**MM HAZ-1: Site Management Plan.** If there is evidence of potential contamination during the application process for a Tier 3 or Tier 4 solar energy project, and at the discretion of the County, an Environmental Site Assessment shall be performed to provide due diligence. For all future solar energy systems and facilities, if contaminated soils or hazardous conditions are incidentally discovered during construction of a solar energy system or facility, the applicant shall prepare a Site Management Plan that identifies measures, including treatment, or excavation and removal of on-site contaminated soils, and needed redistributions of clean fill material on the project site, that shall be implemented prior to or as part of the development of the solar energy project. The plan shall include measures to ensure the safe transport, use, and disposal of contaminated soil and building debris removed from the site. If ground-disturbing activities encounter contaminated groundwater during dewatering activities, the construction contractor shall report the contamination to the appropriate agencies and either treat the extracted groundwater to remove the contaminants before discharge into the sanitary sewer system, or dispose of the dewatering effluent at an offsite facility permitted to accept the waste. The appropriate federal, state, and local agencies shall be notified if evidence of previously undiscovered soil or groundwater contamination (e.g., undocumented underground storage tanks (USTs), stained soil, stressed vegetation, or soil and/or groundwater with odors suggesting contamination) is identified during construction. Any contaminated areas shall be cleaned up in accordance with the recommendations of the Regional Board, DTSC, or other appropriate federal, state, or local regulatory agencies. The construction contractor shall comply with the Site Management Plan and applicable federal, state, and local laws. The Site Management Plan shall outline specific procedures for handling and reporting of hazardous materials, and for disposing of hazardous materials removed from the site at an appropriate off-site facility.	Insignificant with mitigation
Impact HAZ-5: Future solar energy systems and facilities that would occur as a result of the Project that are located within an airport land use plan or within two miles of a public airport or public use airport could result in a safety hazard or excessive noise for people residing or working in the project area.	Potentially significant	**MM HAZ-2: FAA Traffic Coordination Plan.** Applicants of solar energy facilities that utilize helicopters to install gen-tie lines within an airport influence area or within two miles of a public airport shall coordinate with the Federal Aviation Administration (FAA) prior to Project construction to develop an FAA Traffic Coordination Plan. The applicant shall prepare the FAA Traffic Coordination Plan based on consultation with the FAA and any applicable Airport Land Use Compatibility Plans. The FAA Traffic Coordination Plan may include flight restrictions and coordination efforts prior to the commencement of any transmission line construction and operational maintenance activities. The FAA shall approve the Traffic Coordination Plan prior to the commencement of construction.	Insignificant with mitigation

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Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
Cumulative	Potentially significant	**MM HAZ-1: Site Management Plan.** **MM HAZ-2: FAA Traffic Coordination Plan.**	Insignificant with mitigation
Land Use and Planning			
Impact LU-1: While the Project would allow solar energy systems and facilities in areas throughout the County, the Project would not divide an established community. Impacts would be insignificant with mitigation.	Insignificant	No mitigation required	Insignificant
Impact LU-2: The proposed zoning amendments and related development enabled and streamlined for permitting under the Project would not conflict with applicable County land use plans, policies, or regulations.	Insignificant	No mitigation required	Insignificant
Impact LU-3: The proposed zoning amendments and related development would not cause adverse quality-of-life effects on existing communities due to loss of privacy, neighborhood incompatibility, traffic, noise, or loss of sunlight/solar access.	Insignificant	No mitigation required	Insignificant
Cumulative	Insignificant	No mitigation required	Insignificant
Noise			
Impact NOI 1: Future solar energy facilities enabled by the Project could generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	Potentially significant	**MM NOI-1: Pile Driving Noise.** For future solar energy system and facility projects with pile driving activities occurring within 50 feet of noise-sensitive receptors, temporary construction noise barriers shall be installed at the project site boundary or adjacent to pile driving equipment such that the barriers interrupt the line-of-sight to noise-sensitive receptors as practicable. The temporary barriers shall be made of a solid material or affixed with sound-deadening blankets or curtains. Open access points or gates shall be permissible to allow for adequate and safe worker, vehicle, and equipment access to the construction area and pile driving area. **MM NOI-2: Construction Hours.** For all Tier 2, Tier 3, and Tier 4 Projects, the owner/applicant, including all contractors and subcontractors shall limit construction activity, including equipment maintenance and site preparation, to the hours between 8:00 a.m. and 5:00 p.m. (or as otherwise specified in Community Plan/Area: Montecito 7:00 a.m. and 4:30 p.m.; Hope Ranch 8:00 a.m. and 5:00 p.m.;	Insignificant with mitigation

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Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		Eastern Goleta Valley 8:00 a.m. and 5:00 p.m. if within 1,600 feet of a sensitive receptor; Toro Canyon 8:00 a.m. and 5:00 p.m. if within 1,600 feet of a residential receptor; Orcutt 7:00 a.m. and 4:00 p.m.; Los Alamos 7:00 a.m. and 4:00 p.m. or 8:00 a.m. and 5:00 p.m. if project is within 1,600 ft. of a sensitive receptor) Monday through Friday. No construction shall occur on weekends or State holidays. Non-noise generating interior construction activities such as plumbing, electrical, drywall and painting (which does not include the use of compressors, tile saws, or other noise-generating equipment) are not subject to these restrictions. Any subsequent amendment to the Comprehensive General Plan, applicable Community or Specific Plan, or Zoning Code noise standard upon which these construction hours are based shall supersede the hours stated herein. **MM T-1: Construction Traffic Control Plan.**	
Impact NOI 2: Future solar energy facilities enabled under the Project could result in a potentially significant impact regarding groundborne vibration damage to structures and human annoyance from construction and operation.	Potentially significant	**MM NOI-2: Construction Hours.** **MM NOI-3: Pile Driving Vibration.** Future solar energy system and facility projects are required to limit pile driving activities to at least 60 feet away from any off-site buildings or structures.	Insignificant with mitigation
Impact NOI 3: Future solar energy facilities enabled under the Project would not result in workers being exposed to excessive noise levels from a private airstrip or airport.	Insignificant	No mitigation required	Insignificant
Cumulative	Potentially significant	MM NOI-1: Pile Driving Noise, MM NOI-2: Construction Hours, MM NOI-3: Pile Driving Vibration, and MM T-1: Construction Traffic Control Plan	Insignificant with mitigation
Transportation			
Impact T-1: The Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	Insignificant	No mitigation required	Insignificant
Impact T-2: The Project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).	Insignificant	No mitigation required	Insignificant
Impact T-3: The Project would not substantially increase hazards due to a geometric design feature or incompatible uses.	Insignificant	No mitigation required	Insignificant

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Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
Impact T-4: The Project could result in inadequate emergency access.	Potentially significant	**Mitigation Measure T-1: Construction Traffic Control Plan.** As required by the County for Tier 3 and 4 solar facilities and as determined necessary for Tier 2 solar systems, the applicant shall prepare and implement a traffic control plan to reduce construction-related impacts on roadway operation, safety hazards, alternative transportation, parking, and emergency access. Construction traffic control plans typically include the following components, which shall be included as necessary depending on the scale of the project: 1. A street layout showing the location of construction activity and surrounding streets that designates detour routes to avoid or minimize to the extent practicable travel on residential or neighborhood streets, including special signage. 2. A tentative start date and construction duration period for each phase of construction. 3. The name, address, and emergency contact number for those responsible for maintaining the traffic control devices during the course of construction. Additionally, the construction traffic control plan should include the following components, as necessary: 1. Provide access for emergency vehicles at all times. 2. Avoid creating additional delay at intersections currently operating at congested conditions, either by choosing routes that avoid these locations or limiting construction activities to nonpeak hours. 3. Maintain access for driveways and private roads, except for brief periods of construction, in which case property owners will be notified. 4. Provide adequate off-street parking areas at designated staging areas for construction-related vehicles. 5. Maintain pedestrian and bicycle access and circulation during construction where safe to do so. If construction encroaches a sidewalk, a safe detour will be provided for pedestrians at the nearest crosswalk. If construction encroaches on a bike lane, warning signs will be posted that indicate bicycles and vehicles are sharing the roadway. 6. Use traffic controls that include flag persons wearing Occupational Safety and Health Administration-approved vests and using a “Stop/Slow” paddle to warn motorists of construction activity. 7. Maintain access to transit services and ensure that public transit vehicles are detoured.	Insignificant with mitigation

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Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		8. Post standard construction warning signs in advance of the construction area and at any intersection that provides access to the construction area. 9. Post construction warning signs in accordance with local standards or those set forth in the California MUTCD (Caltrans 2010) in advance of the construction area and at any intersection that provides access to the construction area. 10. During lane closures, notify local police and fire departments, Sherriff, and Office of Emergency Management of construction locations to ensure that alternative evacuation and emergency routes are designed to maintain response times during construction periods, if necessary. 11. Provide written notification to contractors regarding appropriate routes to and from construction sites, and weight and speed limits for local roads used to access construction sites. Submit a copy of all such written notifications to the local agencies with jurisdiction.	
Cumulative	Potentially significant	**MM T-1: Construction Traffic Control Plan.**	Insignificant with mitigation
Utilities and Service Systems			
Impact UT-1: Future solar energy facilities enabled under the Project could require relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power or telecommunication facilities, the construction of which could cause significant environmental effects	Insignificant	No mitigation required	Insignificant
Impact UT-2: Future solar energy facilities enabled under the Project could result in a water demand in excess of local or regional supplies.	Potentially significant	**MM UT-1: Water Supply Assessment.** Utility-scale solar energy facilities (Tier 4) proposed on sites with a footprint of 40 acres (or larger) in size shall demonstrate that the project's water demand can be met through local or regional supplies. The applicant/owner shall provide a Can and Will Serve letter or other similar commitment from the water provider or a water supply assessment (WSA). The WSA shall be subject to County review and shall demonstrate that the project would have sufficient water supplies available to serve the project's operational water demand and reasonably foreseeable future development during normal, dry, and multiple dry years over a 20-year projection. The WSA shall meet the standards outlined by Senate Bill (SB) 610 and California Water Code 10912 (or updated State requirements as applicable) and include analysis of reasonable effects on surface and groundwater supplies. A WSA associated with a project must include a discussion of the availability of an identified water supply under	Insignificant with mitigation

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Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
		normal-year, single-dry-year, and multiple-dry-year conditions over a 20-year forecast, accounting for the projected water demand of the project in addition to other existing and planned uses of the identified water supply.	
Impact UT-3: Future solar energy facilities enabled under the Project would not generate demand for wastewater treatment in exceedance of local or regional wastewater systems' capacity.	Insignificant	No mitigation required	Insignificant
Impact UT-4: Future solar energy facilities that would occur under the Project could generate solid waste in excess of state or local standards or in excess of the capacity of local infrastructure, impair the attainment of solid waste reduction goals, and potentially conflict with federal, state, or local management and reduction statutes and regulations related to solid waste.	Potentially significant	**MM UT-2: Solid Waste Management and Diversion Plan.** The applicant/owner shall prepare and submit a solid waste management and diversion plan to the County for review and approval before the start of construction and decommissioning (as applicable). The solid waste diversion plan shall outline how the applicant/owner will sort, measure, and record the disposal of solid waste to ensure that at least 65 percent of inert materials will be recycled, reused, or otherwise diverted from the landfill. The plan shall detail reporting requirements to the County. Measures in the plan shall include, but not be limited to, the following: • Training for construction workers in materials recycling; • Provision of space and/or bins for appropriate storage of recyclable materials on-site; • Establishment of a recyclable materials pick-up area; and • Development of a recordation system tracking tool that details and quantifies the amount of solid waste generated during construction, solid waste recycled, and solid waste delivered to the solid waste disposal facility. The tracking shall be reported on a monthly basis throughout construction to demonstrate the amount of solid waste generated by the project and the proportion diverted. If it is determined, through consultation with Santa Barbara County, that proposed construction and decommissioning activities would not trigger the project-specific threshold of 350 tons of solid waste, documentation of the consultation shall be provided to the County in lieu of the mitigation measure's solid waste diversion plan and reporting requirements.	Insignificant with mitigation
Cumulative	Potentially Significant	**MM UT-1: Water Supply Assessment.** **MM UT-2: Solid Waste Management and Diversion Plan.**	Insignificant with mitigation

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SUMMARY OF POTENTIAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
Wildfires			
Impact WF-1: The Project could substantially impair an adopted emergency response plan or emergency evacuation plan.	Potentially Significant	**MM T-1: Construction Traffic Control Plan.**	Insignificant with mitigation
Impact WF-2: The Project could exacerbate wildfire risk or uncontrolled spread of a wildfire.	Potentially Significant	**MM WF-1: Operational Site Safety Management Plan.** Prior to issuance of a building permit for the construction of a Tier 3 or 4 solar energy facility, an Operation Site Safety Management Plan shall be developed for review and approval by the appropriate fire district. This Plan shall include at minimum: • A program for regular inspections, proper storage practices, and maintaining fire suppression systems to ensure equipment is running properly. • Site specific vegetation clearance requirements. • Battery ESS fire-suppression techniques and trainings for first responders. • Fire Code review requiring a Fire Hazards Analysis for battery ESS over 70kW systems. **MM WF-2: Construction Ignition Risk Reduction.** During construction of Tier 3 or 4 solar energy facilities, measures shall be taken to mitigate the potential for brush or grass fires from use of heavy equipment, welding, vehicles with catalytic converters, etc. These requirements shall include, but are not limited to, the following: • All equipment with the potential to work off-road shall be equipped with appropriate mufflers and have extinguishers mounted on each vehicle; • Personnel shall be briefed on the dangers of wildfire and be able to respond accordingly should the need arise; • On-site supervisor(s) shall have a cell phone or other means of initiating a 911 response time in a timely manner in the event of a medical emergency and/or fire; • All dead and decadent vegetation immediately surrounding the facility should be removed and soil disturbance should be kept at a minimum; • Smoking shall be in a designated area and/or in enclosed cab only; • Hot work permit is required as needed; • A source of on-site water for emergency use shall be available on each construction site during construction.	Insignificant with mitigation
Impact WF-3: The Project would require infrastructure that could exacerbate fire risk.	Potentially Significant	**MM WF-2: Construction Ignition Risk Reduction.**	Insignificant with mitigation

TABLE ES-1
SUMMARY OF POTENTIAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS

Impact	Impact Classification	Mitigation Measure(s)	Residual Impact
Impact WF-4: The Project could expose people or structures to significant risks as a result of post-fire stability.	Potentially Significant	**MM WF-3: Erosion and Sediment Control Plan.** Where required by the latest edition of the California Green Code and/or Chapter 14 of the Santa Barbara County Code, a Storm Water Pollution Prevention Plan (SWPPP), Storm Water Management Plan (SWMP) and/or an Erosion and Sediment Control Plan (ESCP) shall be implemented as part of the development of Tier 3 or Tier 4 solar energy facilities. Grading and erosion and sediment control plans shall be designed to minimize erosion during construction and shall be implemented for the duration of the grading period and until re-graded areas have been stabilized by structures, long-term erosion control measures or permanent landscaping. The Owner/Applicant shall submit the SWPPP, SWMP or ESCP using Best Management Practices (BMP) designed to stabilize the site, protect natural watercourses/creeks, prevent erosion, convey storm water runoff to existing drainage systems keeping contaminants and sediments onsite. The SWPPP or ESCP shall be a part of the Grading Plan submittal and must be approved prior to issuance of grading permits.	Insignificant with mitigation
Cumulative	Potentially Significant	**MM T-1: Construction Traffic Control Plan.** **MM WF-1: Operational Site Safety Management Plan.** **MM WF-2: Construction Ignition Risk Reduction.** **MM WF-3: Erosion and Sediment Control Plan.**	Insignificant with mitigation

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CHAPTER 1
Introduction

1.1 Background and Project Overview

The County of Santa Barbara (County) is proposing the Utility-Scale Solar Amendments Project (Project) to expand the potential for renewable energy generation within the County. Through amendments to the County Land Use Development Code (LUDC), the Montecito LUDC (MLUDC), and Article II Coastal Zoning Ordinance (CZO), as well as amendments to the County's Uniform Rules for Agricultural Preserves and Farmland Security Zones (Uniform Rules), the Project proposes to allow the development of solar energy systems and facilities throughout the County. Amendments to the Comprehensive Plan, including the Coastal Land Use Plan, are also proposed.

In 2019, the County Board of Supervisors (Board) adopted the Strategic Energy Plan (SEP) to identify barriers to stimulate local renewable energy generation. The SEP identified opportunities for renewable energy development, including photovoltaic (solar energy) resources, as well as barriers to development. Given the opportunities available for renewable energy development in the County, solar energy generation provides a viable option to help the County meet its greenhouse gas emission reduction goals under the 2030 Climate Action Plan (50 percent below 2018 levels by 2030). In 2019, the unincorporated county supported approximately 43 megawatts (MW) of utility-scale solar generation, but the SEP identified the potential for up to 513 MW of utility-scale solar generation on agriculturally zoned lands alone (not including potential within other zoning designations). The SEP found that the County has the capacity for up to 2,925 MW of solar photovoltaic energy generated annually (from utility-scale and distributed/on-site solar systems combined).

For these reasons, the County proposes to remove the current land use overlay boundary restrictions, which limit utility-scale solar development to one 600-acre area. The County proposes to allow utility-scale solar as a conditionally permitted use on certain lands zoned for agriculture, light and general industry, public utilities, and professional and institutional uses. Specifically, the County's zoning ordinances would be amended to allow community- and utility-scale solar within the Professional and Institutional (PI), Agricultural I (AG-I), Agricultural II (AG-II), Public Utility (PU), Light Industry (M-1), General Industry (M-2), Industrial Research Park (M-RP), Coastal Related Industry (M-CR), and Coastal Dependent Industry (M-CD) zoning designations within the Inland Area and Coastal Zone portions of the unincorporated county. Smaller types of solar energy systems would generally be allowed in all zones.

The Project would include a tiered permitting structure to provide for a range of future utility-scale solar development and smaller types of solar generation systems and facilities. Depending upon the applicable zoning designation, location within or outside the Coastal Zone, and size of the proposed solar energy

system or facility, permitting options range from an exemption (no permit required), Zoning Clearance, or Land Use Permit/Coastal Development Permit to a Development Plan or Conditional Use Permit. As part of this Project, definitions for terms such as "community-scale solar energy facility" and "utility-scale solar energy facility" are also proposed. Additionally, this Project updates the County's ordinances to incorporate State regulations regarding the streamlining of solar energy systems (e.g., rooftop and ground-mounted on-site solar) and to clarify permitting of battery energy storage systems (ESS).

1.2 Purpose of the Program EIR and Legal Authority

The California Environmental Quality Act (CEQA) was enacted in 1970 by the California legislature to disclose to decision-makers and the public the potential significant environmental effects of proposed activities, including ways to avoid or reduce those effects by requiring the implementation of feasible alternatives or mitigation measures. CEQA applies to all California government agencies, including local agencies when making certain legislative acts and processing discretionary permits or other discretionary approvals for projects proposed by private applicants. As such, the County is required to undertake the CEQA process before deciding on a project. In accordance with Public Resources Code (PRC) Section 21067 and CEQA Guidelines Sections 15367 and 15050 through 15053, the County is the Lead Agency with authority and primary responsibility to perform the environmental review, including certification of a Program Environmental Impact Report (EIR). The CEQA statutes (PRC Section 21000 et seq.) and the CEQA Guidelines (CCR, Title 14, Section 15000 et seq.) codify the process and contents for the preparation of an EIR.

The basic purposes of CEQA include [14 CCR Section 15002(a)]:

1. Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities;
2. Identify ways that environmental damage can be avoided or significantly reduced;
3. Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the government agency finds the changes to be feasible; and
4. Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

The County's *Guidelines for the Implementation of the California Environmental Quality Act of 1970*, along with the County's *Environmental Thresholds and Guidelines Manual*, revised in 2024, provide definitions, procedures, and forms to implement CEQA and supplement the CEQA Guidelines for specific operations of the County (County of Santa Barbara 2021). The Manual is intended to assist the public, applicants, environmental consulting firms, and County decision-makers in understanding the use and application of various environmental impact thresholds as they relate to project proposals. The thresholds of significance in the manual are intended to supplement provisions in the CEQA Guidelines for the determination of significant environmental effects, including CEQA Guidelines Sections 15064, 15065, 15382, and Appendix G. This Program EIR applies the County's thresholds of significance where applicable, which are described in each environmental resource analysis subsection provided in *Chapter 4, Environmental Impact Analysis*.

This Program EIR evaluates the potential environmental impacts associated with the implementation of the Project, informs agencies and the public of related potentially significant environmental effects, evaluates reasonable alternatives, and sets forth mitigation measures and best management practices that would avoid or reduce any potentially significant impacts. While CEQA Guidelines Section 15021(a) requires that consideration be given to avoiding environmental damage, the Lead Agency (i.e., County) and other responsible public agencies must balance adverse environmental effects against other public objectives, including social and economic goals, in determining whether, and in what manner, a project should be approved.

1.3 Program-Level EIR Analysis

CEQA requires the preparation of an EIR to inform the public and decision-makers of the potential environmental effects of the proposed regulations. A Program EIR is used to evaluate a plan or program and its series of related activities, rather than a singular specific project. According to CEQA Guidelines Section 15151, an EIR, or specifically a Program EIR for this Project, "…should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences." This EIR is considered a Program EIR, and due to the expansive nature of the Project and its programmatic implementation, is characterized and examined as a Program EIR prepared pursuant to CEQA Guidelines Section 15168. As a Program EIR, the level of detail included in the Project Description and used in the impact analyses is relatively more general than a project-level EIR, as individual site-level and development-specific details are not available for specific projects. This approach allows the County to consider broad implications and impacts associated with the Project while not requiring a detailed evaluation of individual properties. This Program EIR may be incorporated by reference in subsequent project-specific CEQA review documents to describe regional influences, secondary effects, cumulative impacts, and other broad factors that apply to the Project as a whole.

This Program EIR evaluates the environmental impacts of anticipated activities resulting from the ordinance, Comprehensive Plan, and Uniform Rules amendments. The environmental analysis is based on the Project Description and sets forth mitigation measures where applicable, which will be incorporated into future projects as determined necessary by the County during project review.

1.4 Notice of Preparation and Scoping

Pursuant to the provision of CEQA Guidelines Section 15082, the County Planning and Development (P&D) Long Range Planning Division circulated a Notice of Preparation (NOP) and Scoping of an EIR to State, regional, and local agencies, and members of the public. The NOP was made available electronically on the County's website and published in the Santa Barbara Independent and the Santa Maria Times. The NOP comment period commenced on November 7, 2024, and ended on December 9, 2024. During this time, the County P&D Long Range Planning Division held a hybrid scoping meeting on Thursday, November 21, 2024, at 5:30 p.m. The scoping meeting was conducted in person at the Planning Commission Hearing Room at 123 E. Anapamu Street in Santa Barbara, and virtually through Zoom. While no members of the public attended the scoping meeting, the County received five comment letters provided by agencies, organizations, and individuals during the scoping comment period. The comments

primarily provided input on the potential environmental impacts and the associated scope of the Program EIR. ***Appendix A*** contains the NOP and Scoping Document, as well as comments received (CEQA Guidelines Section 15082). All of the comments have been considered in the preparation of this Program EIR. Comments are summarized in the Executive Summary, in the subsection entitled Areas of Controversy and Issues to be Resolved.

1.5 Scope of Program EIR Analysis

This Program EIR assesses the potential environmental impacts that could occur with the implementation of the Project. The Program EIR evaluates potentially significant direct, indirect, and cumulative effects of the Project related to the resource areas. The scoping process determined that the Program EIR should analyze the following resource areas:

- Aesthetics and Visual Resources
- Agricultural Resources
- Air Quality and Greenhouse Gas Emissions
- Biological Resources
- Cultural Resources and Tribal Cultural Resources
- Energy
- GHG Emissions
- Hazards and Hazardous Materials
- Land Use and Planning
- Noise
- Transportation
- Utilities and Service Systems
- Wildfire

The Program EIR addresses the resource areas above and identifies potential environmental impacts associated with the Project and recommends feasible mitigation measures, where necessary, that would avoid or reduce potentially significant environmental effects. Program EIR subsection 6.6, *Effects Found Not to Be Significant*, addresses other environmental issue areas not identified above, including Geology and Soils; Hydrology and Water Quality; Mineral Resources; Population and Housing; Public Services; and Recreation.

Consistent with CEQA Guidelines Section 15126.6, this Program EIR assesses a reasonable range of alternatives to the Project, including the No Project Alternative and alternatives that would feasibly attain most of the basic objectives while avoiding or substantially lessening one or more of the significant effects of the Project. (See Chapter 5, *Alternatives*, for detailed descriptions of the alternatives and the comparative analysis.)

1.6 Agencies and Roles

The Program EIR process for the Project involves the following agencies, as specified in the CEQA Guidelines:

TABLE 1-1
AGENCIES AND ROLES

Lead Agency	The County is the Lead Agency as it is the agency with principal responsibility for implementing the Project (CEQA Guidelines Section 15367). The County will consider approval of the Project and will issue permits for future solar energy system and facility projects.
Responsible Agencies	Additional agencies with approval authority over aspects of the Project include the California Coastal Commission (CEQA Guidelines Section 15381), California Department of Transportation (Caltrans), and the Central Coast Regional Water Quality Control Board (RWQCB).
Trustee Agencies	State agencies with general management authority over specified natural resources of the State of California when the resources may occur within the Project area, including the California Department of Fish and Wildlife (CDFW) and the California Department of Parks and Recreation (CDPR) (CEQA Guidelines Section 15386).
Other Interested Agencies	Additional agencies that may be interested in the Project and its impacts may include the California State Lands Commission, California Public Utilities Commission (CPUC), the United States Forest Service, and the cities of Santa Barbara, Goleta, Carpinteria, Lompoc, Buellton, Solvang, Guadalupe, and Santa Maria.

1.7 Environmental Review Process

The Program EIR process for the Project consists of the following steps, as specified in the CEQA Guidelines:

TABLE 1-2
ENVIRONMENTAL REVIEW PROCESS

Notice of Preparation (NOP) / Public Scoping Hearing	The County issued an NOP on November 7, 2024, to request comments on the scope of the Program EIR. The NOP was published online, in the Santa Maria Times, and in the Santa Barbara Independent, and circulated to relevant agencies, community organizations, and interested individuals. The NOP was also posted in the County Clerk's office for 30 days and sent to the State Clearinghouse at the Governor's Office of Land Use and Climate Innovation (OLCI) to solicit statewide agency participation in determining the scope of the Program EIR. A hybrid public scoping meeting was held in person and via Zoom on November 21, 2024. The 32-day public comment period closed on December 9, 2024. Appendix A contains the NOP, Scoping Document, and comments received during the review period, which were considered in preparing the scope of this Program EIR (CEQA Guidelines Section 15082).
Draft Program EIR and Public Review Period	The County has prepared this Draft Program EIR and will prepare and distribute a Notice of Availability (NOA) to relevant agencies and interested parties. The NOA will provide a notice of a minimum 45-day public review and comment period for the Draft Program EIR. The Draft Program EIR will be available on the County's website: https://www.countyofsb.org/792/Utility-Scale-Solar-Comprehensive-Plan and at both the County P&D office locations (CEQA Guidelines Section 15087), as well as made available to the public at the Santa Barbara Public Library and Santa Maria Public Library. During the public review period, the County will host a public hearing to present the Project and Draft Program EIR findings to the public and solicit comments.
Final Program EIR	The County will prepare a Final Program EIR, which includes this Draft Program EIR with any necessary revisions, public comments received on the Draft Program EIR, a list of persons and entities who commented, and written responses to comments submitted during the Draft Program EIR public review period.
Program EIR Certification, Findings, and Statement of Overriding Considerations	The County will certify that the Final Program EIR is completed in compliance with CEQA. According to PRC Section 21081, when the Program EIR identifies significant environmental impacts that may result from a project, the lead agency's decision-making body must make specific findings and adopt a Statement of Overriding Considerations (SOC). The SOC must provide specific reasons why the decision-makers have determined that the benefits of the project make its unavoidable adverse environmental impacts acceptable (CEQA Guidelines Sections 15091-15093).

TABLE 1-2
ENVIRONMENTAL REVIEW PROCESS

Mitigation Monitoring and Reporting Program (MMRP)	The County will adopt the MMRP to ensure that applicable mitigation measures are incorporated into future solar energy system and facility projects as part of Project implementation (CEQA Guidelines Section 15097).
Notice of Determination (NOD)	The County will file the NOD with the State Clearinghouse and the County Clerk within five working days of the agency's action on the Program EIR (CEQA Guidelines Section 15094).

1.8 Format of the Draft Program EIR

The content and organization of this Program EIR are designed to meet the current requirements of CEQA, as well as the County's *Guidelines for the Implementation of the California Environmental Quality Act of 1970*. The Program EIR is organized as follows:

Executive Summary (CEQA Guidelines Section 15123) provides an overview of the entire document in a concise, summarized format. It briefly describes the Project (location and Planning Area), the CEQA review process and focus, identifies effects found to be significant and unavoidable, identifies areas of controversy, provides a summary of the Project alternatives (descriptions and conclusions regarding comparative impacts), and provides a summary of Project impacts, mitigation measures, and the level of impact significance following implementation of mitigation measures.

Table of Contents (CEQA Guidelines Section 15122) provides a list of the contents included within the Program EIR.

Chapter 1, **Introduction**, provides an overview of the EIR process, describes the purpose and scope of this Program EIR, and outlines required EIR contents and the organization of the Program EIR.

Chapter 2, **Project Description (CEQA Guidelines Section 15124)**, describes the Project area, the Project Objectives, the scope of the Project, and the details of the Utility-Scale Solar Amendments' implementation as a basis for the environmental impact analysis.

Chapter 3, **Environmental Impact Analysis (CEQA Guidelines Sections 15125**, **15126.2**, **15126.4**, **and 15128)**, describes the existing environmental conditions and regulatory framework for each environmental resource area, methods and assumptions used in each resource area analysis, criteria for determining significance, impacts that would result from the Project, and feasible mitigation measures that would eliminate or reduce significant impacts for each of the environmental topic areas indicated above. This section also includes cumulative analyses to describe impacts that could occur from the combined effect of the Project with other past, present, and reasonably foreseeable future projects.

Chapter 4, **Alternatives (CEQA Guidelines Section 15126.6)**, evaluates the environmental effects of feasible project alternatives relative to the Project, including the required No Project Alternative. This section also identifies the environmentally superior alternative.

Chapter 5, **Other CEQA Considerations (CEQA Guidelines Section 15126.2)**, includes a discussion of environmental topic areas required by CEQA that are not covered in other chapters. This includes unavoidable adverse impacts, impacts found not to be significant, irreversible environmental changes, potential secondary effects caused by the implementation of the mitigation measures for the Project, and growth-inducing impacts.

Chapter 6, **References (CEQA Guidelines Section 15129)**, identifies the documents (printed and website references) and individuals (personal communications) consulted during the preparation of this Program EIR.

Chapter 7, **List of Preparers (CEQA Guidelines Section 15129)**, identifies the individuals and/or organizations involved in preparing this Program EIR.

Appendices provide information and technical studies that support the environmental analyses set forth in this PEIR, and include the NOP and Environmental Scoping Document and supporting technical information and analyses.

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CHAPTER 2
Project Description

2.1 Introduction

This chapter describes the proposed Utility-Scale Solar Amendments (Project) to be evaluated in this Program Environmental Impact Report (EIR). The County of Santa Barbara (County) proposes to amend land use plans and regulations to allow utility-scale[1] and smaller scales of solar energy development on land in unincorporated Santa Barbara County. As identified in the County's Strategic Energy Plan (SEP), the County has the capacity for up to 2,925 megawatts (MW) of solar photovoltaic energy generated annually from utility-scale and distributed/on-site solar systems combined (Strategic Energy Plan 2019). The Project would implement the County Board of Supervisors (Board) recommendation[2] to stimulate local renewable energy generation by allowing solar development in various areas of the County and by establishing a streamlined permitting process to promote utility-scale solar development to reach this potential. Subsequent to the Board's recommendation, the Project was enhanced to streamline permit requirements for a range of solar energy development, including: a new classification for "community-scale solar energy facilities;" clarifying existing permit requirements for battery energy storage systems, and streamlining existing requirements for smaller ground-mounted and rooftop solar energy systems with minimal or negligible land-use impacts.

2.2 Project Location

Santa Barbara County is located on the central coast of California. Encompassing approximately 2,734 square miles, it is home to 444,500 residents (U.S. Census Bureau 2025). Bordered by the Pacific Ocean to the west and south, San Luis Obispo County to the north, Ventura County to the east, and diagonally opposite to Kern County, Santa Barbara County is uniquely located. The County includes the incorporated cities of Buellton, Carpinteria, Goleta, Guadalupe, Lompoc, Santa Barbara, Santa Maria, and Solvang. The County retains land use regulatory authority over areas within the County that are outside of the incorporated cities, and other lands owned or managed by federal, state, or tribal governments. Section 2.3.1, *Planning Areas,* provides descriptions of distinct areas and communities within the unincorporated County. **Figure 2-1**, *Project Location (Unincorporated Santa Barbara County)*, shows the areas within the unincorporated County where solar energy systems and facilities are allowed or are proposed to be allowed.

[1] Existing Land Use and Development Code definition of Utility-Scale Solar Photovoltaic Facilities: Facilities that are connected to the electrical grid on the utility side of the electric meter and are built for the primary purpose of generating and selling wholesale power. The electricity generated by the facility is not primarily used for on-site activities (such as farming or domestic water heating).

[2] The Board provided direction to staff at their July 13, 2021, hearing.

The Project would be located within the Inland and Coastal Zone areas of unincorporated Santa Barbara County. It would not affect lands under the jurisdiction of the federal government (Los Padres National Forest and Vandenberg Space Force Base), the University of California, incorporated cities, and tribal governments.

As described in more detail in Section 2.4, *Project Components*, the solar energy systems and facilities would be categorized based on size. The smaller-scale systems (e.g., rooftop and small ground-mounted solar energy systems) would be categorized as Tier 1 or Tier 2. Tier 1 or 2 systems could occur on all unincorporated County lands, regardless of the zoning designation (see Figure 2-1). Larger solar energy facilities (e.g., community-scale and utility-scale) would be categorized as Tier 3 and Tier 4, respectively. Tier 3 or 4 facilities would be allowed on lands zoned for agriculture, public utilities, light or general industry, and professional or institutional uses, as shown on **Figure 2-2**, *Proposed Solar Facility (Tier 3 and 4) Zoning Amendment Areas*. See Section 2.4.2, *Zoning Ordinance Amendments*, for details on the proposed solar energy system and facility tiers.

2.3 Existing Setting

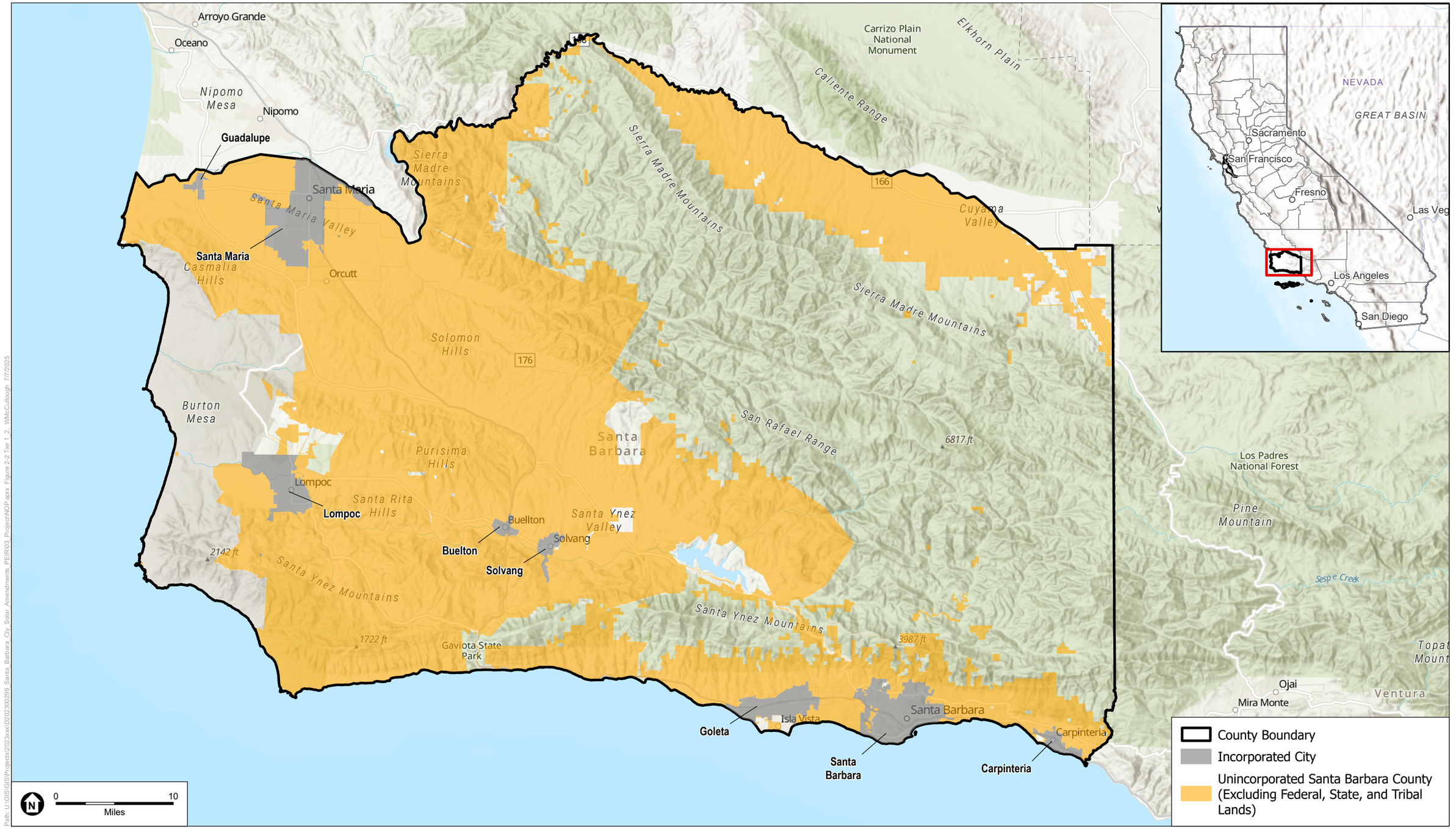
The environmental baseline for purposes of this Program EIR consists of the existing environmental and regulatory setting. The current conditions within the Project study area, as described within this section, are used as the baseline existing environmental conditions for the resource analyses in the Program EIR and are described as part of the affected environment for those resources in Chapter 3.

2.3.1 Planning Areas

Given the large, diverse nature of the County, the following provides a general depiction of the planning areas in which the amendments would allow for solar development. The descriptions provide existing conditions within these areas and similarities across regions to inform the environmental baseline. **Figure 2-3**, *Community Planning Areas,* shows the community plan areas described below.

Cuyama Valley

The Cuyama Valley is approximately 300 square miles and is bounded by the La Panza Range on the north, the Caliente Mountain Range on the northeast, and the Sierra Madre Mountains on the south and the west. At an elevation between 2,000 and 3,000 feet, the Cuyama Valley has a high desert climate with freezing winters and hot, dry summers. The majority of residents are housed at the Valley's lower elevations, near the Cuyama River. This rural region supports agricultural use and oil-related production and processing, with commercial, educational, industrial, recreational, and residential uses. Residents of the Cuyama Valley live within the unincorporated communities of Cuyama, New Cuyama, or Ventucopa, or on ranches and farms located outside the townsites and in the foothills. The Cuyama Valley can be accessed by the east-west California State Route (SR) 166, which connects the Cuyama Valley to the Pacific Coast through the City of Santa Maria. It can also be accessed on SR 33, which connects the Cuyama Valley to Ojai in Ventura County to the south, and Taft in Kern County to the north (Cuyama Valley Community Action Plan 2020).



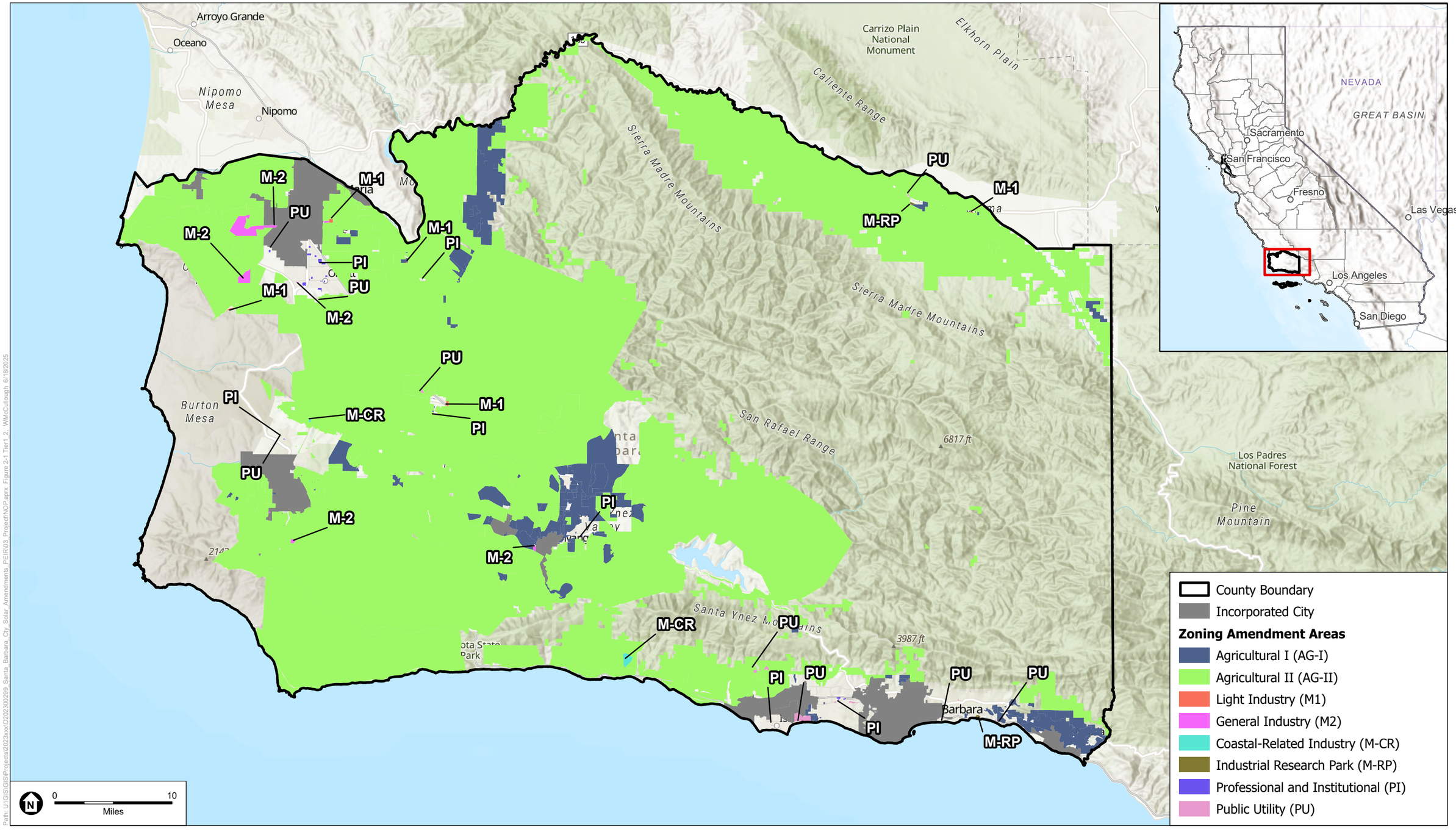
Path: U:\GIS\GIS\Projects\2023xxx\D202300299_Santa_Barbara_Cty_Solar_Amendments_PEIR\03_Project\NOP\aprx Figure 2-2 Tier 1_2_ WMcCullough 7/7/2025

SOURCE: ESA, 2024; County of Santa Barbara, 2024

Santa Barbara County Utility-Scale Solar Amendments

Figure 2-1
Project Location (Unincorporated Santa Barbara County)

ESA



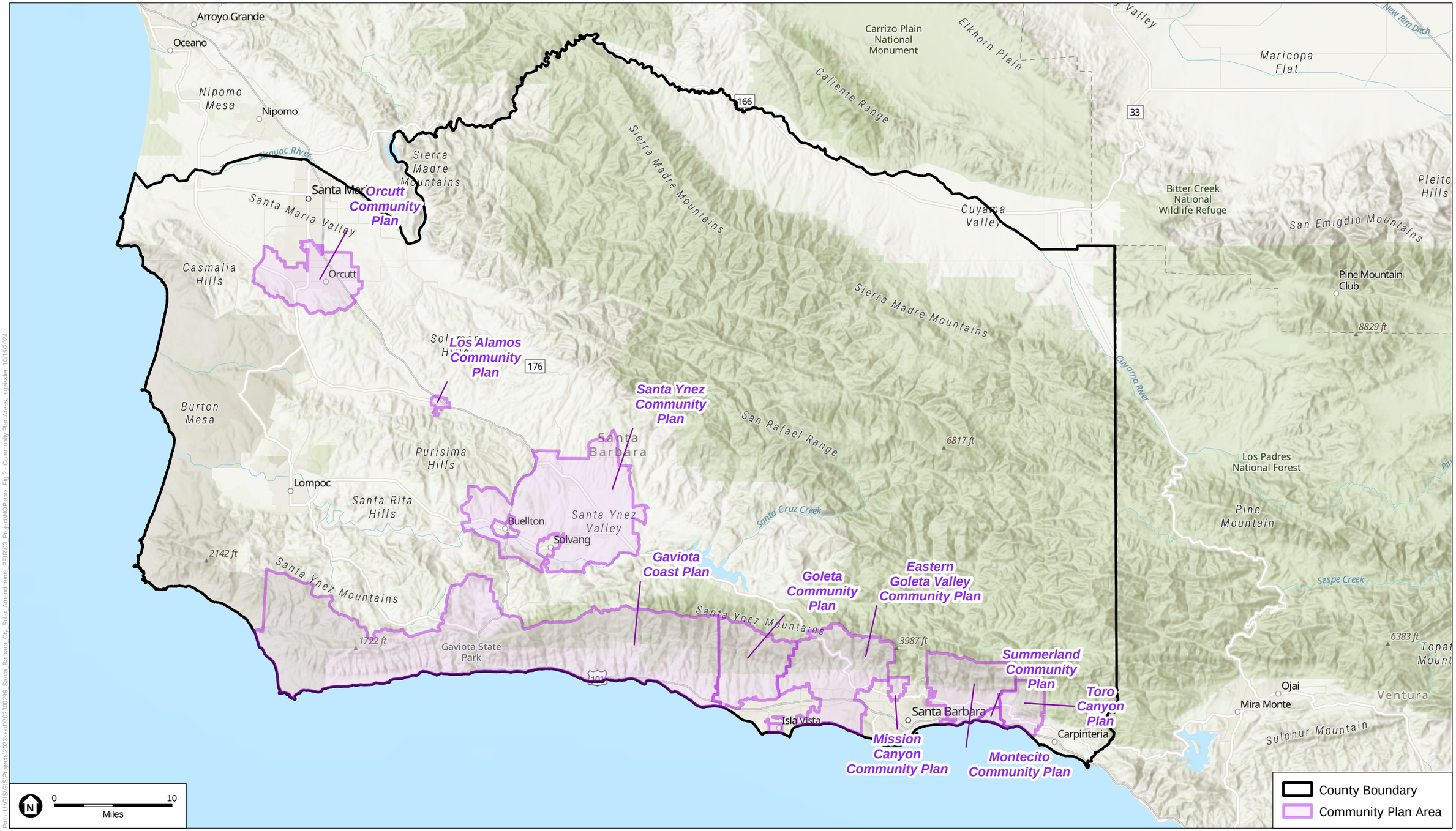
SOURCE: ESA, 2024; County of Santa Barbara, 2024

Santa Barbara County Utility-Scale Solar Amendments

Figure 2-2
Proposed Solar Energy Facility (Tier 3 and 4) Zoning Amendment Areas

ESA

Path: U:\GIS\GIS\Projects\2023xxx\D202300299_Santa_Barbara_Cty_Solar_Amendments_PEIR\03_Project\NOP.aprx Figure 2-1 Tier1_2_ WMcCullough 6/18/2025



SOURCE: ESA, 2024; County of Santa Barbara, 2024

Santa Barbara County Utility-Scale Solar Amendments

Figure 2-3
Community Plan Areas

ESA

Path: U:\GIS\GIS\Projects\2023xxx\D2023002299_Santa_Barbara_Cty_Solar_Amendments_PEIR\03_ProjectNOP\aprx_Fig 2 - Community Plan Areas_sgeisseler 10/15/2024

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There are currently two existing utility-scale solar energy facilities located within the Cuyama Valley. The Cuyama Solar Park is a 40MW solar energy generation facility, approved in 2014. The Cuyama Solar Park is owned and operated by First Solar and is located approximately two miles southeast of Cuyama and approximately two miles southwest of the Cuyama River. It operates on approximately 327 acres of agricultural land (State of California 2025). A second facility, the 20.44-acre SEPV Cuyama facility, was approved in January 2019.

Eastern Goleta Valley Community Plan Area

The Eastern Goleta Valley Community Plan Area is located along the County's southern coast. The Eastern Goleta Valley is approximately 23,300 acres in size. It spans from Camino Cielo Road in the Santa Ynez Mountains to the north to the Pacific Ocean in the south. Approximately 15,300 of these acres are within the designated Rural Area, and 7,900 acres are designated Urban Area. Approximately 36,000 residents live within the Eastern Goleta Valley area. The Eastern Goleta Valley contains agricultural and rural land uses, including urban agriculture, rural agriculture, and mountainous areas. Agricultural land and agricultural businesses play an important role in the Valley's economy by contributing agricultural production to the area's jobs and economic baseline. The foothills of the Eastern Goleta Valley support rural agriculture, typified by orchards, large parcel crop productions, and grazing land. The land use designations reflect a mix of established farms along the Urban/Rural Boundary and across the northern foothills (County of Santa Barbara 2017). With this, the area contains agriculture and low-density residential development in the foothills, along with urban and suburban residential development and limited commercial development in the valley floor. There is also agriculture closer to the coast, delineated by the various creeks (Atascadero, Cieneguitas, and Maria Ygnacio creeks).

Gaviota Coast Plan Area

The Gaviota Coast Plan Area is a topographically and ecologically diverse area consisting of rolling hills, valleys, coastal terraces, streams, coastal bluffs, estuaries, sandy beaches, and rocky shorelines transecting the landscape from the Santa Ynez Mountains to the Pacific Ocean. The rural coastline contains extensive open space and agricultural land composed of numerous watersheds. Agriculture is the predominant land use designation, comprising approximately 77,820 acres of the 101,200 acres within the area. The agricultural uses, primarily rangeland, are an important source of community identity and contribute to the rural character of the Gaviota Coast. In addition, the state-designated scenic corridor along Highway 101 features a diverse range of uses, including the Tajiguas Landfill, the former Mariposa Reina oil and gas processing facility, County fire facilities, and regionally important recreation areas such as Gaviota, Refugio, and El Capitan State Parks.

Topography within the area is varied and includes a backdrop of rugged mountainous areas, rolling hills, and lowland coastal areas. The area has 38 miles of coastline and contains biological and cultural resources. The Gaviota Coast serves as a transition zone between northern and southern California ecological provinces for both terrestrial and marine species, which contributes to the area's biodiversity. Wildlife habitats have been retained with the low-density development in the area (County of Santa Barbara 2016).

Lompoc Planning Area

The Lompoc Planning Area is located in an unincorporated urban area of the Lompoc Valley. The City of Lompoc is located in the western portion of Santa Barbara County, along Highway 1. It is approximately 15 miles west of Highway 101 and the City of Buellton, and eight miles east of the Pacific Ocean. The Lompoc Planning Area consists of three distinct unincorporated communities: Vandenberg Village, Mission Hills, and Mesa Oaks. Vandenberg Village and Mission Hills were constructed in the late 1950s to provide housing for military personnel and employees for the nearby Vandenberg Air Force Base (now a Space Force Base). The community of Mesa Oaks consists of a series of subdivisions constructed in the 1980s and has gradually merged with scattered older rural homes built along Rucker Road. The Lompoc Planning Area is characterized by active agriculture, rolling foothills with grazing lands, streams, and oak woodlands, and rural and suburban development outside the incorporated cities (County of Santa Barbara 1999).

Los Alamos Community Plan Area

The Los Alamos Community Plan Area consists of the town of Los Alamos, which is an unincorporated community in northern Santa Barbara County. The town's population in 2021 was approximately 1,343 people (US Population 2025). Located approximately 50 miles northwest of the City of Santa Barbara and fifteen miles southeast of Santa Maria, the area has a mixture of housing styles and sweeping rural vistas of ranch land, vineyards, and mountains. Highway 101 passes through the community from north to south and provides the principal connection with Santa Maria to the north, and with Santa Ynez Valley, Goleta, and Santa Barbara to the south. It also intersects SR 135, which is the main transportation corridor through downtown Los Alamos, connecting Los Alamos with agricultural lands, SR 1, and Vandenberg Space Force Base to the west.

The planning area is located in a narrow valley traversed by the San Antonio Creek watershed between the Purisima Hills and the Solomon Hills. The urban area includes the original Los Alamos town site established in 1879, primarily comprised of 10,000 square foot lots. The urban area also includes the Los Alamos Cemetery and the Los Alamos County Park (County of Santa Barbara 2011).

Mission Canyon Community Plan Area

The Mission Canyon Community Plan Area is located in the south coast of Santa Barbara County in the foothills of the Santa Ynez Mountains, north of and adjacent to the City of Santa Barbara. The Plan area is bounded by the City of Santa Barbara to the west, south, and east. To the north lies rural land within the boundary of the Los Padres National Forest, with some forest land existing within the Plan area. Mission Canyon is approximately 1,122 acres in size and consists of residential development, some recreational areas, and undeveloped parcels. There is no commercial or industrial development. In total, Mission Canyon contains the following land uses: residential, agricultural, recreation/open space, other open lands, and one institution/government facility (Fire Station 15). Mission Canyon Road, SR 192 (Foothill Road), Tunnel Road, and Las Canoas Road are the major points of ingress and egress. Residential development occurs throughout the Plan area, generally with larger parcels to the north and smaller parcels to the south, with many of the roads private.

Mission Canyon supports a diversity of biological resources, including coast live oak riparian woodland and chaparral. The upper watershed of Mission and Rattlesnake Creeks contains sections of relatively undisturbed habitat serving as wildlife corridors (County of Santa Barbara 2014a).

Montecito Community Plan Area

The Montecito Community Plan Area is located between the Pacific Ocean and the foothills of the Santa Ynez Mountains. It is bounded north by East Camino Cielo Road in the Los Padres National Forest, on the east roughly by Ortega Ridge Road and Picay Creek (west of Ladera Lane), on the south by the Pacific Ocean, and on the west by the City of Santa Barbara. The southern portion of the Plan area is within the state-designated Coastal Zone. The Montecito Community Plan Area is characterized by the "semi-rural" development pattern of low-density residential development connected by narrow, winding roads surrounded by oak woodlands and scenic creeks, nestled between the foothills and the ocean (County of Santa Barbara 1995).

Orcutt Community Plan Area

The Orcutt Community Plan Area is located immediately south of the City of Santa Maria and contains approximately 14,650 acres. It contains both urban and rural areas, which either have some potential for urbanization during the next 20 years (e.g., west Orcutt) or are related to the urban area from a resource perspective (e.g., Solomon Hills). The Orcutt Planning Area is divided into four sub-regions: Central Urban-Core which contains major commercial development, South Orcutt which consists mostly of residential and some commercial development, West Orcutt which is mostly medium density single family homes as well as some light industrial development, and east of Highway 101 which is primarily low-density single-family development and ranches (County of Santa Barbara 2024).

Santa Ynez Valley Community Plan Area

The Santa Ynez Valley Community Plan Area is nestled between mountain ranges in central Santa Barbara County. The area consists of approximately 45,380 acres. The majority of the land, approximately 43,441 acres, is designated agriculture, followed by residential with 1,580 acres, commercial with 110 acres, and very limited industrial with 51 acres. Agriculture is a major contributor to the Santa Ynez Valley's economy and a strong component of community identity. Topography in this area is varied and includes a backdrop of rugged mountainous areas, rolling hills, and valley lowland areas. The diverse habitats support a wealth of biological resources and include oak savanna, woodlands and forests, grasslands, and riparian corridors. Low-density development in many areas has maintained wildlife habitats (County of Santa Barbara 2025).

Summerland Community Plan Area

The Summerland Community Plan Area is located in the southern portion of Santa Barbara County between the cities of Santa Barbara and Carpinteria. It is bordered by Ortega Ridge Road on the west, the Montecito Planning Area to the north, Padaro Lane and the Toro Canyon Planning Area on the east, and the Pacific Ocean on the south. The Plan area totals 907 acres and is situated largely within the state-designated Coastal Zone, with one exception of a residential enclave along Ortega Ridge Road, which is located in the Inland Area. Land uses within the Plan area are primarily residential and related uses, with some commercial uses primarily along Lillie Avenue, and recreational uses primarily along Summerland Beach and the coastline (County of Santa Barbara 2014b).

Toro Canyon Planning Area

The Toro Canyon Planning Area is located in southeastern Santa Barbara County, in the western portion of the Carpinteria Valley between the Santa Ynez Mountains and the Santa Barbara Channel. Toro Canyon is bordered by the Summerland and Montecito Community Plan areas to the west, the Pacific Ocean to the south, the Los Padres National Forest to the north, and the Carpinteria Valley and the Carpinteria City limits to the east. The southern portion of Toro Canyon lies within the state-designated Coastal Zone. It encompasses 5,750 acres and supports large areas of agriculture (including greenhouses), low-density residential, some commercial and recreational areas, and undeveloped open space. The Plan area includes residential development scattered throughout, generally with larger parcels to the north and smaller parcels to the south. Santa Claus Lane and Via Real at the eastern Padaro Lane/Highway 101 interchange are the only commercial areas in Toro Canyon.

Major access roads into Toro Canyon include Highway 101, Via Real, and SR 192 (East Valley Road/Foothill Road). Toro Canyon supports a high diversity of biological resources, including southern oak riparian woodland, coastal scrub, and chaparral. The watersheds of both Toro Creek and Arroyo Paredon Creek support stretches of relatively undisturbed habitat serving as wildlife corridors between the mountainous Los Padres National Forest and the Pacific Ocean (County of Santa Barbara 2004).

2.3.2 Regulatory Context

The following rules and regulations are provided to inform the baseline:

Santa Barbara County Comprehensive Plan

The County's Comprehensive Plan provides a framework for development and growth in the County through various goals and policies to address physical resources and growth within the County planning area. The Plan contains 12 elements. Of these elements, the Project would only amend the Land Use Element.

Santa Barbara County Coastal Land Use Plan

The Coastal Land Use Plan (CLUP) is a separate coastal element to the County's Comprehensive Plan under the California Government Code Section 65303(k). Like the County's Land Use Element, the CLUP lays out the general patterns of development within the coastal areas. The purpose of the CLUP is to protect coastal resources and to provide greater access and recreational opportunities for the public's enjoyment, while allowing for orderly and well-planned development and the siting of coastal-dependent and coastal-related industry. The plan incorporates, to the maximum possible extent, local regulations and policies that are consistent with the Coastal Act. In general, the CLUP places a strong emphasis on expanding public access opportunities to the County's beaches, preserving prime agricultural land, and protecting environmentally sensitive habitats. The Project would amend the CLUP.

Community and Area Plans

The Comprehensive Plan includes community plans that serve as blueprints for the physical development of unincorporated towns and watershed-based areas. There are 10 community plans pertaining to the unincorporated areas of Goleta Valley, Gaviota Coast, Goleta, Los Alamos, Mission Canyon, Montecito,

Orcutt, Santa Ynez Valley, Summerland, and Toro Canyon. These plans contain goals, policies, and standards guiding the development of the communities they serve.

Santa Barbara County Zoning Ordinances

The County of Santa Barbara has three zoning ordinances that implement the Comprehensive Plan (including the CLUP) and individual community plans. The Project would amend all three ordinances, which are each discussed below.

Santa Barbara County Land Use and Development Code

The Santa Barbara County Land Use and Development Code (LUDC) protects and promotes the public health, safety, comfort, convenience, prosperity, and general welfare of residents and businesses in the County (Section 35.10.010 – Purpose of LUDC). The LUDC regulates land uses and implements policies within the Inland areas of the unincorporated County, outside of the Coastal Zone and outside of the Montecito Community Plan area. The Project would amend the following zone districts within the LUDC to allow for utility-scale and community-scale solar energy facilities:

AG-I (Agricultural I): The AG-I zone is applied to areas that are appropriate for agricultural uses within Urban, Inner Rural, Rural (Coastal Zone only) and Existing Developed Rural Neighborhood areas that are shown on the Santa Barbara County Comprehensive Plan land use maps. The intent of the AG-I zone is to provide standards that will support agriculture as a viable land use and encourage maximum agricultural productivity. The AG-I zone includes a minimum gross lot area designation that limits the subdivision potential of land and in some cases affects the range of allowable land uses.

AG-II (Agricultural II): The AG-II zone is applied to areas that are appropriate for agricultural land uses on prime and non-prime agricultural lands located within the Rural Area as shown on the Santa Barbara County Comprehensive Plan land use maps. The intent of the AG-II zone is to preserve these lands for long-term agricultural use. The AG-II zone also includes a minimum gross lot area designation that limits the subdivision potential of land and in some cases affects the range of allowable land uses.

M-RP (Industrial Research Park): The M-RP zone is applied to areas to provide for light industry, technical research, and business headquarters offices (as the primary land use types) that are located in well-designed buildings and attractively landscaped areas. The intent is to establish development standards and landscaping requirements to ensure a park-like environment for the permitted uses and compatibility with adjacent non-industrial areas.

M-1 (Light Industry): The M-1 zone is applied to areas to provide for light industrial uses. The intent is to encourage sound industrial development through appropriate areas for these uses, and to protect nearby residential, commercial, and industrial uses from hazards, noise, and other disturbances.

M-2 (General Industry): The M-2 zone is applied to areas to provide for all types of industrial uses while providing the level of project review necessary to ensure that adverse impacts will be minimized and that these uses will be compatible with surrounding properties.

M-CR (Coastal-Related Industry): The M-CR zone is applied within the Inland area to areas that are appropriate for coastal-related industrial uses. The intent is to provide standards and conditions that will ensure that environmental damage will be avoided or minimized to the maximum extent feasible.

PU (Public Works Utilities and Private Services Facility): The PU zone is applied to areas that are appropriate for the siting of large-scale public works, utilities and private service facilities. The intent is to provide adequate design requirements to ensure that these facilities are compatible with surrounding land uses.

PI (Professional and Institutional): The PI zone is applied to areas that are appropriate for professional uses, and for educational, institutional, governmental, and other public facilities. It is the intent of this zone to ensure that these uses are well-designed and landscaped, and harmonious with surrounding land uses.

Montecito Land Use and Development Code

The Santa Barbara County Montecito Land Use and Development Code (MLUDC), which is a portion of the County LUDC Chapter 35, classifies and regulates the uses of land and structures within the Montecito Community Plan area, consistent with the Comprehensive Plan. The purpose of the MLUDC is to protect and promote the public health, safety, comfort, convenience, prosperity, and general welfare of residents and businesses in the Montecito community. The purpose of this Development Code is to provide standards and guidelines for growth and development, conserve and protect resources, ensure a balance of land uses, and ensure land use compatibility. The Project would amend the PU zone district within the MLUDC to allow for utility-scale and community-scale solar energy facilities.

Santa Barbara County Coastal Zoning Ordinance

Article II of Chapter 35, Zoning, of the County Code of Ordinances contains the Coastal Zoning Ordinance (CZO). The CZO applies to the unincorporated Coastal Zone areas. The CZO implements the CLUP by classifying and regulating the uses of land, buildings, and structures in the Coastal Zone. Pursuant to Public Resources Code (PRC) Section 30500 (Coastal Act), the County maintains a certified Local Coastal Program (LCP) for the unincorporated areas of the county within the Coastal Zone, which consists of the CLUP and CZO. The CZO contains the coastal zoning district maps and sets forth the regulations that apply to the properties in the coastal areas based on zoning designations.

As related to the CZO, the Project would amend the following zone districts to allow for utility-scale and community-scale solar energy facilities:

AG-I, **AG-II**, **M-CR**, **M-RP**, **PI**, and **PU** as described above.

The Project does not include the rezoning of any parcels within the Coastal Zone at this time, and does not assume that any specific parcels will be developed in the future. However, for purposes of providing a Program EIR that may be relied upon for future solar energy facility development, the Project description and accompanying Program EIR impact analysis make assumptions about the Mariposa Reina site (17100 Calle Real in the Gaviota Plan Area, Assessor's Parcel Number 081-130-070). This Project description assumes that the Mariposa Reina site may, at some unspecified time in the future, be redeveloped to allow for a utility-scale solar energy facility installation. The Mariposa Reina site is currently zoned M-CD (Coastal-Dependent Industry) and has historically been used for oil and gas processing, connected to offshore oil extraction in the coastal waters off the Santa Barbara County shoreline. The M-CD zone is applied within the Coastal Zone to areas that are appropriate for certain energy and industrial uses that require a location either on or adjacent to the sea in order to function. The intent of the M-CD zone is to provide standards and conditions that will ensure that environmental damage will be avoided or minimized to the maximum extent feasible while accommodating those industrial uses determined to qualify as

coastal-dependent industry. If the oil and gas processing facilities are fully decommissioned and the site is remediated, the site could still be used for energy-related industry by conversion to a utility-scale solar facility. Future site-specific analysis would be necessary to ensure that the appropriate land use considerations (including policy or zoning amendments), permitting path, and environmental analysis would be undertaken to convert the Mariposa Reina (or any other potential site) to solar energy facility development.

Uniform Rules for Agricultural Preserves and Farmland Security Zones

The Santa Barbara County Uniform Rules for Agricultural Preserves and Farmland Security Zones (Uniform Rules) are the set of rules by which the County administers its Agricultural Preserve Program under the California Land Conservation Act of 1965, known as the Williamson Act. The purpose of the Williamson Act is the long-term conservation of agricultural and open space lands. The Act establishes a program to enroll land in Williamson Act or Farmland Security Zone contracts whereby the land is enforceably restricted to agricultural, open space, or recreational uses in exchange for reduced property tax assessments. Participation in the program is voluntary for the County and eligible landowners.

Conservation of agricultural and open space land benefits the general public by discouraging premature conversion of land to urban land uses, thereby curtailing sprawl and promoting logical urban growth and provision of urban services. The Agricultural Preserve Program both protects agriculture and retains open space for its scenic qualities and value as wildlife habitat. Most directly, it contributes to the state's agricultural economy and the availability of fresh, nutritious, varied, and affordable food. To ensure the long-term retention of these benefits, land enrolled in the program is prevented from being readily converted to urban or other non-agricultural uses. This is achieved by the County through enforcement of the Uniform Rules and the terms of the contracts, which also maintains the constitutionality of administering preferential property tax assessments for these lands. The Project would amend the Uniform Rules to allow for utility-scale and smaller-scale solar energy systems and facilities to be developed, within specific parameters, on lands subject to agricultural preserves. The Project would also update the Uniform Rules to incorporate the State's regulations and requirements for converting an agricultural preserve contract into a solar-use easement contract.

Existing Permitting of Solar Energy Systems and Facilities

The LUDC currently only allows utility-scale solar energy facilities on lands zoned AG-II within the 600-acre Utility-Scale Solar Photovoltaic Overlay. LUDC Chapter 35.59, *Utility-Scale Photovoltaic Facilities*, defines the overlay boundaries and prescribes development standards specifically for utility-scale solar. The development standards prevent or minimize potential impacts to public views, agricultural lands, sensitive biological resources, geologic hazards, and other project-related impacts. Applicants must obtain a Conditional Use Permit (CUP) to construct a utility-scale solar energy facility.

Additionally, rooftop solar energy systems are currently exempt from planning permit requirements throughout the unincorporated County. Freestanding or ground-mounted solar energy systems that are typically accessory and intended for on-site use are exempt from planning permit requirements in the Inland areas, and require a Coastal Development Permit (CDP) in the Coastal Zone. **Table 2-1**, *Solar Photovoltaic Systems Currently Allowed within Santa Barbara County*, provides a summary of current regulatory conditions.

TABLE 2-1
SOLAR PHOTOVOLTAIC SYSTEMS CURRENTLY ALLOWED WITHIN SANTA BARBARA COUNTY

Location	Allowed Use	Description	Planning Permit Required	Allowable Zone(s)
Utility-Scale Solar				
Inland – Excluding Montecito	Utility-Scale Solar Photovoltaic Facilities (LUDC Chapter 35.59)	Utility-scale solar facilities located within the Utility-Scale Solar Photovoltaic Overlay (600 acres) (LUDC Chapter 35.59)	Conditional Use Permit (CUP)	AG-II
Inland - Montecito	Not allowed	Not applicable	Not allowed	Not allowed
Coastal Zone	Not allowed	Not applicable	Not allowed	Not allowed
Solar Energy Systems				
Inland	Rooftop and Freestanding Solar Energy Systems (LUDC Sections 35.20.040.B.24 and 35.30.160, MLUDC Sections 35.420.040.B.22 and 35.430.160)	Solar energy device whose primary purpose is to provide for the collection, storage, and distribution of solar energy for on-site uses. (LUDC Section 35.110.020.S, MLUDC Section 35.500.020.S)	Exempt[1]	All Zones
Coastal Zone - (Rooftop)	Rooftop Solar Energy Systems (CZO Section 35- 51B.B.2.n)	Solar systems located on the roofs of existing structures. (CZO Section 35-51B.B.2.n)	Exempt[1]	All Zones
Coastal Zone – (Freestanding)	Freestanding Solar Energy Systems (CZO Section 35-169.4.2.c.1)	Ground-mounted solar systems accessory and incidental to the principal use and sized to primarily support only the principal use. (CZO Section 35-169.4.2.c.1)	Coastal Development Permit (CDP)[2]	All Zones

NOTES:

1. A Solar Use Permit is required in tandem with the applicable building permit if the Building Official finds that the system would have "a specific, adverse impact upon the public health or safety." (LUDC Section 35.30.160.A, MLUDC Section 35.430.160.A)
2. The Director shall review the CDP application and approve, conditionally approve, or deny the Coastal Development Permit. A public hearing shall not be required. (CZO Section 35-169.4.2.c.1.b)

SOURCE: County of Santa Barbara and ESA, 2024

Often related to utility-scale solar energy development is the consideration of energy storage (e.g., battery energy storage systems [battery ESS]) and the electrical grid for transmitting the generated power. With respect to the state's electrical grid, Santa Barbara County is situated at the terminus of two electricity service providers' territories. The southern portion of the County is within Southern California Edison's (SCE's) service territory, and the northern portion is within Pacific Gas & Electric's (PG&E's) service territory. Electricity transmission in the County remains an ongoing operation for both SCE and PG&E. The transmission grid is designed to carry electricity over large distances, connecting large utility-scale power plants to load centers. There are several transmission lines within the County, including lines running at higher voltages, 115 kilovolts (kV) and 220 kV, which can carry more electricity than the lower voltage 60/66 kV lines. The Project would generally rely on these existing high-voltage lines to transmit electricity to the existing grid. The California Public Utilities Commission oversees and regulates permits for transmission lines. With respect to battery ESS, existing zoning regulations and pertinent policies allow for stand-alone battery ESS facilities to be permitted by the County, within unincorporated areas.

2.4 Purpose and Objectives of the Project

CEQA Guidelines Section 15124(b) requires that the Program EIR provide the underlying purpose of the project and objectives. The underlying purpose of the Project is to allow utility-scale solar and smaller scales of solar energy generation facilities to be developed on land previously not available for such use in order for the County to come closer to meeting its renewable energy goals. In addition to renewable energy generation, the Project seeks to remove barriers to energy capture and storage by facilitating the permitting of energy storage facilities.

The Project seeks to achieve the following primary objectives:

1. Encourage the development of solar energy within the County in order to meet ambitious state and local emission reduction goals.
2. Allow utility-scale solar in areas that can accommodate the use while maintaining valued resources.
3. Provide opportunities for the development of solar energy within the County through the removal of some County regulatory barriers identified in the Strategic Energy Plan (e.g., allowing utility-scale solar outside of the existing 600-acre overlay area, and allowing utility-scale solar within Williamson Act-contracted land).
4. Develop a regulatory program that minimizes potential adverse effects on people and the environment.
5. Provide efficiency and clarity in the permitting process.
6. Increase renewable energy generation through utility-scale and community-scale solar.
7. Facilitate permitting of on-site and "distributed" renewable energy projects to support regional resiliency and provide electricity availability during Public Safety Power Shutoffs and local severe weather or disaster events.

2.5 Project Components

2.5.1 Descriptions of Solar Energy Systems and Facilities

Solar Energy Systems

Solar energy systems typically provide electricity for on-site or local use but may also feed excess generated electricity back into the electrical grid. They can also be part of a microgrid or distributed energy system, defined by the U.S. Department of Energy as, "a group of interconnected loads and distributed energy resources. . . that acts as a single controllable entity" (US Department of Energy 2024). Solar energy systems can be located on the roof of a building or structure. They may also be "freestanding" or "ground-mounted," meaning they are attached to the ground by a pole or other support structure specifically intended to hold the solar panels. Structures such as solar canopies and solar carports would also be classified as solar energy systems. Refer to **Figure 2-4***, Example of a Photovoltaic Solar Array*, for a visual depiction of what a ground-mounted solar energy system and facility could look like.

The State of California has implemented regulations in the past 15 years to streamline the installation of solar energy systems, particularly rooftop systems. California Civil Code Section 801.5 defines "solar energy system" as on-site energy generation that is "not designed for procurement of electricity by an electric utility." Under existing State codes, solar energy systems on rooftops or existing parking lots are



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SOURCE: State Environmental Policy Act Draft Programmatic Environmental Impact Statement, State of Washington; Photograph from National Park Service Climate Change Response

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Figure 2-4
Example of a Photovoltaic Solar Array

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exempt from the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21080.35). Cities and counties are required to have expedited and streamlined permitting processes for small residential rooftop solar systems (defined as less than 10 kW) per Government Code Section 65850.5. Jurisdictions the size of Santa Barbara County must also implement electronic permitting and consistent permit fees for combined solar and storage projects.

Currently, solar energy systems that support on-site uses are allowed within the entire unincorporated county and are exempt from planning permits except that freestanding systems in the Coastal Zone require a CDP (refer to Table 2-1). The County zoning ordinances do not limit the size of rooftop or freestanding solar energy systems based on the square footage or generating capacity (e.g., MW) of the system. The roof area of an existing structure physically limits the size of a rooftop system. Appropriate building or electrical permits would still be required before a solar energy system could be installed.

Solar Energy Facilities

Solar energy facilities in the context of this Project are considered to be large energy-generating facilities that provide electricity to the local or regional electric grid. Some portion of the generated electricity may be used on site, but typically larger-scale systems generate electricity that is managed by a utility company and distributed off site. They are typically the primary use of a site, but may be an accessory use to a different primary use. This Project describes utility-scale and community-scale solar energy facilities.

Utility-scale solar

Utility-scale solar projects are generally large and require many acres of land. LUDC Section 35.110.020 (Definitions of Specialized Terms and Phrases) defines "utility-scale solar photovoltaic facilities" as,

> Facilities that are connected to the electrical grid on the utility side of the electric meter and are built for the primary purpose of generating and selling wholesale power. The electricity generated by the facility is not primarily used for on-site activities (such as farming or domestic water heating).

Refer to **Figure 2-5***, Example of Utility-Scale Solar Facility*, for a visual of what this type of project could look like.

The majority of land within a solar energy facility consists of solar arrays. Each solar array would consist of photovoltaic (PV) solar modules supported by racking systems. The PV modules convert sunlight into electricity. The PV solar modules can be on a solar tracking system, which enables the panels to track the sun throughout the day. For a tracking system, piles or metal piers may be driven into the ground to support the solar panels. The exact length of each row of modules may vary, but each row would be separated by enough distance to accommodate maintenance personnel and design parameters that meet applicable fire safety requirements. The solar modules would be self-contained and designed to withstand exposure to the elements. They would be certified to comply with all industry-standard quality testing and would be electrically connected and grounded.

To convert the energy produced by the solar energy facility (Direct Current [DC]) into usable Alternating Current (AC) power, the modules would be connected to power inverters. The energy may then be transferred from these inverters to a substation or switching station that would ultimately transfer the power to the regional electrical grid. The energy may also be routed into an energy storage system to be



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SOURCE: Dmitrii, Zotov (Photographer). (September 18, 2019)
Solar Power Station - Aerial View: Long Rows of Solar Panels at Sunset.
Digital Image. www.shutterstock.com.

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Figure 2-5
Example of Utility-Scale Solar Facility

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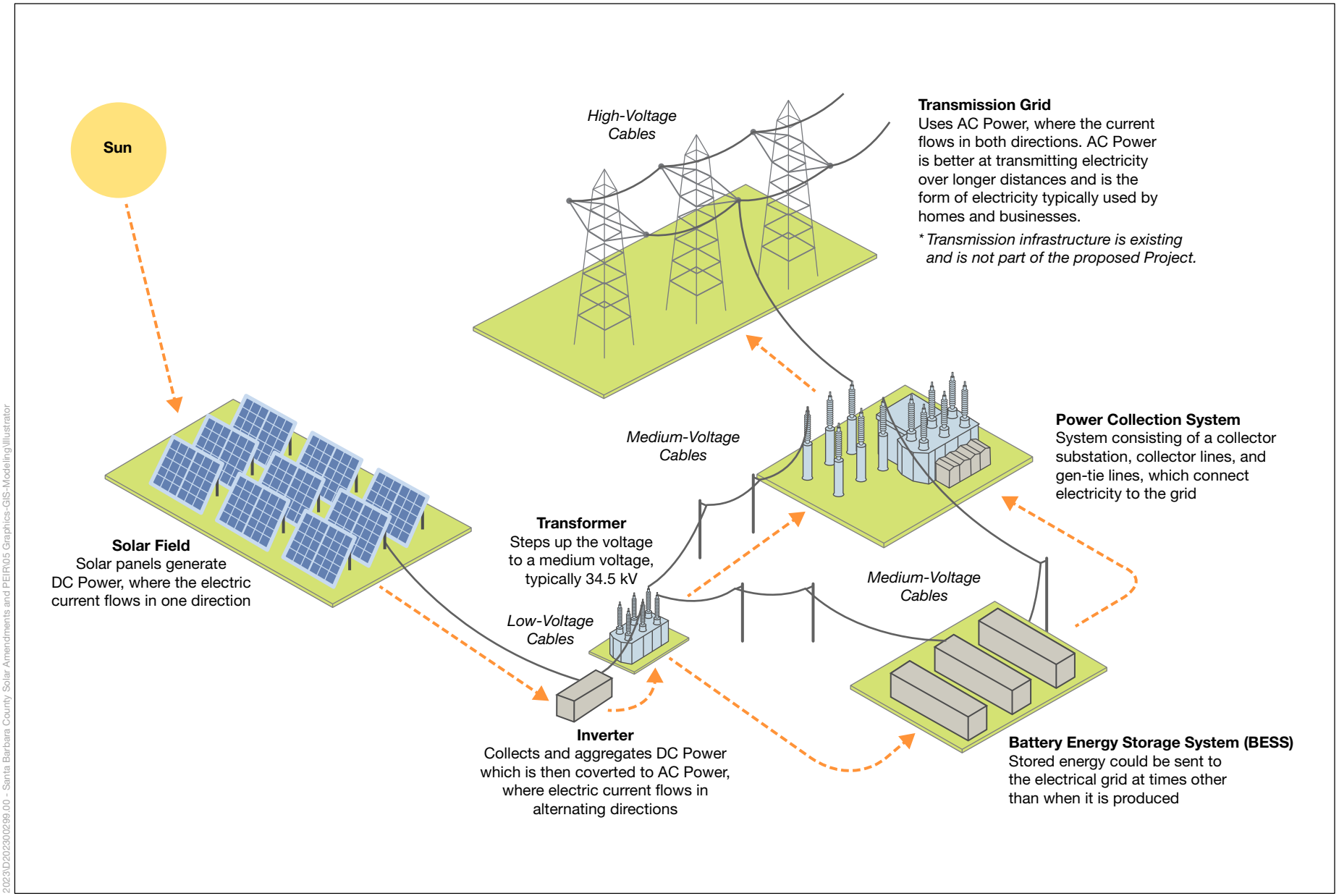
stored and transferred to the electrical grid at a later time. A transmission substation converts electricity into different voltages to allow the electricity to be connected to and routed through the transmission system. The voltage is stepped up or down through pieces of equipment called transformers, which sit within a substation's site. Transformers are electrical devices that transfer electrical energy by means of a changing magnetic field (National Grid 2025). A switching station operates at a single voltage and does not include any transformers. Switching stations connect and disconnect transmission lines or other system components to enable maintenance and repair to occur without service outages (Matrix NAC 2025). A switching station or substation may be a separate component located off-site, or may be part of the solar energy facility itself.

Once developed, energy from solar energy facilities can end up underutilized due to lack of storage capabilities that feed directly into the grid. Additionally, due to the County's topographic constraints and location at the ends of PG&E's and SCE's service territories, energy storage systems (ESS) are available to provide backup energy during times of transmission or distribution line overload or shutdowns and to store surplus energy. Utility-scale solar facilities may include an ESS, typically a battery ESS. A battery ESS consists of battery banks housed in electrical enclosures. The batteries typically would be lithium-ion, flow, or sodium sulfur. Electrical conduit connecting the battery banks to a power inverter may be buried underground. The inverter output may be stepped up to a higher voltage and combined at a substation, where it may be stepped up again and interconnected to the grid. Solar energy systems and facilities may also include a battery ESS that allows them to generate and use electricity independent of a connection to the grid, operating as a microgrid. Battery ESS may also be stand-alone facilities, separate from utility-scale solar facilities, as have been permitted already within the County.

To connect to the electrical transmission grid, the utility-scale solar facility may require a generation tie (gen-tie) line consisting of poles, wires, cables, and other components. Gen-tie lines are typically less than five miles long (Transmission Agency of Northern California 2025). Gen-tie towers and lines would be part of a solar energy facility project, but the regional transmission lines and towers would not, as transmission lines are regulated by the California Public Utilities Commission.

Refer to **Figure 2-6**, *Typical Components of Utility-Scale Solar Energy Facilities*, to see these project components outlined. Note that the distribution infrastructure is not part of the Project.

Finally, other buildings, facilities, and infrastructure may be part of a utility-scale solar energy facility. Small, enclosed structures or buildings may be needed for control and data collection services, or for storage and maintenance services. Trenching may be required to install conduit or pipes to connect the buildings to telecommunication or electric services. The buildings may include restroom facilities connected to an on-site septic system. Water wells or on-site water storage tanks may be needed for on-site water use. Water would typically be needed for construction or decommissioning activities (e.g., dust suppression), operational purposes (e.g., cleaning solar panels, landscaping, maintenance employee use), and for emergency use (e.g., fire suppression). Stormwater detention or retention basins may be constructed to meet permitting requirements. Internal access roads and parking would be provided, which may be paved or covered in a dust-suppressing material such as gravel. Road access improvements may be required to provide safe ingress and egress from the adjacent or nearest road. Finally, gates, security lighting, and signage are typically required or installed at the entrance, and fencing would typically be placed around the perimeter of the site.



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SOURCE: ESA, 2025

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Figure 2-6
Typical Components of Utility-Scale Solar Energy Facilities

ESA

Refer to **Figure 2-7**, *Typical Project Components Scale*, for a visual of the size of the infrastructure that may be required to support the implementation of utility-scale solar facilities.

As indicated in Section 2.3.2, *Regulatory Context*, currently, utility-scale solar is only allowed with a CUP within the 600-acre Utility-Scale Solar Photovoltaic Overlay on lands zoned AG-II) in the unincorporated Cuyama Valley Rural Region. Battery ESS are allowed as part of a utility-scale solar energy facility within the overlay, and are also allowed as stand-alone facilities in other zones. All existing stand-alone battery ESS facilities within the unincorporated County have been permitted within the AG-II zone thus far.

Community-scale solar

Community-scale solar energy facilities are typically smaller than utility-scale facilities, fit into an established development pattern, and connect to the electricity distribution network (Solar@Scale 2023). They may be designed to send all of the generated electricity to the transmission grid, or they may be designed to provide some onsite electricity and deliver the rest to the grid for regional use. Community-scale facilities are typically ground-mounted, but they can be sited on large rooftops or a combination of rooftop and ground-mounted. The County does not currently have a definition of "community-scale" solar.

Community-scale solar facilities would include solar PV modules and arrays, racking or other pole structures to hold the arrays, inverters, and a connection to the local distribution network or regional transmission grid. Depending on the site, they may include other components of a utility-scale facility, such as internal access roads, fencing, signage, storage or control buildings, and an ESS.

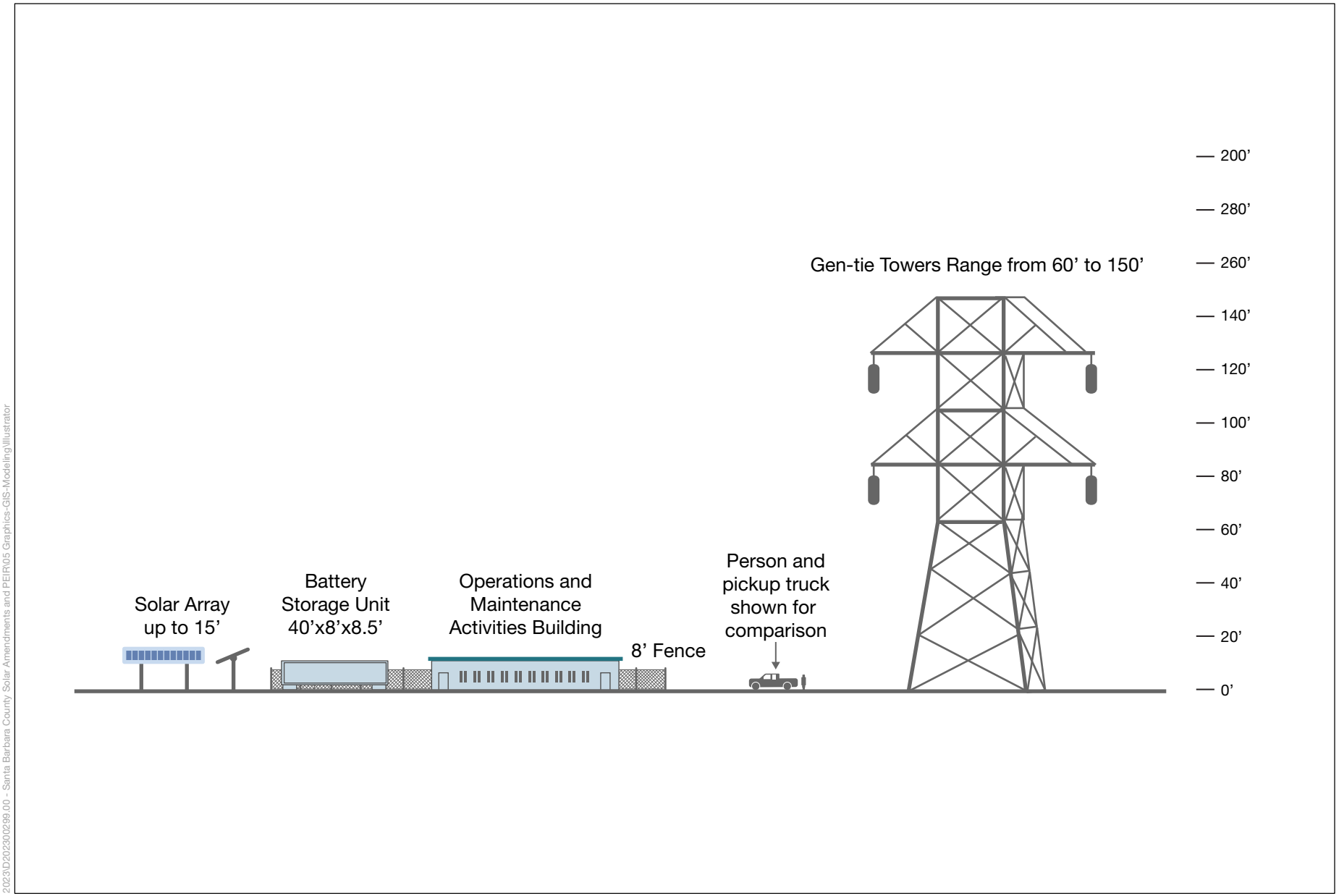
Please note that community-scale solar energy facilities are different than "community solar." "Community solar" projects and organizations (such as the Central Coast Community Energy organization, of which Santa Barbara County is a part) are designed to aggregate renewable energy resources to provide clean energy to their customers. Community-scale solar energy facilities may ultimately provide electricity to community solar customers, but community solar projects and organizations are not considered as part of this Project.

2.5.2 Proposed Amendments

The Project would amend the following County of Santa Barbara land use plans and regulations:

- County of Santa Barbara Comprehensive Plan Land Use Element
- Coastal Land Use Plan
- County LUDC
- MLUDC
- Article II Coastal Zoning Ordinance
- Uniform Rules for Agricultural Preserves and Farmland Security Zones (Uniform Rules)

The proposed amendments to each document are described within the following three sections.



SOURCE: ESA, 2025

Santa Barbara County Utility Scale Solar Amendments Draft PEIR

Figure 2-7
Typical Project Components Scale

2023\D2023002990.00 - Santa Barbara County Solar Amendments and PEIR\05 Graphics-GIS-Modeling\Illustrator

Zoning Ordinance Amendments

The majority of the proposed amendments would be within the three zoning ordinances (LUDC, MLUDC, and CZO). To facilitate utility-scale solar development throughout the unincorporated county, the Project would, in part, remove the Utility-Scale Solar Photovoltaic Overlay and allow utility-scale solar as a conditional use on lands zoned Professional and Institutional (PI), Agricultural I (AG-I), Agricultural II (AG-II), Public Utility (PU), Light Industry (M-1), General Industry (M-2), Industrial Research Park (M-RP), and Coastal Related Industry (M-CR) within the Inland Area and Coastal Zone portions of the unincorporated county. In addition, the Project would create and define a new category of solar energy facility, termed "community-scale." Community-scale solar would be conditionally allowed within the same zoning designations.

In tandem with the solar energy facility ordinance revisions, existing development standards and other related components of the zoning ordinances would be revised to meet new State requirements for streamlining the permitting of solar energy systems.[3] In part, the solar energy system amendments would allow for streamlined permitting of solar carports and other solar shade structures in accordance with California Government Code Section 65850.5 and pertinent definitions in California Civil Code Section 801.5. The amendments would also modify the permit requirement for certain ground-mounted solar energy systems in the Coastal Zone.

The proposed amendments would provide opportunities for various types of solar energy including, but not limited to community-scale,[4] distributed energy resources or systems,[5] and onsite systems (e.g., rooftop, ground-mounted). The Project includes definitions for relevant terms such as "community-scale solar energy facility" and "utility-scale solar energy facility." These definitions provide a basis for assessing the environmental effects of the proposed amendments. Depending upon the applicable zoning designation, location within or outside the Coastal Zone, and size of the proposed solar energy system or facility, permitting options range from an exemption (no planning permit required), to a Zoning Clearance or Coastal Development Permit, to a Minor or Major CUP.

Updates to all three zoning ordinances would be made to create a tiered, streamlined path for permitting utility-scale and community-scale solar energy facilities, and rooftop and ground-mounted solar energy systems. Four tiers are proposed to categorize each type of energy generation system or facility, and thereby standardize and streamline land use permitting. The tiers would categorize the solar energy facilities or systems by typical size and land use classification allowance, as opposed to whether the energy generated is used on- or off-site. This streamlined path would identify solar facilities that are ministerial and therefore, exempt from CEQA, and those that would require discretionary permits such as

[3] Existing LUDC definition of Solar Energy System: Solar energy system means either (a) any solar collector or other solar energy device whose primary purpose is to provide for the collection, storage, and distribution of solar energy for space heating, space cooling, electric generation, or water heating, or (b) any structural design feature of a building, whose primary purpose is to provide for the collection, storage, and distribution of solar energy for electricity generation, space heating or cooling, or for water heating…

[4] U.S. Department of Energy defines community scale solar as any solar project or purchasing program, within a geographic area, in which the benefits flow to multiple customers (individuals, businesses, nonprofits, and other groups) rather than one company or facility.

[5] The California Energy Commission (2024) defines "distributed energy resources" as a "diverse category of devices and technologies that interface with the electricity system at the distribution level, either directly connected to a distribution utility's wires or on an end-use customer's premises, behind the utility meter."

a Development Plan or CUP. The Project would ensure consistency in permitting procedures across all three ordinances (County LUDC, MLUDC, and CZO), where possible.

Table 2-2, *Proposed Solar Energy System and Facility Tiers*, shows the proposed category of tiers, ranging from 1-4, with each allowable size and classification.

TABLE 2-2
PROPOSED SOLAR ENERGY SYSTEM AND FACILITY TIERS

Category	Proposed Classification	Proposed Allowable System Size	Site Development Considerations
Tier 1	Building-integrated or roof-mounted solar energy system	All system sizes	May be located on any existing or proposed buildings or structures.
	Small ground-mounted[1] solar energy system	Up to and including 0.5 acres	May be allowed on undeveloped land or existing developed land.
Tier 2	Large ground-mounted[1] solar energy system	Greater than 0.5 and up to and including 5.0 acres	Only allowed on existing developed land (e.g., existing parking lot).
Tier 3	Community-scale solar energy facility	Greater than 0.5 and up to and including 30 acres	May be allowed on undeveloped land or existing developed land.
Tier 4	Utility-scale solar energy facility	Greater than 30 acres	May be allowed on undeveloped land or existing developed land.

NOTE:
1. Ground-mounted solar energy systems would include "freestanding" systems as the term is currently used within the CZO.

Table 2-3, *Proposed Allowed Zones and Permit Requirements*, indicates where each tier would be allowed and what type of planning permit would be required, if any.

TABLE 2-3
PROPOSED ALLOWED ZONES AND PERMIT REQUIREMENTS

Tier	Zones Where Allowed	Planning Permit Requirement
Tier 1	All zones	All Tier 1 building-integrated or roof-mounted systems would be exempt from planning permits in all unincorporated County areas. Tier 1, small ground-mounted systems would be exempt from planning permits in Inland Areas (within the LUDC and MLUDC). Tier 1, small ground-mounted solar energy systems would require a CDP[1] in the Coastal Zone (within the CZO).
Tier 2	All zones	Zoning Clearance (LUDC and MLUDC) or CDP[1] (CZO)
Tier 3	AG-I, AG-II; PI; M-1, M-2, M-RP, M-CR	Minor CUP
	PU	Development Plan
Tier 4	AG-I, AG-II; PI; M-1, M-2, M-RP, M-CR	Major CUP
	PU	Development Plan

NOTE:
1. The proposed CZO amendments would allow for Tier 1 or 2 solar energy systems to be only appealable to the California Coastal Commission.

The Project would include revised or new development standards for each tier of solar energy systems or facilities to be permitted. The existing development standards within the Utility-Scale Solar Photovoltaic Facilities chapter of the County LUDC (Chapter 35.59) would be amended as needed to provide standards for all tiers of solar energy facilities and systems and to mitigate potential resource and land use impacts. These development standards would be applied across all three ordinances.

Finally, in addition to the utility-scale solar ordinance amendments, the three ordinances would be revised to clarify permitting for standalone battery ESS. Battery ESS facilities are currently permitted as public utility facilities or private services in the LUDC, MLUDC, and CZO. The ordinance definitions and use tables would be revised to clarify that battery ESS facilities would be permitted where similar utility facilities are currently allowed. Stand-alone battery ESS would be subject to the same emergency response and emergency action plan standards as battery ESS components of a Tier 3 or 4 solar energy facility, for permitting consistency across all three ordinances and within the unincorporated county.

County LUDC

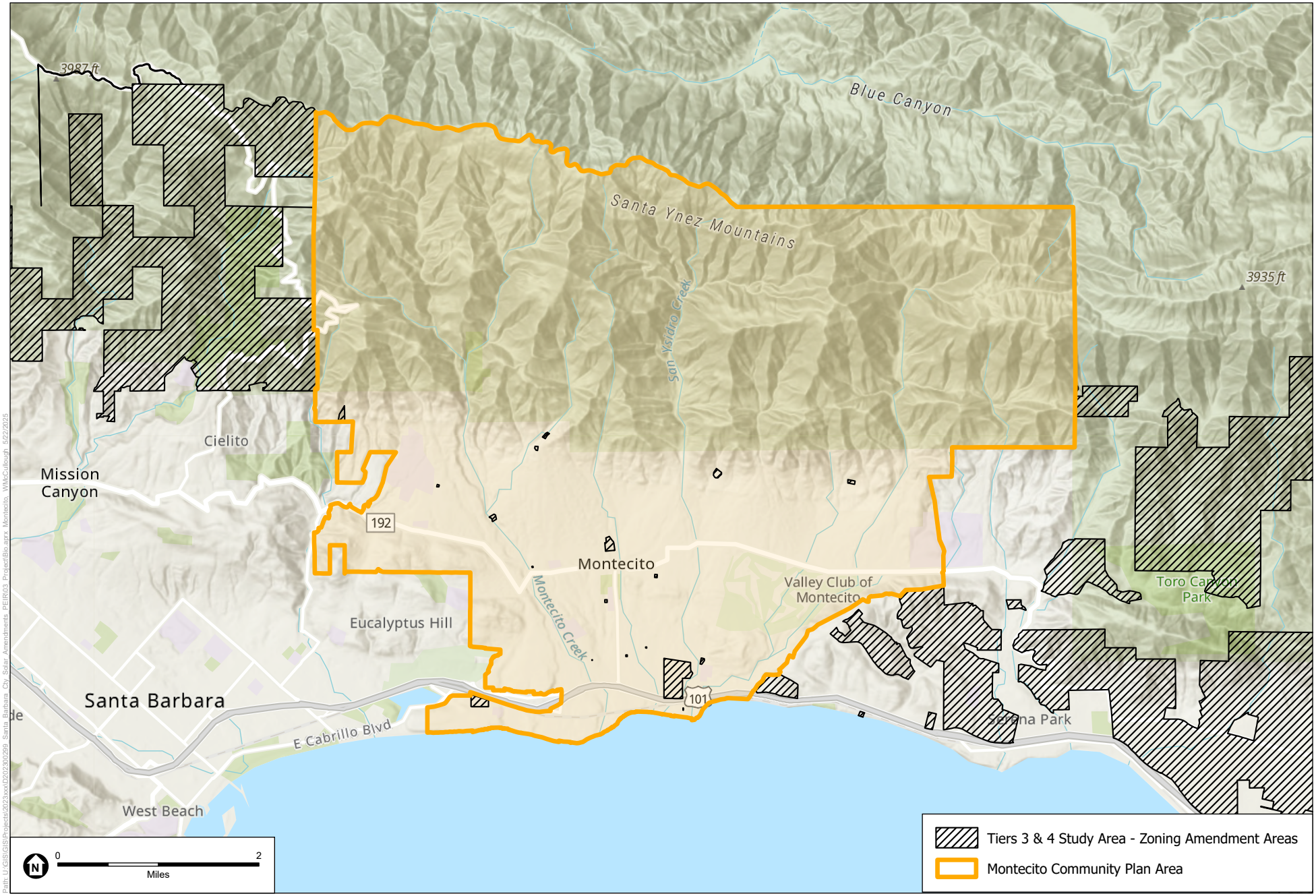
The Project focuses on amending LUDC Chapter 35.59 to ultimately allow utility-scale and smaller scales of solar development outside of the existing Utility-Scale Solar Photovoltaic Overlay area, within lands zoned AG-I, AG-II, PI, PU, M-1, M-2, M-RP, and M-CR as shown in Figure 2-2, outside of the Montecito Community Plan and Coastal Zone areas. As shown in Table 2-3, the amendments would identify solar energy systems and facilities that would be allowed; the zones in which they would be allowed; and the required types of permits, with accompanying development standards, for the siting and operation of such systems and facilities. These provisions are intended to encourage solar energy generation and storage development while protecting public health and safety.

Montecito LUDC

The Project would also amend the MLUDC to allow utility-scale (and smaller scales of) solar energy facilities and systems as permitted uses within specific zoning designations. The MLUDC is the applicable zoning ordinance for the Inland portion of the Montecito Community Plan. Of the zoning designations described under the "Zoning Ordinance Amendments" section above, the Inland area of the Montecito Community Plan only contains land zoned PU. Therefore, community-scale (Tier 3) and utility-scale (Tier 4) solar energy facilities would be allowed within the PU zoning designation. As shown in Table 2-3, Tier 3 or Tier 4 projects would be permitted under a Development Plan according to the requirements in MLUDC Section 35.472.080. Refer to **Figure 2-8**, *Tier 3 and Tier 4 in Montecito Community Plan Area* for a visual depiction of where utility-scale solar facilities would be allowed under the Project in this area.

Coastal Zoning Ordinance

Under this Project, within the Coastal Zoning Ordinance, utility-scale solar energy facilities would be allowed within the AG-I, AG-II, PU, PI, M-RP, and M-CR zoning designations. The Coastal Zone does not contain any lands zoned M-1 or M-2.



SOURCE: ESA, 2025; Santa Barbara County, 2025

Santa Barbara County Utility-Scale Solar Amendments

Figure 2-8
Tier 3 and Tier 4 in Montecito Community Plan Area

ESA

As shown in Table 2-3, building-integrated or rooftop solar energy systems would continue to be exempt from planning permits within the Coastal Zone. Under the Project, the CZO would be amended to streamline the planning permit path for certain ground-mounted solar energy systems. Currently, ground-mounted (freestanding) systems require a CDP, which has specific noticing and appeal procedures under CZO Section 35-169 (Coastal Development Permits). The CZO provides that ground-mounted systems permitted by a CDP, outside of the California Coastal Commission appeals jurisdiction, are locally appealable to the County Planning Commission or Board of Supervisors. The Project would allow for Tier 1 or 2 ground-mounted solar energy systems to be permitted by a CDP and only appealable if within the Coastal Commission appeals jurisdiction. This permit path change would reduce appeal requirements and timeframes to streamline and facilitate the installation of these systems.

2.5.3 Policy Amendments

The second component of the Project would include an update to the County's land use plans as needed, including the CLUP and the Land Use Element of the Comprehensive Plan to allow for utility-scale and community-scale solar development in the zoning designations identified above. Amendments to the Comprehensive Plan primarily include amending the Land Use Element to remove the Utility-Scale Solar Photovoltaic Facility Overlay and the Utility-Scale Solar Photovoltaic Facility Policy, thereby allowing utility-scale solar (and smaller scales of solar energy generation facilities) as an allowed use outside of the overlay area. The definition of "utility-scale solar photovoltaic facilities" would be revised and new definitions would be added to support smaller scales of solar energy generation systems and facilities (e.g., community-scale solar energy facilities, distributed energy systems, onsite solar energy systems).

Currently, the CLUP does not allow utility-scale solar facilities within the Coastal Zone. Proposed amendments to the CLUP would allow utility-scale and smaller scales of solar energy systems and facilities as allowed uses within the Coastal Zone portion of the unincorporated county, for consistency with the Comprehensive Plan amendments.

2.5.4 Williamson Act Uniform Rules Amendments

The final component of the Project is to update the Uniform Rules for Agricultural Preserves and Farmland Security Zones (Uniform Rules). The proposed amendments include adding a definition for "agrivoltaics",[6] defining "compatible use" specifically as it pertains to an energy facility with agriculture, and adding a definition for "solar energy facility" and "solar-use easement."[7] This component of the Project includes:

- Amending Uniform Rule 2, *Compatible Uses within Agricultural Preserves*, to expand the compatibility guidelines under the Williamson Act. It also includes updating Section 2-9 to include solar energy facilities as a compatible use meeting certain criteria, including agrivoltaics and solar energy facilities separated from agricultural uses on contracted land.
- Amending Uniform Rule 6, *Administration*, to add Solar Use Easement allowances. This means a cancellation of a Williamson Act Contract to allow for utility-scale solar development.

[6] Agrivoltaics is the term used to describe the co-location of solar and agriculture uses.

[7] As described by the California Department of Conservation, parties holding a Williamson Act or Farmland Security Zone contract may mutually agree to rescind a contract (or a portion of) in order to simultaneously enter into a solar-use easement, allowing solar as a compatible use.

Section 3.2, *Agricultural Resources*, of this Program EIR provides more details on the California Land Conservation Act (Williamson Act) and the Uniform Rules' principles of compatibility for the County's agricultural preserve program.

2.6 Required Actions and Approvals

The County is the Lead Agency for the Project, consistent with CEQA Guidelines Section 15065(b). As such, the County will use this Program EIR to both evaluate the potential environmental impacts that could result from Project implementation and develop changes to the Project and/or adopt mitigation measures that would address those impacts. The Board will consider adoption of the Project concurrent with certification of the Final Program EIR. Pursuant to CEQA Guidelines Section 15093, the decision-makers must "…balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a proposal project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered 'acceptable.'"

If the County, as Lead Agency, approves the Project with significant and unavoidable impacts, a Statement of Overriding Considerations must be written, which shall state the specific reasons to support its action based on the Final PEIR and/or other information in the record.

Implementation of the Project would require the following regulatory and/or legislative actions:

- Montecito Planning Commission review of environmental findings, Final EIR, Statement of Overriding Considerations (if needed), and proposed amendments, and recommendation to:
  - Board of Supervisors for the Inland portion of the Montecito Planning Area
  - County Planning Commission for the Coastal Zone portion of the Montecito Planning Area.
- County Planning Commission review of environmental findings, Final EIR, Statement of Overriding Considerations (if needed), and proposed amendments, and recommendation to the Board of Supervisors for the Inland portion of the County outside of the Montecito Planning Area, and for the entire Coastal Zone portion.
- Board adoption of environmental findings, certify the PEIR, and, if needed, adopt a Statement of Overriding Considerations for any unavoidable, significant environmental impacts that would result from the Project; and
- Board adoption of amendments to the County Comprehensive Plan, Coastal Land Use Plan, County LUDC, MLUDC, Article II - Coastal Zoning Ordinance, and Uniform Rules to establish the land use and zoning regulations for the allowance of solar energy systems and facilities.
- California Coastal Commission certification of amendments to the LCP, including the CZO, as it is the implementing ordinance of the LCP.

CHAPTER 3
Environmental Impact Analysis

3.0 Introduction and Approach to the Analysis

This chapter of the Program Environmental Impact Report (EIR) analyzes the potential environmental impacts that could occur from future development enabled by the amendments proposed by the County as described in Chapter 2, *Project Description*. The Project, which is the land use and regulation amendments, does not include specific solar energy developments. As described in Chapter 1, *Introduction*, potential environmental impacts are addressed programmatically in this EIR because the Project would allow for the development of solar energy systems and facilities in unincorporated areas throughout the County. This Program EIR evaluates the construction, operation/maintenance, and decommissioning of future solar energy systems and facilities that could be developed as a result of the Project, including typical or frequently-included components such as substations, generation tie (gen-tie) lines, or battery energy storage systems (ESS).

While the details for future solar projects are unknown and speculative at this time, this Program EIR estimates the reasonably foreseeable extent of solar energy systems and facilities in locations that would allow such facilities associated with the amendments. The analyses consider "buildout" to be 2055, or a 30-year timeframe.

3.0.1 Impact Analysis Guidelines

The California Environmental Quality Act (CEQA) Guidelines Section 15126.2(a) requires an EIR analysis to "identify and focus on the significant environmental effects of a proposed project." The emphasis of the EIR should be placed on the potential "physical" adverse effects of a proposed project. CEQA Guidelines Section 15360 defines "environment" as the physical conditions that exist within the area that would be affected by a proposed project, including, but not limited to, land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. CEQA Guidelines Section 15360 further defines the "area involved" as the area in which significant effects would occur either directly or indirectly as a result of the project. The "environment" includes both natural and man-made conditions.

CEQA Guidelines Section 15382 clarifies the definition of "significant effect on the environment" as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project. An economic or social change by itself shall not be considered a significant effect on the environment. However, economic or social change that may have a physical impact (e.g., urban decay) should be considered in an EIR (Bakersfield Citizens for Local Control v. City of Bakersfield [2004] 124 Cal. App. 4th 1184). The Project would allow for solar energy systems and facilities, which

would not result in the development of uses that could lead to urban decay. Therefore, economic effects are not analyzed any further in this EIR pursuant to CEQA.

For each environmental issue area, thresholds for determining impact significance are identified based on the CEQA Guidelines and County-adopted thresholds described in the County's Environmental Thresholds and Guidelines Manual (2024), along with descriptions of the methodologies used for conducting the impact analysis. For some resource areas, such as air quality, greenhouse gas (GHG) emissions, and noise, the analyses of impacts are more quantitative and involve the comparison of effects against adopted numerical thresholds. For other topics, such as land use and planning, the analyses of impacts are inherently more qualitative, involving the consideration of a variety of factors such as adopted County policies. Where the analysis of impacts warrants a more qualitative assessment, a detailed discussion of the specific approach to methodology for assessing impacts is presented in each resource section.

3.0.2 Environmental Resource Areas Analyzed in the Program EIR

The scope of this EIR is based on the Project Description outlined in Chapter 2, *Project Description*, as well as the proposed scope of analysis contained within the Notice of Preparation (NOP) and the Environmental Scoping Document (Appendix A), focusing on review of environmental resources that could result in potentially significant impacts. This chapter evaluates the potential for environmental impacts on the following resource areas:

Section 3.1, *Aesthetics and Visual Resources*

Section 3.2, *Agricultural Resources*

Section 3.3, *Air Quality*

Section 3.4, *Biological Resources*

Section 3.5, *Cultural, Paleontological, and Tribal Cultural Resources*

Section 3.6, *Energy*

Section 3.7, *Greenhouse Gas Emissions*

Section 3.8, *Hazards and Hazardous Materials*

Section 3.9, *Land Use and Planning*

Section 3.10, *Noise*

Section 3.11, *Transportation*

Section 3.12, *Utilities and Service Systems*

Section 3.13, *Wildfire*

Sections 3.1 through 3.13 provide a detailed discussion of the environmental setting, impacts resulting from the Project, and mitigation measures designed to reduce potentially significant impacts, if necessary and when feasible. Residual impacts following the implementation of any mitigation measures and cumulative impacts are also discussed. In addition, Chapter 5, *Other CEQA Considerations*, identifies other environmental resource areas and provides a brief discussion of why the resource areas were not primarily analyzed within this Program EIR, due to their reduced potential for significant impacts from the Project. Chapter 5, *Other CEQA Considerations*, also addresses the growth-inducing effects of the Project.

3.0.3 Organization of Environmental Impact Analysis

Each section of this chapter (Sections 3.1 through 3.13) addresses an environmental issue area and sets forth the following information for each component of the Project:

- **Introduction:** This subsection introduces the issue area and provides a general approach to the assessment.
- **Environmental Setting:** This subsection describes the physical characteristics and existing environmental conditions within unincorporated areas as they relate to the environmental resource area under review. According to the CEQA Guidelines, the existing environmental setting normally constitutes the physical baseline conditions by which the lead agency determines whether an impact is significant. The existing environmental setting includes all developed and undeveloped lands that may be affected by the Project.
- **Regulatory Framework:** This subsection summarizes the federal, state, and local regulations, plans, and standards that relate to the specific issue area being discussed.
- **Project Impact Analysis:** This subsection discusses the significance criteria, methodology, environmental impact analysis, and mitigation measures that may be necessary to reduce environmental impacts. It also presents the residual impacts following the implementation of recommended mitigation measures.
  - ***Thresholds of Significance:*** This subsection presents the criteria that will be used to evaluate impacts. The criterion or threshold for a given environmental effect is the level at which the County finds the effect to be significant. The significance criteria can be a quantitative or qualitative standard, or set of criteria, pursuant to which the significance of a given environmental effect may be determined (CEQA Guidelines Section 15064.7).
  - ***Methodology:*** This subsection outlines the general approach used for the analysis of the environmental issue addressed in the section.
- **Project Impacts:** This subsection provides an analysis of the nature and extent of Project impacts. These analyses address short-term construction and long-term operational and maintenance activities, as well as decommissioning activities associated with the development of solar energy facilities resulting from the Project. The analyses evaluate direct (or primary) effects of the Project as well as the indirect (or secondary) impacts, as necessary. While the criteria for determining significant impacts are unique to each issue area, the analysis applies a uniform classification of the impacts based on the following definitions from the County's 2020 revised *Guidelines for the Implementation of the California Environmental Quality Act of 1970*:
  - ***Significant and Unavoidable Impacts:*** Potentially significant impacts that cannot be feasibly mitigated or avoided. No measures could be taken to avoid or reduce these adverse effects to insignificant levels. Even after the application of feasible mitigation measures, the residual impact would be significant. If the Project is approved with significant and unavoidable impacts, decision-makers must adopt a Statement of Overriding Considerations (SOC) pursuant to CEQA Guidelines Section 15093 explaining why the benefits of the Project outweigh the potential damage caused by these significant unavoidable impacts.
  - ***Significant but Mitigable Impacts:*** Potentially significant adverse impacts that can be feasibly mitigated or avoided to an insignificant level. If the Project is approved with significant but mitigable impacts, decision-makers are required to make findings pursuant to CEQA Guidelines Section 15091, stating that impacts have been mitigated to the maximum extent feasible and the residual impact would not be significant.

  - ***Insignificant Impacts:*** These adverse but insignificant impacts do not require mitigation, and they do not require findings to be made. Mitigation measures may still be recommended to improve consistency with policies in the County's Comprehensive Plan.
  - ***No Impacts:*** No adverse changes in the environment would result from the implementation of the proposed Project.
  - ***Beneficial Impacts:*** Project implementation would result in impacts that would be beneficial to the environment.
- **Mitigation Measures:** For each significant adverse impact identified, mitigation measures are presented where feasible to reduce the impacts to acceptable levels (CEQA Guidelines Section 15130).
- **Residual Impacts:** This section identifies impact categories after mitigation is applied. Based on the criteria above, the environmental impact analysis assesses each issue area to determine the significance level. In those instances where mitigation measures cannot reduce adverse impacts to significant but mitigable levels, impacts are categorized as significant and unavoidable.
- **Cumulative Impacts:** This subsection provides a discussion of the Project effects when combined with the effects of cumulative projects, which includes buildout in the County under the Comprehensive Plan.

3.0.4 Mitigation Measures and Monitoring

Pursuant to CEQA Guidelines Section 15126.4, where potentially significant environmental impacts are identified in an EIR, feasible measures that could minimize significant impacts shall be described. Mitigation measures are identified as part of the analysis of each impact topic in Sections 3.1 through 3.13 of this PEIR.

Feasible means "…capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors" (CEQA Guidelines Section 15364). A Lead Agency must impose mitigation measures unless findings can be made that the mitigation measures are found to be infeasible or within the jurisdiction of another agency (City of Marina v. Board of Trustees of the California State University [2006] 39 Cal. 4th 341). Mitigation measures must be fully enforceable and may involve various means of implementation, such as:

- Measures incorporated directly into the proposed amendments as new or revised permitting requirements or development standards.
- Measures incorporated as standard conditions of approval for individual projects.
- Measures implemented in multi-year County programs or development impact fee programs.

CEQA requires that the implementation of adopted mitigation measures or any revisions made to the project by the lead agency to mitigate or avoid significant environmental effects be monitored for compliance. Accordingly, CEQA Guidelines Section 15097 requires that a public agency adopt a Mitigation Monitoring or Reporting Program (MMRP) for those adopted mitigation measures and project revisions. The MMRP will be provided in the Final Program EIR that will be prepared following public review of the Draft Program EIR.

3.0.5 Impact Assessment Assumptions

As identified in the County's Strategic Energy Plan (SEP), the County has the capacity for up to 2,925 megawatts (MW) of solar photovoltaic energy generated annually from utility-scale and distributed/onsite solar systems combined (County of Santa Barbara 2019). The Project would implement the County Board of Supervisors (Board) recommendation[1] to stimulate local renewable energy generation by allowing solar development in various areas of the County and by establishing a streamlined permitting process to promote utility-scale solar development to reach this potential. Subsequently, the Project was enhanced to update and streamline permit requirements for small solar energy systems with minimal or negligible land-use impacts, and to clarify the permitting path for stand-alone battery storage systems.

The Program EIR evaluates the construction, operation/maintenance, and decommissioning of future solar energy systems and facilities that could be developed as a result of the Project. The Project would create four tiers of solar energy systems and facilities based on size. The future energy facilities that could occur as a result of the Project would be located within several zoning designations in the unincorporated County. Refer to Table 2-3, *Proposed Allowed Zones and Permit Requirements*, in Chapter 2, *Project Description*, for the applicable zones, as well as Figures 2-1, *Project Location*, and 2-2, *Proposed Solar Energy Facility (Tier 3 and 4) Zoning Amendment Areas*.

The level of activity associated with the installation, maintenance, and decommissioning of the facilities differs based on the size allowed in the proposed tiers. The following provides information regarding the size of the facilities in each tier and general assumptions considered in the analyses. As indicated above, each technical section in Chapter 3 contains a methodology subsection that includes any specific assumptions relevant to the resource area used in the analysis, if necessary.

Tier 1 solar energy systems would be small-scale, rooftop or ground-mounted structures that provide energy for on-site use. Tier 1 systems are currently permitted throughout the unincorporated county. As described in Table 2-1, *Solar Photovoltaic Systems Currently Allowed within Santa Barbara County*, in Chapter 2, *Project Description*, rooftop and ground-mounted solar energy systems are currently exempt from planning permits in the Inland county areas. Within the Coastal Zone, rooftop solar energy systems are exempt from planning permits, and ground-mounted ("freestanding") systems require a Coastal Development Permit (CDP). The County's current ordinances do not limit the allowable size of ground-mounted ("freestanding") solar energy systems. Under existing State codes, solar energy systems on rooftops or existing parking lots are exempt from the requirements of CEQA (Public Resources Code Section 21080.35). Examples of existing solar energy systems in the County that would fall within the proposed Tier 1 parameters include Santa Barbara County Fire Station 12 (approximately 0.03 acres in size) and the Emergency Operations Center (approximately 0.11 acres in size), both located in Eastern Goleta Valley.

The Project would continue to allow rooftop solar energy systems of any size to be exempt from planning permit requirements. The Project would add a size limit for Tier 1 systems of up to and including 0.5 acres for small ground-mounted facilities, and would standardize terminology across all three ordinances. Tier 1, small ground-mounted facilities, would continue to be exempt from planning permits in the Inland County

[1] The Board provided direction to staff at their July 13, 2021, hearing.

areas. Tier 1, small ground-mounted facilities, would be permitted by a CDP in the Coastal Zone, but would only be subject to appeal to the California Coastal Commission.

Tier 2 solar facilities would be ground-mounted solar energy systems limited to existing developed land, including but not limited to parking lots and playgrounds. Typically this would include solar carports or solar canopies, which would generate power for onsite use. Since the County's existing ordinances do not specify a limit on the size of ground-mounted ("freestanding") solar energy facilities, Tier 2 systems can currently be allowed or permitted similar to Tier 1 ground-mounted systems as an accessory use. Examples of existing systems in the County that would fall within Tier 2 include Dos Pueblos High School in Goleta Valley, which consists of solar panels mounted on solar canopies that cover approximately 4 acres; and the Santa Barbara City Granada Garage in downtown Santa Barbara, which consists of solar panels and battery storage that occupies approximately 0.6 acres., which consists of solar panels and battery storage that occupies approximately 0.6 acres.

The Project clarifies that Tier 2 will be "large" ground-mounted solar energy systems, greater than 0.5 acres in size and up to and including 5.0 acres in size. The proposed amendments include a height limit of 25 feet and would require landscaping and compliance with lighting standards applicable to the zoning district in which the system is located. Generally, Tier 2 systems would be located within developed, more urban areas. Under the Project, Tier 2 systems would be permitted in the Inland areas with a Zoning Clearance, and in the Coastal Zone with a CDP subject to appeal only to the California Coastal Commission.

Given the size of the proposed Tier 1 and Tier 2 systems, the construction equipment, workers, and length of time to install would be limited and would be similar to the types of activities that already occur in such areas. Minimal ground disturbance would be required for the ground-mounted systems, and for Tier 2, the disturbance would be in a previously disturbed or developed area. In addition, the footprint of Tier 1 and 2 systems would be relatively small. For these reasons, effects would be less than those for Tier 3 and Tier 4 (described below).

Tier 3, community-scale solar, would be conditionally allowed through a minor conditional use permit (CUP) in PI, AG-1, AG-II, PU, M-1, M-2, M-RP, and M-CR districts. Tier 3 facilities would be located on developed or undeveloped land and could be greater than 0.5 acres in size, up to and including 30 acres in size. The community-scale facilities would typically be ground-mounted and be the principal land use of a site, but they can be sited as a combination of rooftop and ground-mounted and can be subordinate to the primary use. Community-scale facilities could include appurtenant structures such as a substation or switching station, energy storage system, generation tie (gen-tie) lines, and operation or maintenance buildings. They would typically connect to the electricity distribution network but could be disconnected from the grid, either as a microgrid or solely to provide power to an on-site use. Examples of existing solar energy facilities in the County that meet the Tier 3 parameters include the Calle Real Photovoltaic Project, which consists of ground-mounted panels on an undeveloped slope that occupies approximately 2.6 acres adjacent to the County Jail in Eastern Goleta Valley, and the Cuyama hybrid solar and storage facility in New Cuyama, which provides 1.5 MW of solar energy and 12.5 megawatt hours (MWh) of storage on approximately 20.44 acres. The Calle Real Photovoltaic Project was constructed on County land, so it was exempt from planning permits. The Cuyama hybrid facility was constructed within the 600-acre Utility-Scale Solar Photovoltaic Overlay and required a CUP. Otherwise,

under the County's current ordinances, Tier 3, community-scale solar would not generally be permitted elsewhere.

Tier 4 utility-scale solar energy facilities would be conditionally allowed through a major CUP in the same zones as Tier 3 community-scale solar. Tier 4 facilities would have an overall footprint of greater than 30 acres, and most would supply energy to the local or regional electrical grid. They could be designed to be the primary use of a site, or to support the primary use. Utility-scale solar facilities could include appurtenant structures such as a substation or switching station, energy storage system, gen-tie lines, operation or maintenance buildings, and weather towers. An example of an existing solar facility in the County that falls into the Tier 4 category is the Cuyama Solar Array project that produces 40 MW of solar energy and occupies approximately 327 acres. The Cuyama Solar Array was permitted with a CUP within the County's existing 600-acre Utility-Scale Solar Photovoltaic Overlay. Currently, Tier 4 facilities would not be permitted outside of the 600-acre overlay area.

The Project also includes zoning ordinance amendments to clarify permitting for stand-alone battery ESS. As described in Chapter 2.0, *Project Description*, battery ESS is currently permissible within the unincorporated County. The Project would not allow stand-alone battery ESS to be permitted in locations in which they are not currently allowed, and would not change any pertinent permit requirements. Therefore, the resource area impact assessments in Chapter 3 address only those battery ESS that would be developed as part of solar energy systems and facilities, since that is a change from the existing condition.

The Comprehensive Plan includes goals and policies for the protection of resources, such as scenic, biological, and cultural resources. In addition, the County has existing development standards in the Land Use and Development Code (LUDC) for features such as landscaping and lighting that would apply to solar energy systems and facilities. The Project would largely retain the existing LUDC development standards pertinent to utility-scale solar facilities, but would strengthen them and implement them across all three zoning ordinances. The proposed amendments are provided on the County's website at https://www.countyofsb.org/792/Utility-Scale-Solar-Comprehensive-Plan. The proposed amendments would standardize solar energy system and facility development review and permitting to the extent feasible, and reduce or avoid environmental impacts.

The proposed ordinance amendments provide development standards for Tier 3 and Tier 4 solar facilities. Setbacks and height limits of the zone in which the facility is located would apply, and lighting would need to comply with the County's outdoor lighting requirements. In addition, proposed development standards address facility appearance and restrict locations to preserve scenic views. Solar energy facilities shall not be located on a ridgeline that is visible from a public viewing area (e.g., public roads, trails, recreation areas) and shall not be sited within a scenic highway corridor (defined as the corridor of land extending 2,000 feet outward from the right-of-way lines of any state scenic highway) unless the solar energy facility: (1) is entirely obscured by existing landforms or vegetation, (2) is located entirely within a site that has been previously developed for urban or industrial uses, and any onsite transmission lines and power lines are placed underground to the maximum extent practicable, or (3) receives Design Review approval. The colors and materials, excluding the panels, would be required to match or blend with the primary background.

If a future Tier 3 or 4 facility would convert prime agricultural land and/or Important Farmland shown on the Department of Conservation's Important Farmland Maps to non-agricultural use, or impair agricultural

productivity, the applicant would be required to mitigate at a ratio of 1:1 for each acre that would be converted or impaired. The proposed amendments would also require that Tier 3 and Tier 4 solar energy facilities be designed and located to minimize adverse impacts to biological resources, including known sensitive natural communities, Environmentally Sensitive Habitats (ESHs), rare and special-status plant species, special-status wildlife species and their habitats, critical habitat corridors, waters and wetlands (as applicable), and nesting birds. To avoid raptor electrocution, recommendations in existing guidelines promulgated by the Edison Electric Institute's Avian Power Line Interaction Committee regarding power line spacing and markers as well as construction and work procedures would be implemented. In addition, ground vegetation would be installed and maintained for the duration of the operation to, in part, reduce dust and increase the aesthetics of the site until the site is decommissioned.

Tier 3 and Tier 4 solar energy facilities shall include a fire prevention plan to identify sources of fire hazards and methods to mitigate fire hazards during construction and throughout operation of the project. Stand-alone battery ESSs and solar energy facilities that include a battery energy component would be required to establish an emergency response and emergency action plan that is reviewed and approved by the County Fire Department.

The proposed amendments would require a decommissioning plan to guide site closure activities to meet federal, state, and local requirements for the rehabilitation and revegetation of the project site after a Tier 3 or 4 facility closes or terminates its use. If the project site is within an Agricultural zone, then the site would be restored to a condition suitable to resume agricultural usage. These existing and proposed regulations and policies serve to minimize environmental impacts and protect resources. As such, proposed and existing County regulations, standard conditions, and policies are considered in the resource impact analyses in Chapter 3, as applicable. For purposes of the impact analysis, potential impacts resulting from decommissioning are evaluated, including the potential to return a site to its former use (e.g., agriculture). However, the amendments do not require that a solar energy facility be closed and decommissioned within a certain time frame, and the applicable County permit requirements (e.g., conditional use permit) would not mandate decommissioning of a site unless the site’s use was terminated by the landowner/applicant for a specified period of time. Therefore, certain resource areas (e.g., agriculture, biological resources) are assumed to have permanent impacts in some cases, as described in Chapter 3.

This Program EIR does not evaluate any site-specific projects and therefore, does not approve or exclude facilities on a site-specific basis. Future project-level siting and design details, as well as the timing of potential future solar development, are unknown at this time. While the Project does not include the rezoning of any parcels to allow for utility-scale solar development, for analysis purposes, it is assumed that the Mariposa Reina oil processing facility site (17100 Calle Mariposa Reina in the Gaviota area) may, at some unspecified time in the future, be redeveloped to allow for a utility-scale solar energy facility installation, per County Board of Supervisors (Board) recommendation[2]. Currently, the Mariposa Reina site is zoned for Coastal Dependent Industry (M-CD) with a land use designation of Coastal Dependent Industry. Once a development proposal has been submitted, additional site-specific analysis may be necessary to ensure that the appropriate land use considerations, permitting path, and environmental analysis would be undertaken to convert the Mariposa Reina (or any other potential site) to a solar energy facility development. Future site-specific considerations at the Mariposa Reina site, or other potential

[2] The Board provided direction to staff at their July 13, 2021, hearing.

sites, may also require future amendments to the General Plan, CLUP, or zoning ordinances to change a site's land use or zoning designations to Public Utilities or another zone where Tier 3 or 4 solar energy facilities would be allowed.

The type and magnitude of impacts from a specific solar energy system or facility would depend on the location and facility-specific design. The decision of where to site solar facilities would be determined by property owners and/or future developers. In general, the location of Tier 3 and Tier 4 solar facilities could be limited by topography and sensitive resources, such as ESH and rare and special-status plants and species, as part of the policy and development standard requirements to obtain a permit.

The following discussion provides assumptions regarding future solar energy facilities that would be enabled as a result of the Project that are used in the analyses provided in this Program EIR. Construction of the community- and utility-scale solar energy facilities would typically involve various components thereby involving some combination of the following activities: establishing site access; clearing vegetation and site grading; the use of staging and laydown areas; construction of internal and external access routes; erection of security fencing; construction of foundation posts or pile driving to support the solar structures; assembling and installation of solar panel arrays and tracker systems; installing and connecting electrical systems, inverters/transformers and associated substations; construction of racks and/or containers for housing battery storage and remote monitoring systems; erection of meteorological towers for weather data collection; and constructing and connecting electrical overhead gen-tie lines to the battery energy storage system or solar facility substation(s). In addition, larger solar energy facilities may include ancillary telecommunications connections, such as the inclusion of fiber cable installation or last-mile internet connections to convey data or facilitate remote monitoring. Typically, these systems involve placing fiber optic cable underground in conduits or collocating cables on poles in a shared configuration. Decommissioning typically involves many of the same activities, but with structure demolition and waste removal as a significant component of the work.

This Program EIR developed assumptions in order to provide technical analysis since there are no specific projects proposed at this time, and the exact siting and specifications of future projects are unknown. Under the proposed amendments, Tier 1 projects have no acreage limit if they are roof-mounted solar energy systems, or 0.5 acres if freestanding, and Tier 2 projects can be up to 5 acres in size. For the technical analyses, Tier 1 and Tier 2 projects are modeled as a 5-acre project size with the following general assumptions. Construction phases would typically include site preparation, grading, and solar facility installation and construction, potentially lasting up to approximately 34 months (about three years) of construction. Tier 1 and Tier 2 projects are assumed to have a daily round-trip maximum of up to 60 worker trips, 50 vendor truck trips, and 20 haul truck trips. It is assumed that on-site construction equipment would be required throughout the construction duration, and may include, but are not limited to, graders, forklifts, backhoes, and cranes. The analyses for Tiers 1 and 2 are conservative to represent a reasonable worst-case scenario, and projects less than 5.0 acres in size would result in lesser impacts than those disclosed herein for a 5-acre project.

Under the proposed amendments, Tier 3 projects would be up to 30 acres in size, and Tier 4 projects would have no acreage limit. For the purposes of providing a conservative modeling assessment for larger solar energy facility projects, a project size of up to 600 acres was modeled using the following general assumptions (described further in Sections 3.3, *Air Quality*, and 3.10, *Noise*). All Tier 3 projects would be

less than 600 acres. Tier 4 projects do not have an upper bound size limit; however, 600 acres was selected for modeling purposes as it coincides with the current 600-acre Utility-Scale Solar Photovoltaic Overlay on lands zoned AG II. Projects less than 600 acres in size would typically result in fewer impacts than those disclosed in Chapter 3 for a 600-acre project. Construction phases would typically include site preparation, grading, and solar facility installation and construction, potentially lasting up to approximately 53 months (about four and a half years) of construction. A 600-acre project is assumed to have a daily maximum of up to 120 worker trips, 100 vendor truck trips, and 50 haul truck trips. It is assumed that on-site construction equipment would be required throughout the construction duration, and may include, but is not limited to, graders, forklifts, backhoes, and cranes. The analyses for Tiers 3 and 4 are conservative to represent a reasonable worst-case scenario. Assumptions and potential impacts are discussed further within the respective resource areas sections in Chapter 3.

3.0.6 Cumulative Impacts Analyses

CEQA Guidelines Section 15130(a) states that an EIR shall "discuss the cumulative impacts of a project when the project's incremental effect is cumulatively considerable." The CEQA Guidelines define cumulative impacts as "two or more individual effects that, when considered together, are considerable or which compound or increase other environmental impacts." Section 15355 of the CEQA Guidelines further states that the individual effects can be various changes related to a single project or the change involved in a number of other closely related past, present, and reasonably foreseeable future projects. The discussion of cumulative impacts must reflect the severity of the impacts as well as the likelihood of their occurrence. However, the discussion need not be as detailed as the discussion of environmental impacts attributable to the project alone.

According to CEQA Guidelines Section 15130(a)(1), "…a 'cumulative impact' consists of an impact that is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. An EIR should not discuss impacts which do not result in part from the project evaluated in the EIR."

In addition, as stated in the CEQA Guidelines Section 15064(h)(4), "[t]he mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable."

Therefore, the cumulative impact discussion focuses on whether the impacts of the Project are cumulatively considerable within the context of combined impacts caused by other past, present, or future projects. The main determinant for purposes of inclusion and evaluation in the cumulative impact analysis is whether an individual project, program, policy initiative, or conceptual future project would contribute to an impact to an environmental resource to which the Project also would have an impact. Generally, projects that are located within geographical proximity to each other (e.g., two or more projects located within the same watershed, or utilizing the same roadways) have the potential to contribute to cumulative impacts to an environmental resource. However, given the geographical distribution and extent of the environmental resource, projects do not necessarily need to be located within close proximity to one another to be included in the cumulative impacts analysis.

The County of Santa Barbara Planning and Development Department (P&D) Long Range Planning Division reviewed current work plans to consider program and policy initiatives, discretionary and

ministerial projects throughout the county to identify projects that may have a cumulative effect on the environment. **Table 3.0-1**, *Cumulative Comprehensive Planning Projects List*, provides the land use plans and policy initiatives, either recently adopted, in progress, or reasonably foreseeable (at the time the environmental baseline for this Program EIR was set), that are assessed as part of the cumulative scenario for each resource area.

Table 3.0-2, *Cumulative Energy Projects List*, describes energy projects within Santa Barbara County either recently constructed, in progress, or reasonably foreseeable (at the time the environmental baseline for this Program EIR was set) that are assessed as part of the cumulative scenario for each resource area.

TABLE 3.0-1
CUMULATIVE COMPREHENSIVE PLANNING PROJECTS LIST

Project Name	Description	Location	CEQA Document	Status	Discussion
Past Projects					
2030 Climate Action Plan (CAP)	The 2030 CAP establishes 2030 and 2045 greenhouse gas (GHG) emissions targets and provides measures to establish a trajectory towards achieving those targets. The 2030 CAP includes specific measures to achieve a GHG emissions target of 50 percent below 2018 levels by 2030.	Countywide (unincorporated)	EIR	Adopted in 2024	The 2030 CAP was developed collaboratively and includes efforts to enhance the community's resiliency to future climate change impacts, as well as to adapt to changes that are already underway. GHG reduction measures include increasing energy resilience in new and existing buildings and developing a sunset strategy for fossil-fuel extraction.
2023-2031 Housing Element Update	The County updated the Housing Element of its Comprehensive Plan to meet its share of regional housing needs in accordance with State housing law.	Countywide (unincorporated)	Program EIR	Adopted December 2023	The Board of Supervisors selected and adopted 28 rezone sites and selected 9 County-owned sites for future residential development
Short-Term Rental Ordinance	Ordinance regarding short-term rental regulations for Coastal and non-Coastal Zones (including "homestays").	Countywide (unincorporated)	Notice of Exemption	Coastal Short-Term Rental Ordinance: on hold (Inland Short-Term Rental Ordinance: adopted 2017)	Short-Term Rentals and Homestays are permitted in certain Inland Area Zones of the unincorporated County; however, they are currently unregulated in the Coastal Zone.
Disadvantaged Unincorporated Communities Update	Senate Bill 244 (Government Code § 65302.10(c)) required the County to review and update the Disadvantaged Unincorporated Communities (DUC) appendix of the County Comprehensive Plan Land Use Element.	Countywide (unincorporated)	Notice of Exemption	Adopted in 2022	The initial DUCs identified and incorporated into the Land Use Element in 2015 included the unincorporated communities of Casmalia, Cuyama, Garey, New Cuyama, Sisquoc, Los Alamos, and Ventucopa. An updated analysis in 2022 did not identify any new DUCs.
2050 Regional Transportation Plan/Sustainable Communities Plan	The Regional Transportation Plan (RTP) is a long-range planning document prepared by the Santa Barbara County Association of Governments (SBCAG) that defines how the region plans to invest in the transportation system over 20+ years. The Sustainable Communities Strategy (SCS) is a component of the RTP, required by SB 375 (2008), that sets forth a forecasted development pattern for the region, which will (in part) reduce greenhouse gas (GHG) emissions from passenger vehicles and light trucks to achieve the GHG reduction targets set by the California Air Resources Board.	Countywide	EIR	Adopted 2021	The future land use and transportation scenario presented in the SCS must accommodate forecast population, employment, and housing sufficient to meet the needs of all economic segments of the population, including the State-mandated Regional Housing Needs Allocation (RHNA), while considering State housing goals.

TABLE 3.0-1
CUMULATIVE COMPREHENSIVE PLANNING PROJECTS LIST

Project Name	Description	Location	CEQA Document	Status	Discussion
Other Present or Reasonably Foreseeable Future Projects					
2024 Annual Zoning Amendments Package	Zoning ordinance amendments to update, revise, or clarify as needed. In 2024 the ordinances were amended for consistency with SB 9, update small wireless telecom facilities requirements, and make other minor "cleanup" amendments.	Countywide (unincorporated)	Notice of Exemption	Adopted in February 2025, pending Coastal Commission Certification	Senate Bill 9 amendments ministerially permit up to two principal dwelling units or urban lot splits in compliance with State law. Other amendments streamlined permitting for small wireless facilities, updated allowed uses, and aligned with State law changes for accessory dwelling units.
Agricultural Enterprise Ordinance	Amendment to the County LUDC and the Coastal Zoning Ordinance (Article II) to allow a variety of uses that would be incidental to, and compatible with, agricultural uses on lands zoned Agricultural I and II (AG-I and AG-II).	Countywide (unincorporated)	Environmental Impact Report (EIR)	LUDC (Inland) amendments approved by Board of Supervisors in December 2024; Article II (Coastal Zone) amendments are proposed for certification by the California Coastal Commission.	The Agricultural Enterprise Ordinance will expand the range and diversity of allowable uses on all AG-II lands and allow incidental food service at winery tasting rooms in AG-I zones. The project supports the overall economic viability of the existing agricultural uses and operations while maintaining the primary agricultural function, productivity, and character of these agricultural zoning districts.
2025 Zoning Amendments Package	Minor cleanup amendments to bring certain rules, regulations under Senate Bill 9 amendments ministerially permit up to two principal dwelling units or urban lot splits in compliance with State law. Other amendments streamlined permitting for small wireless facilities, updated allowed uses, and aligned with State law changes for accessory dwelling units."	Countywide (unincorporated)	NOE	2025- 2026	Minor cleanup amendments as needed.
Zoning Ordinance Amendment Project	An effort by Santa Barbara County to bring certain rules, regulations, and review processes up to date with County goals, and reflect current regulatory, economic, and environmental conditions.	Countywide (unincorporated)	Notice of Exemption	In Progress	The project will result in a set of amendments to the County's land use and development regulatory documents aimed at technical updates, housing, accommodation, and process improvements. The Board has approved ordinance amendments for the technical updates, including eliminating the Shopping Center (SC) zone and rezoning all such properties to C-2, countywide outdoor lighting standards, and updates to the sign regulations.

TABLE 3.0-1
CUMULATIVE COMPREHENSIVE PLANNING PROJECTS LIST

Project Name	Description	Location	CEQA Document	Status	Discussion
Cannabis Odor Ordinance Amendments	Amendment of existing development standards, Article II cannabis odor control regulations, and Odor Abatement Plan (OAP) compliance and monitoring requirements for commercial cannabis facilities in the Coastal Zone.	Countywide (unincorporated)	LUDC Amendments: covered under previously prepared EIR. Article II amendments: exempt	Board adopted in March 2025 CCC certification pending as of April 2025	Ordinance requires the installation of multi-technology carbon filtration systems inside every cannabis greenhouse in the Carpinteria Valley, on or before March 31, 2026.
Environmental Justice (EJ) Element	The County is preparing a stand-alone EJ Element to identify disadvantaged communities within the unincorporated county and develop goals, policies, and objectives, in accordance with Senate Bill 1000.	Countywide (unincorporated)	Notice of Exemption	Decision-maker hearings expected summer of 2025	EJ communities in the unincorporated County include Casmalia, Cuyama, New Cuyama, Ventucopa, Garey, Sisquoc, Los Alamos, and Isla Vista. The EJ Element will develop goals, policies, and objectives that: reduce unique or compounded health risks; promote access to public facilities, healthy foods, safe and sanitary homes, and physical activity; promote civic engagement in the public decision-making process; and prioritize improvements and programs that address the needs of disadvantaged communities.
Safety Element Update	The Safety Element Update consists of three concurrent phased projects, including: • Phase 1 – Safety Element amendments to incorporate revised wildfire policies and actions, and incorporate the revised Multi-Jurisdiction Hazard Mitigation (MJHMP); • Phase 2 - Preparation of the Evacuation Modelling and Planning Project (grant-funded); and • Phase 3 – Preparation of the Climate Change Adaptation Plan	Countywide (unincorporated)	Program EIR	Phase I: adopted in 2023 Phase II: expected to be complete in May 2025 Phase III: Early 2027	The County's Seismic Safety and Safety Element (Safety Element) establishes policies to protect the community from natural and human-made hazards. It is intended to guide land use planning by providing pertinent data regarding geologic, soil, seismic, fire, and flood hazards. The Safety Element also includes the Safety Element Supplement that describes land use planning measures to reduce the risk of public exposure to acutely hazardous materials associated with oil and gas pipelines and fixed facilities.
Open Space Element Update	Update to the Open Space Element (in accordance with Senate Bill 1425) to address the following components: (1) Access to open space for all residents in a manner that considers social, economic, and racial equity, correlated with the environmental justice element or environmental justice policies in the general plan, as applicable.	Countywide (unincorporated)	To be determined	Expected adoption in 2026	The County's Open Space Element has not been substantially updated since it was first adopted in 1979. It describes open space for public health and safety, the managed production of resources, outdoor recreation, and the preservation of natural resources.

TABLE 3.0-1
CUMULATIVE COMPREHENSIVE PLANNING PROJECTS LIST

Project Name	Description	Location	CEQA Document	Status	Discussion
	(2) Climate resilience and other co-benefits of open space, correlated with the safety element. (3) Rewilding opportunities, correlated with the land use element.				
Circulation Element Update	Updates in accordance with State codes to plan for a "balanced, multimodal transportation network" and to develop and implement safety measures.	Countywide (unincorporated)	To be determined	Expected adoption in 2027	The updated Circulation Element will plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways for safe and convenient travel in a manner that is suitable to the rural, suburban, or urban context of the Comprehensive Plan.
Senior Mobile Home Park Ordinance	Create two new zoning overlays within the LUDC and Article II, in addition to land use designation changes and consistency rezones. A new Mobile Home Park (MHP) overlay would be applied to existing all-ages mobile home parks within the unincorporated county, and a new Senior Mobile Home Park (SMHP) overlay would be applied to existing senior mobile home parks operating within the unincorporated county.	Countywide (unincorporated)	Notice of Exemption	Expected adoption in 2025	At the November 5, 2024, hearing, the Board of Supervisors adopted the Senior Mobile Home Park Conversion Interim Urgency Ordinance to prohibit the conversion of senior or age-restricted mobile home parks to all-ages mobile home parks. The ordinance was subsequently extended to October 2025.
Airport Land Use Plan Consistency Amendments	Amendments to the Comprehensive Plan to be consistent with the Airport Land Use Compatibility Plans (ALUCPs) for the Santa Barbara, Santa Maria, Lompoc, and Santa Ynez Airports and Vandenberg Space Force Base.	Countywide (unincorporated)	Notice of Exemption	Expected adoption in Fall 2025	SBCAG adopted updates to the ALUCPs in January 2023. The County must (1) prepare amendments to the Comprehensive Plan and zoning ordinances to achieve consistency with the updated ALUCPs, present the consistency amendments to decision-makers for consideration of adoption in Fall 2025, and obtain Coastal Commission-certification of a LCPA involving changes to the Santa Barbara Airport ALUCP.
Recreation Master Plan	The Recreation Master Plan will foster new parks, trails, and recreational facilities in strategic coordination with other public recreation providers in the county. Recreation projects are planned to address recreation needs including parks, sports fields and courts, trails, campgrounds, aquatic and community centers, equestrian facilities, and more.	Countywide (unincorporated)	EIR	Draft Recreation Master Plan and Draft EIR released in February 2025.	The Draft Recreation Master Plan includes potential programs and actions for implementation, including a Recreation Benefit Project program, funding programs, community partnerships, and amendments to the County's Comprehensive Plan and zoning ordinances.

TABLE 3.0-1
CUMULATIVE COMPREHENSIVE PLANNING PROJECTS LIST

Project Name	Description	Location	CEQA Document	Status	Discussion
Santa Barbara County Last-Mile Broadband Program	The Project would facilitate the implementation of future broadband infrastructure installations in various communities across the County that are currently underserved or unserved by high-speed broadband internet services.	Countywide (unincorporated)	EIR	Final EIR certified in February 2025.	The Project involves last-mile broadband installations designed for nine communities identified as Priority Areas for broadband service under the Broadband Program. The broadband facility installations could include both underground and aerial fiber optic cable as part of proposed "last-mile" broadband facilities, which are intended to reach end users in these affected communities.
Foothill Community Wildfire Protection Plan	A Community Wildfire Protection Plan (CWPP) is a tool to help reduce the severity and impact of wildfires and facilitate community resilience. The Foothill CWPP will incorporate the existing Mission Canyon CWPP into an updated plan for the region.	The Plan Area encompasses the Santa Barbara Foothill Communities of Mission Canyon, San Roque, Barger Canyon, and Northridge, as well as undeveloped areas north of these communities within private land, County land, and the Los Padres National Forest.	Notice of Exemption	Expected completion summer 2025	Cities nearby also have their own CWPPs: City of Santa Barbara, Montecito, Carpinteria / Summerland, and Goleta. CWPPs also exist for unincorporated areas close to the Plan Area such as the Gaviota Coast CWPP, and San Marcos Pass / Eastern Goleta Valley CWPP.

SOURCE: County of Santa Barbara, ESA, 2025

TABLE 3.0-2
CUMULATIVE ENERGY PROJECTS LIST

Project Name	Description	Location	CEQA Process	Status	Discussion
Past Projects					
Ellwood Generating Station	The Ellwood Generation Station is a "peaker plant" that provides electricity when electricity demand is high. The life of the plant has been extended to maintain grid reliability.	30 Las Armas Rd, Goleta, CA 93117-2400	Not applicable	Online since 1974	Generation greater than 30 MW
Marian Medical Center Co-Generation Plant (Santa Maria Landfill I)	This cogeneration plant produces power for the Marian Medical Center using landfill gas (methane) piped in from the nearby Santa Maria Landfill.	Northeast section of the City of Santa Maria, from the Santa Maria Landfill (2065 East Main Street) to the Marian Medical Center (1400 East Church Street). A pipeline runs between these facilities beneath the East Main Street right-of-way to the Suey Road right-of-way.	Mitigated Negative Declaration (MND)	Online since 2008	Generation less than 10 MW
Bloom Energy Server (UCSB Fuel Cell)	The Bloom Energy Server uses fuel cell technology to generate electricity from natural gas. The electricity is sold to SCE.	University of California, Santa Barbara	Notice of Exemption	Online since 2012	Generation less than 10 MW
Gibraltar Small Hydropower Plant	The City of Santa Barbara recommissioned the Gibraltar hydropower plant in 2015 after it had been shut down for 17 years. When there is sufficient water to spill over the Gibraltar Dam, the hydropower facility produces electricity that is sold to SCE.	Gibraltar Dam and Reservoir (located on the Santa Ynez River, approximately 9 miles north of the City of Santa Barbara)	Notice of Exemption	Online since 2015	Generation less than 10 MW
Cuyama Solar Project	The county's first utility-scale solar project. It is a 327-acre ground-mounted solar project. The solar energy produced is purchased by PG&E.	Approximately 2 miles southeast of Cuyama and 2 miles southwest of the Cuyama River	EIR	Online since 2017	40 MW PV generation
SEPV Cuyama Solar & Battery Energy Storage Facility	Solar PV + lithium-ion battery energy storage facility adjacent to the existing Cuyama Solar Project.	Adjacent to Cuyama Solar Project (~2 miles southeast of Cuyama and ~2 miles southwest of the Cuyama River)	Relied on Cuyama Solar Overlay EIR	Online since 2023	Solar generation and battery ESS less than 10 MW
Vandenberg Space Force Base (VSFB) Solar 1 Project	This solar project is located on Vandenberg Space Force Base and was built with energy assurance as a goal. The solar array provides an estimated 35% of the base's electricity needs through a 25-year power purchase agreement.	Vandenberg Space Force Base	Environmental Assessment	Online since 2018	Generation 10-30 MW

TABLE 3.0-2
CUMULATIVE ENERGY PROJECTS LIST

Project Name	Description	Location	CEQA Process	Status	Discussion
Tajiguas Landfill Gas Plant	This biogas plant uses landfill gas from onsite waste to produce electricity that powers onsite operations. It is co-located with the ReSource Center, which diverts more than 85% of the waste received at the Tajiguas Landfill to be recycled or composted.	14470 Calle Real, Goleta	EIR	Online since 2021	Generation less than 10 MW
Vallecito Energy Storage Resilience Project	The county's first front-of-meter wholesale battery storage project. It uses lithium-ion (Li-ion) battery cell technology and the resource adequacy credits produced are purchased by Southern California Edison (SCE).	Carpinteria, in the unincorporated Santa Barbara County area, near Foothill Road and Linden Avenue	MND	Online since 2021	Battery ESS 10-30 MW
Strauss Wind Project	The county's first utility-scale wind project. The Project includes the construction and operation of a wind energy facility on approximately 5,887 acres of rural land.	3.5 miles southwest of Lompoc	EIR	Online since 2023	95.25 MW wind generation
ExxonMobil Las Flores Canyon Cogeneration Plant	The natural gas-fired cogeneration plant provides electricity that powers onshore facilities and offshore oil and gas platforms. The facility is also able to export power to SCE when it generates more electricity than it needs.	Goleta	EIR	Online (beginning unknown)	Generation greater than 30 MW
Goleta Water District Small Hydro	This small hydroelectric plant is owned and operated by the Goleta Water District. The hydroelectricity produced by the plant is sold to SCE.	Corona Del Mar Water Treatment Facility on Glen Annie Rd.	Unknown	Online (beginning unknown)	Generation less than 10 MW
Goleta Battery Energy Storage Facility	This lithium-ion battery energy storage project uses 44 containerized Tesla batteries.	6864 and 6868 Cortona Drive in Goleta	MND	Online since 2023	Battery ESS greater than 30 MW
Carpinteria Valley Water District	Installation of solar panels on new covered parking structures that produce enough energy each year to run the CVWD office for seven years.	1301 Santa Ynez Avenue, Carpinteria	Unknown	Online since 2022	Solar generation and storage
Industrial Parkway Storage Project	Eight battery storage containers and four storage inverters were installed, and the output is procured by Central Coast Community Energy.	2916 Industrial Pkwy, Santa Maria, CA 93455	Unknown	Online since 2022	10 MW of storage

TABLE 3.0-2
CUMULATIVE ENERGY PROJECTS LIST

Project Name	Description	Location	CEQA Process	Status	Discussion
Santa Maria Landfill II	This biogas plant uses excess landfill gas generated by the Santa Maria Regional Landfill that is not used by the nearby Marian Medical Center Co-Generation Plant.	Northeast section of the City of Santa Maria, from the Santa Maria Landfill (2065 East Main Street) to the Marian Medical Center (1400 East Church Street). A pipeline would run between these facilities beneath the East Main Street right-of-way to the Suey Road right-of-way.	MND	Online (beginning unknown)	Generation less than 10 MW
Other Present or Reasonably Foreseeable Future Energy Projects					
VSFB Microgrid Project	This planned microgrid project will add battery storage, microgrid controls, and substations to the existing 28-MW solar project at Vandenberg Air Force Base. The resulting microgrid will be capable of maintaining base operations during power outages.	Vandenberg Space Force Base	Categorical Exclusion	Planning stage	Battery ESS 10-30 MW
Imerys Solar & Storage Project	This planned solar PV + battery energy storage project is in the planning phase to offset Imerys' electricity use at its Lompoc industrial facility. The output will be procured by Imerys.	2500 Miguelito Rd, Lompoc, CA 93436	EIR	Permitting	Generation and Battery ESS 10-30 MW
NRG Ellwood Battery Storage Project	This battery energy storage project is in the planning phase in Goleta. It is proposed to be co-located with the existing Ellwood Generation Station, a natural gas power plant.	30 Las Armas Road Goleta, California, 93117	MND	Permitting	Battery ESS less than 10 MW

SOURCE: Data compiled by Environmental Science Associates in 2025

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3.1 Aesthetics

3.1.1 Introduction

This section describes potential impacts on aesthetic and visual resources in Santa Barbara County with future development of solar facilities enabled under the proposed Project. Lands under federal jurisdiction (such as the Los Padres National Forest and Vandenburg Space Force Base) are not included in the study area. Lands under state jurisdiction, including those of the University of California, Santa Barbara (UCSB), are also excluded from consideration as these lands are not subject to County land use plan requirements. Visual resources in this section include publicly accessible scenic vistas and corridors, and scenic highways in unincorporated county areas. This section also considers light and glare, which contribute to the visual quality and aesthetic character of Santa Barbara County.

The County received several comments pertaining to aesthetic and visual resources during the public scoping period. The City of Carpinteria requested that the EIR include an evaluation of direct, indirect, and cumulative impacts of visual resources in Carpinteria, including from structural elements, landform modifications, light, and glare. The City of Goleta suggested that the analysis should address potential impacts on scenic corridors, including those adjacent to Goleta, such as views from Highway 101, the foothills, and coastal areas. The comment also suggested that design standards should be considered to reduce visual impacts, such as requiring landscaping, buffering, or siting projects away from high-visibility areas (and not on highly visible slopes). The City of Goleta letter also commented on the potential for altering the visual character of rural areas or agricultural and open space lands.

3.1.2 Environmental Setting

Santa Barbara County Scenic Values Mapping

The County mapped scenic values based on the identified visual quality of lands as viewed from major roadways and edges of development. Scenic areas are defined by features regarded as having high levels of scenic quality and visual interest, notably including waterways, streams, rivers, reservoirs, the ocean, and hillside or mountainous landforms. Steep slopes and higher elevations provide vantage points for views and scenic vistas. The Comprehensive Plan describes three general levels of scenic value. High scenic value areas warrant strong consideration for open space protection. Moderate scenic value areas may be subject to development standards or design review before development is permitted. Low scenic value areas are not subject to standards for open space protection.

Scenic Vistas and Corridors

Scenic Values Model

In consideration of the scenic quality of the County and its communities, the County's Comprehensive Plan identifies the visual quality of the lands as viewed from major roadways and the edge of development. The Open Space Element includes an analysis of scenic values as informed by a model, which identified and ranked geographic scenic areas within the County. The countywide scenic values model considers water resources (i.e., reservoirs, rivers, streams, watersheds) as well as the vegetation surrounding the banks and shores and the habitats these lands support. The model also considers the terrain or predominant slope as these features additionally contribute to the visual landscape. The Open Space Element notes that

an important aspect of scenic quality is the backdrop of urban areas, much of which is beyond the one-quarter mile band shown on the maps. The background mountains and coastline form a strong image and inform the general open space concept of the unincorporated county.

State Scenic Highways

In recognition that Santa Barbara County is a destination for its scenic beauty, the Open Space Element also contains designated travel routes intended for the protection of scenic quality, based on destination routes, traffic capacity, and scenic value. Highway travel provides exposure to the County's visual attributes and scenic resources. Three state highways in the County are officially designated as State Scenic Highways (as discussed under state regulations). The designated scenic highways are listed below:

- State Route (SR) 1 (between the intersection of U.S. Highway 101 and Las Cruces and the City of Lompoc);
- SR 154 (entire length); and
- U.S. Highway 101 (from the City of Goleta's western boundary to SR 1 at Las Cruces).

Portions of other state highways that cross the County are identified as eligible routes (though not officially designated). These include SR 33 from the junction of SR 166 to the City of Ojai in Ventura County; SR 166 from Highway 33 west through Santa Barbara and San Luis Obispo counties to U.S. Highway 101; U.S. Highway 101 throughout its entire length through Santa Barbara County; and SR 150 from U.S. Highway 101 to the City of Ojai in Ventura County (County of Santa Barbara 2009a).

Local Corridors with Scenic Values

The County Comprehensive Plan Environmental Resources Management Element (ERME) combines the results of the scenic corridors and scenic values model to identify travel routes with the highest scenic values, as listed below and shown in **Figure 3.1-1**, *Scenic Corridors*.

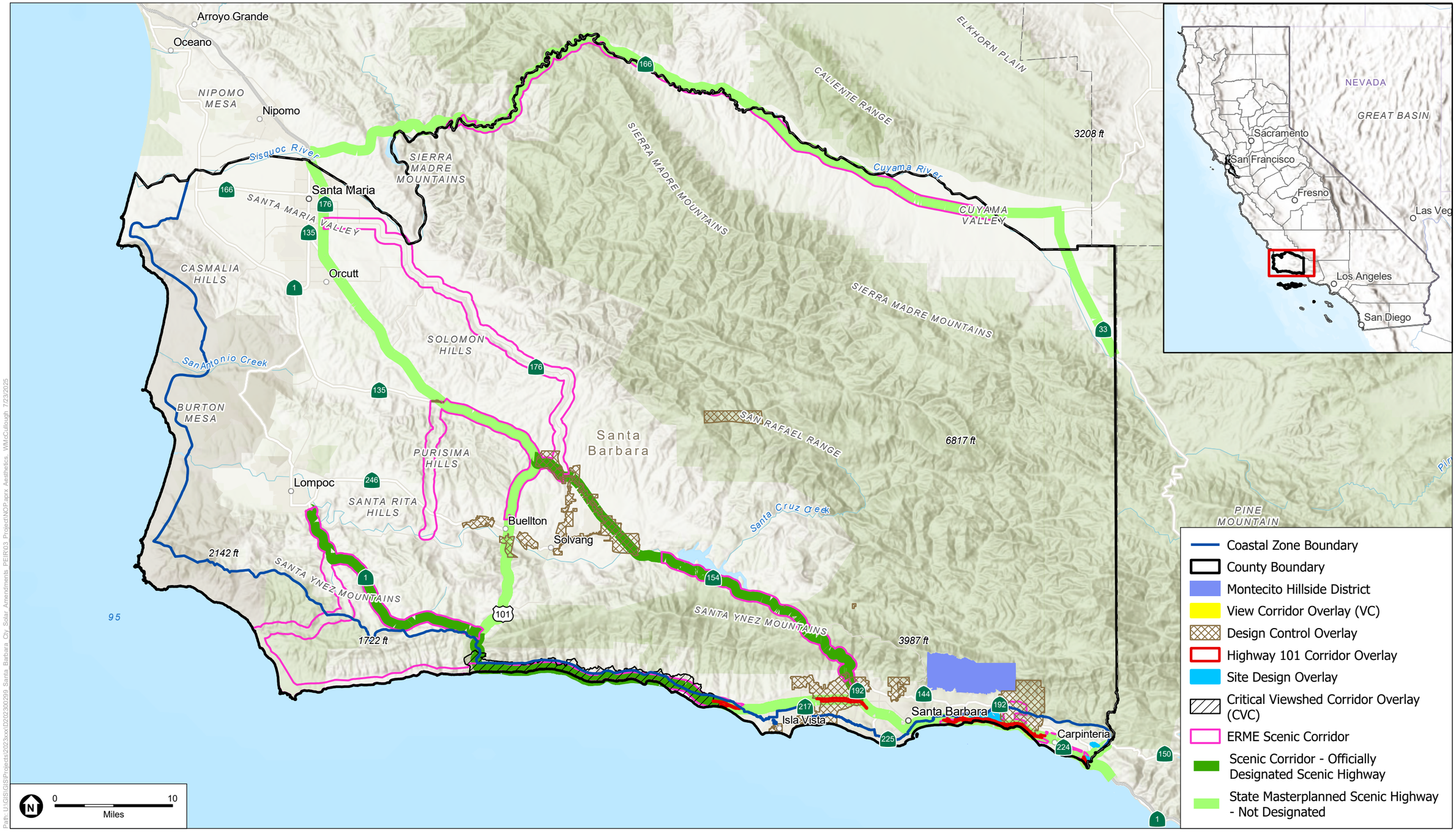
In addition, scenic vistas and corridors are considered in the County's adopted community plans (see Section 3.1.3). Scenic corridors, as identified by the County, are listed below:

North County

- U.S. Highway 101: Los Alamos-Buellton
- SR 1: Lompoc-U.S. 101
- SR 154: Los Olivos-U.S. 101
- SR 154: Lake Cachuma-Santa Barbara
- SR 166: Santa Maria-Cuyama
- SR 176: Santa Maria-Los Olivos
- Jalama Road: SR l-Jalama County Park
- Jalama County Park-Gaviota Beach State Park
- Drum Canyon Road: Los Alamos-Lompoc-Buellton

South Coast

- U.S. Highway 101: Gaviota Beach-South Coast Urban Complex
- U.S. Highway 101: Montecito-Rincon Point
- U.S. Highway 101: Goleta North Junction of Highway 1
- Toro Canyon Park-Serena Park



Path: U:\GIS\GIS\Projects\2023xxx\202300299_Santa_Barbara_Cty_Solar_Amendments_PEIR\03_Project\NOP\aprx Aesthetics, WMcCullough 7/23/2025

SOURCE: ESA, 2024; County of Santa Barbara, 2024

Santa Barbara County Solar Amendments and PEIR

Figure 3.1-1
Scenic Resources

ESA

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Light and Glare

Depending on context, new sources of light and glare can generate nuisance conditions for sensitive viewers. Light spillover or trespass effects can limit nighttime views of the sky and disturb wildlife in rural areas. Glare can interfere with clear views and diminish public enjoyment of recreational resources or be distracting to motorists.

Light and glare sources differ between urban and rural areas. In urban areas, sources of light may include interior or exterior building lights, streetlights, illuminated signs, landscape lighting, security lighting, or vehicular lights, among others. These are generally less ubiquitous in rural areas but may present effects. Sources of glare in urban and rural settings may include glass windows, reflective metallic building materials, vehicles, and water surfaces. Existing industrial development and other solar development within the County moderately contribute light and glare to the environment. Trees and vegetative cover tend to modify one's perception of light and glare. Conversely, denuded or bare land can be perceived as highly reflective, compared to areas with landscaping or shade trees.

Existing Visual Context Within Planning Areas

Coastal Zone

As noted in the Coastal Land Use Plan, Santa Barbara County is world-renowned for its beauty and diversity. The southern coast is characterized by sandy beaches, bluffs, and coastal terraces. Urban development and agriculture are nestled along a narrow coastal shelf against a spectacular backdrop of the Santa Ynez Mountains. The coastline stretching from Point Conception north to the Santa Maria River is rugged and rural, consisting of rolling hills, mountains, rocky headlands, and sand dunes between Mussel Point and the Santa Maria River (County of Santa Barbara 2019).

Cuyama Valley

The Cuyama Valley lies in the northeastern region of Santa Barbara County between southern San Luis Obispo County and the Caliente Mountains to the north and the northern slopes of the Sierra Madre Mountains to the south. Topography in the Cuyama Valley Rural Area is relatively flat, with scenic views available from local and state parks, as well as distant views of the Los Padres National Forest. The built environment in Cuyama Valley consists of a small rural residential community, an existing utility-scale solar, oil, and gas development, and a patchwork of ranches and other agricultural lands. Roadways through the area include SR 166 and SR 33 (both eligible state scenic roadways) along with smaller rural roads.

Eastern Goleta Valley

The Eastern Goleta Valley plan area includes mountains, rural foothills, coastal areas, and open space lands interspersed with low- and moderate-density residential areas that provide majestic views of the region. Riparian corridors such as the San Antonio Creek watershed, along with rugged oak woodlands and natural and built communities shape the landscape of Eastern Goleta Valley. Eastern Goleta includes State-designated scenic highways such as SR 154 from U.S. 101 near Los Olivos via San Marcos Pass to U.S. 101 in Santa Barbara. Although outside of the study area, there is an existing utility-scale battery storage facility in the city of Goleta, along with other business and residential development. The visual character and natural scenic beauty of the south coast lend the community a range of benefits such as

open space protection, economic appeal, community character, and an enhanced quality of life (County of Santa Barbara 2017a).

Gaviota Coast

The rural Gaviota coastline contains extensive open space and scenic agricultural land. The 38-mile rural coastline has striking scenic features set between the ridgeline of the Santa Ynez Mountains and Gaviota Creek watershed to the north, and the vast expanse of the Pacific Ocean to the south. The visual character of the Gaviota coast is relatively undisturbed, albeit bisected by the transportation corridor of U.S. 101 and the coastal railroad. This segment of U.S. Highway 101 is designated as a state scenic highway.

Lompoc

Scenic resources in the Lompoc area include natural areas in the Santa Ynez watershed and the Santa Ynez River, which flows between the Purisma and Santa Rita Hills. The built environment is mostly within the city of Lompoc (in Lompoc valley), surrounded by low-density rural residences in the hills. Agricultural lands of low to moderate value border the city of Lompoc to the east and west. SR 1, a designated state scenic highway, runs north-south through the Lompoc Valley between the low-lying foothills of the Santa Ynez Mountains (County of Santa Barbara 2024).

Los Alamos

Los Alamos is surrounded by agricultural land consisting of relatively large parcels (of 100 acres or greater). The narrow Los Alamos Valley is situated between the oak-studded Purisma Hills to the south and the grasslands of the Solomon Hills to the north. Visible from the north-south trending streets and SR 135 and the town of Los Alamos, the Purisma Hills extend from the city of Buellton to the south to Vandenberg Space Force Base to the north. An extensive San Antonio Creek riparian corridor provides a visual resource as the creek runs through the Los Alamos community. Travel corridors with scenic values include U.S. Highway 101 east of the town between Los Alamos and Buellton, which is defined in the County's Scenic Highways Element as a Scenic Level One travel corridor, the "most scenic, major capacity, primary designation route." This segment of U.S. 101 is also a state scenic highway; the segment that bisects the town, although undesignated, has been proposed for scenic highway status (County of Santa Barbara 2010).

Montecito

Situated between the Santa Ynez Mountains and the Pacific Ocean, the visual quality of Montecito is considered very high. Several travel corridors offer scenic panoramic views. These include U.S. 101, which provides views to the south of curving beaches and rocky headlands. Channel Drive and Olive Mill Road also provide scenic views of the ocean and mountains. The built environment remains semi-rural in character due to single-family residential lots and estates being greater than one acre in size, with scenic creeks, open spaces, and extensive native oak woodland landscaping (County of Santa Barbara 1995).

Santa Maria/Orcutt

Santa Maria Valley contains rural, agricultural (vineyards, row crops, and rangelands) lands along with urban development in the cities of Santa Maria and Guadalupe. The visual character of the region is defined by expansive agricultural valleys and plains, with distant views of the surrounding mountains and foothills. Waterways in the region include San Antonio Creek, Cuyama River, and Sisquoc River, which

is a tributary to the Santa Maria River. Prominent scenic features in Orcutt include the foothills at the southern end of the Santa Maria Valley, the northern slopes of the Solomon and Casmalia Hills, and various drainage corridors and canyons, which shape the landscape. The primary travel routes through the valley include U.S. 101, an eligible state scenic highway, and SR 1, which is classified as moderately scenic in the Orcutt Community Plan.

Santa Ynez Valley

The Santa Ynez Valley contains rural lands with visually scenic features and variable topography. Framed by mountain peaks and ridgelines, the valley contains rural ranchlands and vineyards as shaped by the Santa Ynez River and its tributaries. The built environment includes wineries, agricultural structures, ranch buildings, and rural and suburban residences. The rural scenic qualities unique to the region are highly valued by County residents and visitors.

Summerland

The community of Summerland is situated to the south of Montecito, between the ocean and mountains, with expansive views available of both. The community originated to take advantage of these natural visual resources. The built environment includes some historic structures along with sweeping ocean and mountain views. For these reasons, architectural design is afforded special consideration in Summerland (County of Santa Barbara 2017b).

Toro Canyon

The visual character of Toro Canyon is shaped by rolling foothills, ridgelines, creeks, rock outcroppings, and chaparral woodlands, all of which contribute to its scenic value. The foothills, Paredon Ridge, the sheer upper face of the Santa Ynez Mountains, and the Pacific coastline of Toro Canyon provide natural scenic beauty from major travel corridors, trails, and public roadways. Major view corridors include U.S. 101 (a designated state scenic highway which notably includes the historic Santa Claus Lane); Via Real; SR 192; and Toro Canyon Road, among others. The built environment includes residential development, along with agricultural avocado and citrus orchards, greenhouses, and open field crops (County of Santa Barbara 2004).

Visual Sensitivity

Visual sensitivity is the overall measure of an existing landscape's susceptibility to adverse visual changes. People in different visual settings, typically characterized by different land uses surrounding a project, have varying degrees of sensitivity to changes in visual conditions depending on the overall visual characteristics of the place. Santa Barbara County contains many areas of outstanding visual quality. In areas of more distinctive visual quality, including designated scenic highways, designated scenic roads, parks, and recreation and natural areas, visual sensitivity is more pronounced for the viewers. In areas of less distinctive visual quality, sensitivity to change tends to be less pronounced, depending on the level of visual exposure. The analysis of visual sensitivity is based on the combined factors of visual quality, viewer types, and volumes (such as the number of visitors to a recreational area) and visual exposure to a project. Considering these factors, visual sensitivity is categorized into high, moderate, or low visual sensitivity ranges.

Viewer Groups

The primary affected viewer groups within the study area include public viewers such as residents, motorists, local cyclists, recreational viewers, and visitors, such as tourists, pedestrians, and cyclists.

Residents

The predominant residential viewer groups for the Project include rural residents and seasonal residents within agricultural and rural areas of the unincorporated county. Due to the rural nature of lands zoned as agricultural, rural residents could be highly sensitive to visual alterations and light effects compared to urban residents. However, both rural and urban residents may be sensitive to the introduction of structures associated with the Project.

Motorists and Viewers from the Road Network

Motorists include commuters, residents, visitors, and other drivers who travel the major roadways for various purposes. While traveling at standard speeds on the highway, motorists' views are of limited duration. Views for cyclists tend to be more prolonged and noticeable than those of motorists due to the slower speed of travel. Commuters and regular travelers may be sensitive to changes in a familiar landscape.

Recreational Viewers and Visitors

Visitors come to the Santa Barbara County area for sightseeing, use of beaches, bicycling, hiking, wine tasting, cultural events, and to participate in other recreational activities. While experiencing local parks or other outdoor recreation, visitors and recreational users may be sensitive to physical changes in the landscape that potentially affect their enjoyment of the scenic values of the place.

3.1.3 Regulatory Framework

Federal

No federal lands are proposed for use under the Project; there are no federal regulations governing visual or scenic resources that would be applicable to the analysis of aesthetics and visual resources.

State

California Department of Transportation State Scenic Highway Program

California’s Scenic Highway Program was created by the state legislature in 1963 to preserve and protect scenic highway corridors from changes that would diminish the scenic quality of lands adjacent to state highways. The State Scenic Highway System includes highways that either are eligible for designation as scenic highways or have been designated as such. The status of a state scenic highway shifts from eligible to officially designated when the local jurisdiction adopts a scenic corridor protection program, applies to the California Department of Transportation (Caltrans) for scenic highway approval, and receives the designation. While local jurisdictions may propose adding routes with outstanding scenic elements to the list of eligible highways, state legislation is required for routes to become officially designated (Caltrans 2025). There are three officially designated State Scenic highways in the County and four eligible (undesignated) scenic highway segments, as noted in the environmental setting.

California Energy Code

In addition to building energy efficiency standards and requirements for community shared solar electric generation or battery storage requirements, Title 24, Part 6 of the California Energy Code (CEC) contains requirements for outdoor lighting zones and luminaire cutoff requirements. Exterior lighting allowances in California vary by zone characteristics. As defined by CEC, the ambient illumination allowances range from very low in zones with undeveloped areas of parks and wildlife preserves to moderately high in urban/commercial centers (CEC 2022).

California Coastal Act

Implementation of the Coastal Act requires regulation of development on hillsides and watersheds within the Coastal Zone. In particular, views to and along the coast shall be protected. New development shall be visually compatible with the character of the surrounding areas. The Coastal Act, in Public Resources Code Section 30251, identifies scenic and visual qualities of coastal areas as a resource of public importance and mandates their consideration and protection. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural landforms, to be visually compatible with the character of the surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas (County of Santa Barbara 2019).

Local

County of Santa Barbara Local Coastal Program

The County Local Coastal Program (LCP), as required by the California Coastal Act, governs projects and development in the Coastal Zone. The County's LCP includes the Coastal Land Use Plan (CLUP) and Article II Coastal Zoning Ordinance, which implements the Coastal Land Use Plan.

Coastal Land Use Plan

The CLUP goals and policies endeavor to protect the County's scenic values and diverse habitats, preserve prime agricultural lands, and provide maximum recreational use of beaches while also allowing for orderly growth and development with respect to resources in the Coastal Zone. The CLUP contains visual resource protection policies as well as policies protecting environmentally sensitive habitats and historic resources in the coastal zone. Visual resources are among the principal concerns for siting and permitting major energy facilities in the Coastal Zone. As noted in the CLUP, industrial and energy facilities, particularly when sited within view corridors, may result in long-term visual effects. Some effects may be limited through proper siting, screening/landscaping, and undergrounding. The CLUP notes that abandonment of an industrial or energy facility must include removal of above-ground equipment to reduce impacts on visual resources (Santa Barbara County 2019). Relevant CLUP policies are provided below.

CLUP Visual Resources Policies

> ***Policy 4-1*:** Areas within the coastal zone which are now required to obtain approval from the County Board of Architectural Review (BAR), because of the requirements of the D-Design Supervision Combining Regulations or because they are within the boundaries of Ordinance 453, shall continue to be subject to design review. In addition, developments in all areas designated on the land use plan maps as Commercial, Industrial, or Planned Development and residential structures on bluff top lots shall be required to obtain plan approval from the County BAR.

***Policy 4-2*:** All commercial, industrial, planned development, and greenhouse projects shall be required to submit a landscaping plan to the County for approval.

***Policy 4-3*:** In areas designated as rural on the land use plan maps, the height, scale, and design of structures shall be compatible with the character of the surrounding natural environment, except where technical requirements dictate otherwise. Structures shall be subordinate in appearance to natural landforms; shall be designed to follow the natural contours of the landscape; and shall be sited so as not to intrude into the skyline as seen from public viewing places.

***Policy 4-4*:** In areas designated as urban on the land use plan maps and in designated rural neighborhoods, new structures shall be in conformance with the scale and character of the existing community. Clustered development, varied circulation patterns, and diverse housing types shall be encouraged.

***Policy 4-5*:** In addition to that required for safety (see Policy 3-4), further bluff setbacks may be required for oceanfront structures to minimize or avoid impacts on public views from the beach. Bluff top structures shall be set back from the bluff edge sufficiently far to ensure that the structure does not infringe on views from the beach except in areas where existing structures on both sides of the proposed structure already impact public views from the beach. In such cases, the new structure shall be located no closer to the bluff's edge than the adjacent structures.

***Policy 4-6*:** Signs shall be of size, location, and appearance so as not to detract from scenic areas or views from public roads and other viewing points.

***Policy 4-7*:** Utilities, including television, shall be placed underground in new developments in accordance with the rules and regulations of the California Public Utilities Commission, except where cost of undergrounding would be so high as to deny service.

***Policy 4-8*:** The County shall request the State of California to designate that portion of Highway 101 between Winchester Canyon and Gaviota State Park as a "Scenic Highway."

CLUP View Corridor Overlay Designation

The Coastal Act mandate for the protection of visual resources is broad, requiring the protection of the scenic and visual qualities of coastal areas. Since the County's coastal area is world-renowned for its beauty, the entire coastal zone could be subject to a visual resource protection overlay designation. All areas in the County in the Coastal Zone where there are views from Highway 101 to the ocean are subject to development review by the County Board of Architectural Review (BAR) for conformance to the following policies.

***Policy 4-9*:** Structures shall be sited and designed to preserve unobstructed broad views of the ocean from Highway 101 and shall be clustered to the maximum extent feasible.

***Policy 4-10*:** A landscaping plan shall be submitted to the County for approval. Landscaping, when mature, shall not impede public views.

***Policy 4-11*:** Building height shall not exceed one story or 15 feet above average finished grade, unless an increase in height would facilitate clustering of development and result in greater view protection, or a height in excess of 15 feet would not impact public views to the ocean.

Santa Barbara County Comprehensive Plan

The County's Comprehensive Plan recognizes the value of protecting scenic and visual resources. In addition to the various community plans, the Land Use, Open Space, Environmental Resources

Management, and Scenic Highways elements of the Comprehensive Plan provide specific guidance for the protection of views, scenic corridors, and visual resources (County of Santa Barbara 2009a).

Land Use Element

The Land Use Element of the Comprehensive Plan was last updated in 2024 (County of Santa Barbara 2024). The element contains hillside and watershed protection and visual policies to guide County land use considerations.

> ***Hillside and Watershed Protection Policy 2*:** All developments shall be designed to fit the site topography, soils, geology, hydrology, and any other existing conditions and be oriented so that grading and other site preparation is kept to an absolute minimum. Natural features, landforms, and native vegetation, such as trees, shall be preserved to the maximum extent feasible. Areas of the site which are not suited to development because of known soil, geologic, flood, erosion or other hazards shall remain in open space.
>
> ***Visual Resource Policy 1*:** All commercial, industrial, and planned developments shall be required to submit a landscaping plan to the County for approval.
>
> ***Visual Resource Policy 2*:** In areas designated as rural on the land use plan maps, the height, scale, and design of structures shall be compatible with the character of the surrounding natural environment, except where technical requirements dictate otherwise. Structures shall be subordinate in appearance to natural landforms; shall be designed to follow the natural contours of the landscape and shall be sited so as not to intrude into the skyline as seen from public viewing places.
>
> ***Visual Resource Policy 3*:** In areas designated as urban on the land use plan maps and in designated rural neighborhoods, new structures shall be in conformance with the scale and character of the existing community. Clustered development, varied circulation patterns, and diverse housing types shall be encouraged.
>
> ***Visual Resources Policy 4*:** Signs shall be of size, location and appearance so as not to detract from scenic areas or views from public roads and other viewing points.
>
> ***Visual Resource Policy 5*:** Utilities, including television, shall be placed underground in new developments in accordance with the rules and regulations of the California Public Utilities Commission, except where cost of undergrounding would be so high as to deny service.

Open Space Element

Scenic Values Model and Travel Corridor Overlay

In addition to the scenic values model and corresponding overlay (described in Section 3.1.2), travel corridors were also evaluated in the Open Space Element to determine relative (or ranked) scenic values in roadways and establish overlays for scenic travel corridors. Travel corridors and urban perimeter areas determined to be of the highest scenic value should be designated as open space. Other scenic areas should be subjected to design review before development permission is granted. Preservation of the integrity of the site and minimum visual disturbance or change from existing conditions are the principal criteria for review, as noted in the Open Space Element. Level 1 is designed to protect scenic values as open space; Level 2 is considered to be moderately scenic; Level 3 is considered the least scenic. When using the scenic values model, its findings for a particular project area should be critically analyzed and compared with available studies on scenic quality. If conflicting values are indicated for a project site,

detailed studies should be conducted to resolve them. The scenic values model (County of Santa Barbara 2009a) considers the following criteria:

a) Certain urban and rural areas should be controlled as to their intensity, design, and arrangement of development to retain their unique, scenic feature.

b) Development should be compatible with its surroundings and, if possible, enhance it.

c) Adopted architectural themes shall be adhered to in the areas which have designated themes.

d) In keeping with the dominant rural character of the County, natural features and settings are preferred.

e) Variety in design and landscaping should be encouraged.

f) Scenic corridors should be designated in conjunction with the Scenic Highway Element, and development within them carefully regulated to maintain their scenic qualities.

g) Sign control shall be implemented through the existing County Sign Ordinance.

h) Landscape plans shall be required for all major developments and for developments in certain designated scenic areas.

i) The D-Design Supervision Combining Regulation for zoning should be used to implement design review.

j) Open space uses are encouraged for all scenic areas.

Environmental Resources Management Element

As defined in the ERME, the county's scenic beauty is one of the principal factors that attracts its residents and visitors. The ERME defines areas of scenic values and scenic corridors within the County. The ERME provides maps with categorized areas as guidance for potential development. For example, within "Category C" areas (areas of high scenic value and scenic corridors), urban development is subject to plan design review and specific conditions may be imposed to protect against hazards and to preserve the integrity of the land and environment (County of Santa Barbara 2009a).

The following routes[1] in the ERME are classified as having the highest scenic values:

- U.S. 101: Los Alamos-Buellton
- U.S. 101: Gaviota Beach- South Coast Urban Complex
- U.S. 101: Montecito-Rincon Point
- Cal. (State Route) 1: Lompoc- U.S. 101
- Cal. (State Route) 154: Los Olivos- U.S. 101
- Cal (State Route) 154: Lake Cachuma-Santa Barbara
- Cal (State Route) 166: Santa Maria-Cuyama
- Cal. (State Route) 176: Santa Maria-Los Olivos
- Jalama Road: Cal 1-Jalama County Park
- Jalama County Park-Gaviota Beach State Park

[1] Portions of SRs 1 and 154 are designated as official State Scenic Highways.

- Drum Canyon Road: Los Alamos-Lompoc-Buellton link
- Toro Canyon Park- Serena Park

Scenic Highways Element

The Scenic Highways Element presents the County's policies and procedures for scenic highways and their designation. This element contains the County's scenic highways goals, evaluation standards, preservation measures, and procedures for obtaining official "Scenic Highway" designation for state and county roads in the county. The Scenic Highways Element contains goals and preservation measures for eligible scenic routes (County of Santa Barbara 2009b). Such measures for preservation of an eligible scenic corridor include regulation of land use and zoning, including the application of the "D" Design Control Overlay District to require design review of structures or other development, grading and landscaping regulations, and specifications for outdoor signage. For projects under County jurisdiction, the County can require conditions suitable for maintenance or enhancement of the scenic qualities of the corridor. Some optional measures as suggested by the Scenic Highways Element include (but are not limited to) the following:

a) Public purchase of development rights in scenic corridors;
b) Establishment of a citizens committee for scenic highway matters;
c) Implementation of Williamson Act "Open Space Preserves" for areas along scenic routes; and
d) Enactment of development prohibitions in scenic corridors.

The following goals are listed in the Scenic Highways Element of the County Comprehensive Plan (County of Santa Barbara 2009b):

a) To enhance and preserve the valuable scenic resources located along roadways within the County.
b) To consider every proposed new highway or major realignment as an opportunity to maintain the scenic quality of the County by evaluating them for scenic highway eligibility.
c) To help maintain the economic contribution of tourism to the County.
d) To accommodate State planning law.

Community Plans

The County includes the incorporated cities of Buellton, Carpinteria, Goleta, Guadalupe, Lompoc, Santa Barbara, Santa Maria, and Solvang. Unincorporated areas include Montecito, Summerland, Eastern Goleta Valley and areas around Goleta, Isla Vista, Carpinteria Valley, Cuyama Valley, Casmalia, Garey, Sisquoc, Orcutt, and Vandenberg Village, as well as Ballard, Los Olivos, Santa Ynez, and Los Alamos in the Santa Ynez Valley. Several of the unincorporated communities have specific community plans with their own goals, policies, and development standards relevant to this analysis. The County has community plans for unincorporated Goleta Valley, Gaviota Coast, Los Alamos, Mission Canyon, Montecito, Orcutt, Santa Ynez, Summerland, and Toro Canyon. In addition, the County's Comprehensive Plan contains relevant policies for the Cuyama Valley and Lompoc areas. A list of the community plan goals, policies, development standards, and design guidelines (as applicable) pertinent to the Project's visual resources analysis is provided below.

Visual and Scenic Resources Overlays

The visual resources overlays identified in the County's land use plans are summarized in **Table 3.1-1**, *Summary of Scenic Resources Overlays*.

TABLE 3.1-1
SUMMARY OF SCENIC RESOURCES OVERLAYS

Geographic Area	Plan Element or Community Plan	Scenic Overlay	Other Resources	Ordinances or Other Scenic Considerations
Santa Barbara County Comprehensive Plan				
Santa Barbara County[a]	Scenic Highways Element	Scenic Corridor: State Designated Scenic Highways; Eligible Scenic Highways; Coastal Zone Boundary	State Scenic Highways; Coastal Scenic Resources	Various
Santa Barbara County[a]	Open Space Element	Scenic Values Model Map	Water; Geology; Coastal Scenic Resources	
Santa Barbara County[a]	Environmental Resources Management Element (ERME) 1	High Scenic Value; Scenic Corridor Boundary		
South Coast Area	ERME 2	High Scenic Value; Scenic Corridor Boundary		
Santa Ynez Valley	ERME 3	High Scenic Value; Scenic Corridor Boundary		
Lompoc Area	ERME 4	High Scenic Value; Scenic Corridor Boundary		
Santa Maria- Orcutt Area	ERME 5	High Scenic Value; Scenic Corridor Boundary		
Community Plans and Guidelines				
Gaviota Coast	Gaviota Coast Plan	Critical Viewshed Corridor Overlay; Land Use Overlay	Land Use, Coastal Zone	NA
Eastern Goleta Valley	Eastern Goleta Valley Community Plan	Land Use Overlay Scenic Buffer; Design Control Overlay; Highway 101 Corridor Overlay	Land Use, Coastal Zone	NA
Lompoc Area	Lompoc Area Interpretive Guidelines	Hillside slopes >30%	NA	NA
Montecito	Montecito Community Plan	Land Use Overlay: View Corridor Overlay; Site Design Overlay; Montecito Hillside Overlay	Land Use, Coastal Zone	NA
Mission Canyon	Mission Canyon Community Plan	Mission Canyon Scenic Corridor Scenic Buffer Overlay	Land Use; Historic Resources	LUDC standards for setbacks, design review, signage
Santa Ynez Valley	Santa Ynez Valley Community Plan	Design Control Overlay; Scenic Values model; Hillside	Land Use, Historic Resources	Outdoor lighting ordinance; Hillside and Ridgeline Protection Ord; community separators
Summerland	Summerland Community Plan	Site Design Overlay; View Corridor Overlay	Coastal Zone	NA

TABLE 3.1-1
SUMMARY OF SCENIC RESOURCES OVERLAYS

Geographic Area	Plan Element or Community Plan	Scenic Overlay	Other Resources	Ordinances or Other Scenic Considerations
Toro Canyon Area	Toro Canyon Community Plan	View Corridor Overlay; Carpinteria Agricultural Overlay Area A View Parcels	Coastal Zone	NA
Local Coastal Plan				
Santa Barbara County/ Coastal Land Use Plan	Various	Carpinteria Valley Zoning Overlay; View Corridor Boundary; View Corridor Overlay; Site Design Overlay; Design Control Overlay	Coastal Zone	Coastal Zoning Ordinance

NOTE:
a. Unincorporated County lands
NA = Not applicable
SOURCE: County of Santa Barbara; ESA, 2025

Cuyama Valley

Located in northern Santa Barbara County and extending to southern San Luis Obispo, southwestern Kern, and northwestern Ventura County, the Cuyama Valley lies along the Cuyama River that runs between the northern slopes of the Sierra Madre Mountains. Cuyama Valley includes the communities of Cuyama, New Cuyama, and Ventucopa. The County's Comprehensive Plan outlines visual and scenic resources policies that apply to the Cuyama area.

Eastern Goleta Valley Community Plan

Priority public vistas are identified in the Eastern Goleta Valley Community Plan (County of Santa Barbara 2017a). The Plan establishes land use development policies and design guidelines for the built environment, in part to achieve the following goal:

Goal 18: The spectacular beauty of eastern Goleta Valley is preserved and enhanced.

***Objective VIS-GV-1*:** Preserve and enhance the visual resources and public vistas of the built and natural environment.

Policy VIS-ERG-1.1: Development should minimize impacts to open space views as seen from public vistas and scenic local routes and avoid impairment of significant visual resources.

Gaviota Coast Plan and Design Guidelines

The Gaviota Coast Plan (County of Santa Barbara 2018) describes the critical viewshed corridor overlay and contains numerous visual resources goals and policies intended to protect aesthetic and scenic resources in the Gaviota Coast Plan Area. Goals and policies applicable to the Project are listed below. Additionally, the Gaviota Coast Plan Design Guidelines establish architectural and aesthetic goals for the plan area to ensure that all building and landscape designs are compatible with the design objectives of the Gaviota Coast Plan area (County of Santa Barbara 2016).

Goal VIS-1: To protect and enhance the rural, scenic, and visual qualities of the Gaviota Coast.

***Policy VIS-1*:** Visual Compatibility. The height, scale, and design of structures shall be compatible with the character of the surrounding natural and agricultural environment.

***Policy VIS-1a*:** Visual Resource Protection. (COASTAL) Development shall be sited and designed to avoid and minimize impacts to the rural, natural, and agricultural environment as seen from public viewing places. If there is no feasible building site location on the project site where development would not be visible, then the development shall be sited and designed to minimize impacts to visual resources through measures that may include, but not be limited to, siting development in the least visible portion of the site, breaking up the mass of new structures, designing structures to blend into the natural setting, restricting the building maximum size, reducing maximum height, clustering development, minimizing grading, incorporating screening elements such as landscaping or artificial berms. Landscape screening and artificial berms shall not substitute for siting and design alternatives that avoid impacts to public views of the ocean and other scenic areas and minimize alteration of natural land forms.

***Policy VIS-2*:** Visually Subordinate Development. Development shall be visually subordinate to the natural and agricultural environment as seen from public viewing places. Visual subordinance shall be achieved through adherence to Site Design Hierarchy and Design Guidelines. "Visually subordinance" is defined as development that is partially visible but not dominant or disruptive in relation to the surrounding landscape as viewed from a public viewing place.

Goleta Community Plan

In recognition of visual resources including open space lands and scenic communities in the coastal zone, the Goleta Community Plan (County of Santa Barbara 1995a) contains the following policies pertaining to the protection of visual and scenic resources.

Policy VIS- GV-1: The County shall through its discretionary and design review process, ensure the maintenance and where necessary the improvement of the quality in the design and landscaping of industrial, commercial, institutional, and residential facilities.

DevStd VIS-GV-1.1: Setbacks, landscaping, and structural treatments shall be emphasized along major roadways to help preserve viewsheds and create an aesthetic visual corridor. Parking lots and other impervious surfaces should be placed inside and rear, rather than frontage, areas in all development along roadways.

Policy VIS-GV-5: In hillside areas where water tanks are required for structural firefighting purposes, tanks should be designed to: 1) blend in with natural land forms; 2) not impinge on the viewshed; and 3) be screened by landscaping.

Policy VlS-GV-6: Outdoor lighting in Goleta shall be designed and placed so as to minimize impacts on neighboring properties and the community in general.

DevStd VlS~GV-6.1: All new development with major outdoor lighting facilities should be illuminated with only fully shielded lighting with low glare design.

Lompoc Area Land Use Interpretive Guidelines

The Land Use Interpretive Guidelines of the Santa Barbara County Comprehensive Plan for the Lompoc Area (Santa Barbara County 1999) contain the following visual resources goals and guideline applicable to the Project.

Goal: The natural backdrop of the area should be preserved through strict controls on hillside development. Hillside grading over 30 percent on residential and commercial land should be severely restricted.

Goal: Development, construction, and roads cut in steep areas should be limited to ensure safety and protection of the terrain, as well as environmental and scenic values.

***A-12*.** All development, including buildings, understories, fences, water tanks and retaining walls adjacent to natural open space areas should be sited and designed to protect the visual character of these areas and blend in with natural landforms through the use of such methods as setbacks, building orientation, materials and colors (earth tones and non-reflective paints), landscape buffers, shielded exterior lighting, screening of parking areas and inclusion of perimeter roads to allow maintenance of open space corridors.

Los Alamos Community Plan

Visual resources and community character were considered as part of the Los Alamos Community Plan. Additionally, policies for the protection of views, a scenic buffer overlay, and architectural guidelines have been established to limit light pollution and night and preserve visual resources, in support of the following goal:

Goal VIS-LA-1: Maintain the Small Town Feel And Rural Character of the Town of Los Alamos And Integrate a Respect for Open Space Views and The Aesthetic Qualities Of The Community In All Facets Of Project Design.

Mission Canyon Community Plan

The Mission Canyon Community Plan contains goals, policies, and development standards to protect visual and scenic resources, public views, nighttime sky quality, as well as historic resources and structures (County of Santa Barbara 2014).

Visual and Aesthetic Resources Goals, Policies, Development Standards

Goal VIS-MC-1: Protect the visual and aesthetic resources of Mission Canyon, including public views of the mountains and ocean and the quality of the nighttime sky.

***Policy VIS-MC-1*:** Development shall be sited and designed to protect views as seen from public viewing places.

DevStd VIS-MC-1.1: Development shall be sited and designed to minimize the obstruction or degradation of views as seen from public viewing places.

DevStd VIS-MC-1.2: Development and grading shall be sited and designed to avoid or minimize hillside and mountain scarring and minimize the bulk of structures visible from public viewing places. Measures may be required to achieve this goal, including but not limited to increased setbacks, reduced structure size and height, reductions in grading, extensive landscaping, low intensity lighting, and narrow or limited length roads/driveways.

DevStd VIS-MC-1.3: Development shall not occur on ridgelines if suitable alternative locations are available on the property. When there is no other suitable alternative location, structures shall not be sited so as to intrude into the skyline or be conspicuously visible from public viewing places to the maximum extent feasible. Additional measures such as an appropriate landscape plan and limiting the height of the building may be required in these cases.

Goal VIS-MC-3: Maintain and enhance the aesthetic qualities of the community in all aspects of residential development and landscaping.

***Policy VIS-MC-4*:** Development shall be sited, designed, and scaled to be compatible with neighborhood character, to protect visual resources, and to respect site constraints such as steep slopes.

DevStd VIS-MC-4.1: Development, including houses, roads and driveways, and accessory buildings shall be sited, designed, and scaled to be compatible with and visually subordinate to significant natural features such as major rock outcroppings, mature trees and woodlands, drainage courses, visually prominent slopes, and hilltops and ridgelines.

DevStd VIS-MC-4.2: Grading for development, including primary and accessory structures, access roads (public and private) and driveways, and vegetation clearance for fire safety purposes shall be kept to a minimum and shall be performed in a way that:

- Minimizes scarring and,

Maintains to the maximum extent feasible the natural appearance of ridgelines and hillsides.

Montecito Community Plan

The following goals and policies pertinent to aesthetic and visual resources are identified in the Montecito Community Plan (County of Santa Barbara 1995b).

Goal VIS-M-1: Protect the visual importance of the Santa Ynez Mountain range and ocean views as having both local and regional significance and protect from development which could adversely affect this quality.

Policy VIS-M-1.1: Development shall be subordinate to the natural open space characteristics of the mountains.

Policy VIS-M-1.2: Grading required for access roads and site development shall be limited in scope so as to protect the viewshed.

Policy VIS-M-1.3: Development of property should minimize impacts to open space views as seen from public roads.

Goal VIS-M-2: Protect public and private open space as an integral part of the community's semi-rural character and encourage its retention.

***Policy VIS-M-2.1*:** Lands which should be preserved in open space for scenic value include road side turnouts, stream channels, equestrian and hiking trails, and mountainous areas.

Montecito Land Use & Development Code

The Montecito Land Use and Development Code (MLUDC) implements the Montecito Community Plan and other County policies applicable to the Montecito area. It contains standards for development and land uses including those pertaining to outdoor lighting and renewable energy development. Solar energy systems located on the roof of an existing structure and freestanding solar energy systems are exempt from design review but would be subject to Development Code requirements and building, or electrical permit conditions, as applicable. Pursuant to the MLUDC (as updated in 2025), all lights shall be directed and oriented to prevent light spillover and glare onto adjacent properties. Lighting shall be designed so as not to interfere with vehicular traffic on any portion of a street. The purpose and intent of the Montecito

Hillside (H-MON) overlay zone is to preserve, enhance, and protect the visual and biological importance of natural mountainous areas of Montecito that are steeply sloped and visually prominent. The overlay zone is applied to mountainous areas and adjacent areas in the Montecito Community Plan area as shown on Santa Barbara County zoning maps (County of Santa Barbara 2021).

Santa Ynez Valley Community Plan

The Santa Ynez Valley Community Plan (County of Santa Barbara 2009) contains visual and aesthetic resources goals, policies, development standards, and actions intended to protect views and scenic resources and limit light effects on the nighttime sky. The ones most relevant to the Project are listed below.

Goal VIS SYV-1: Protect the Rural/Agricultural character and natural features of the Planning Area, including mountain views, scenic corridors and buffers, prominent valley viewsheds, and the quality of the nighttime sky.

***Policy VIS-SYV-1*:** Development of property should minimize impacts to open space views as seen from public roads and viewpoints and avoid destruction of significant visual resources.

DevStd VIS-SYV-1.1: Development and grading shall be sited and designed to avoid or minimize scarring of the landscape and minimize the bulk of structures visible from public viewing areas. Mitigation measures may be required, including but not limited to increased setbacks, reduced structure size and height, reductions in grading, extensive landscaping and proper siting of driveways, unless those measures would preclude reasonable use of the property or pose adverse public safety issues.

DevStd VIS-SYV-1.2: Development, including houses, roads and driveways, shall be sited and designed to be compatible with and subordinate to significant natural features including prominent slopes, hilltops and ridgelines, mature trees and woodlands, and natural drainage courses.

DevStd VIS-SYV-1.3: Development shall not occur on ridgelines if suitable alternative locations are available on the property. When there is no other suitable location, structures shall not intrude into the skyline or be conspicuously visible from public viewing places. Additional measures such as an appropriate landscape plan and limits to building height may be required in these cases.

DevStd VIS-SYV-1.4: Consistent with applicable ordinances, policies, development standards and the Constrained Site Guidelines, structures shall be sited and designed to minimize the need for vegetation clearance for fuel management zone buffers. Where feasible, necessary roads and driveways shall be used as or incorporated into fuel management zones.

Policy VIS-SYV-2: All plans for new or altered buildings and structures within the Design Control Overlay shall be reviewed by the County Board of Architectural Review.

Policy VIS-SYV-3: The night sky of the Santa Ynez Valley shall be protected from excessive and unnecessary light associated with new development and redevelopment.

Summerland Community Plan

The Summerland Community Plan (County of Santa Barbara 2017b) contains goals, policies, and actions pertaining to visual resources. The policies relevant to the Project are provided as follows.

***Policy VIS-S-1*:** Prior to the issuance of a Coastal Development Permit or Land Use permit, all plans for new or altered buildings or structures shall be reviewed by the County BAR.

***Policy VIS-S-3*:** Public views from Summerland to the ocean and from the Highway to the foothills shall be protected and enhanced.

Action VIS-S-3.1: The Summerland Citizen's Association shall work with the County to develop an ordinance that addresses the height of fences and hedges with consideration of minimizing view blockage as seen from public viewing places. The ordinance shall also consider safety and aesthetics relating to the height and distance of fences and hedges from property lines.

***Policy VIS-S-4*:** New development in Summerland shall be compatible with and shall enhance the community's architectural character.

***Policy VIS-S-7*:** In the rural areas all development shall be designed to minimize visual and aesthetic impacts.

Toro Canyon Plan

The Toro Canyon Plan contains goals, policies, and development standards for the protection of visual and aesthetic resources.

Goal VIS-TC-1: Protect the rural and semi-rural character and natural features of the area particularly public views of the foothills, Santa Ynez Mountains, and Pacific Ocean

***Policy VIS-TC-1*:** Development shall be sited and designed to protect public views.

DevStd VIS-TC-1.1: Development shall be sited and designed to minimize the obstruction or degradation of public views.

DevStd VIS TC-1.2: Development and grading shall be sited and designed to avoid or minimize hillside and mountain scarring and minimize the bulk of structures visible from public viewing areas. Mitigation measures may be required to achieve this, including but not limited to increased setbacks, reduced structure size and height, reductions in grading, extensive landscaping, low intensity lighting, and the use of narrow or limited length roads/driveways, unless those measures would preclude reasonable use of property or pose adverse public safety issues.

Santa Barbara County Land Use and Development Code

The County's LUDC (Chapter 35 of the Santa Barbara County Code) carries out the policies of the Comprehensive Plan by classifying and regulating land uses within the County in a manner consistent with the Comprehensive Plan. Section 35.21.050, *Agricultural Zones Development Standards,* requires that structures within AG-1 and AG-2 zones shall comply with the following setback standards:

- **Front** – Standard setback from public road right of way is 20 feet and setback from road centerline is 50 feet, whichever is greater.
- **Side, Rear** – AG-I zones have a 20-foot side and rear setback from property lines. There are no side or rear setbacks for AG-II zones.

Section 35.30.090, *Height Measurement, Exceptions, and Limitations* requires that height limits of the applicable zone apply for solar energy facilities, except that poles and towers necessary to connect to the

electrical grid shall be exempt from applicable height limits. Maximum height of structures in ridgeline or hillside locations is 32 feet as measured from the highest part of the structure, excluding chimneys, vents, and noncommercial antennas, to the lowest point of the structure where an exterior wall intersects the finished grade, whichever is lower. Additional height limitations apply if proposed in an Airport Approach (F) Overlay Zone.

Section 35.30.120, *Outdoor Lighting*, as updated in 2025, indicates that outdoor lighting standards are intended to preserve and protect the nighttime environment of the county by regulating unnecessary and excessive outdoor lighting (County of Santa Barbara 2025). The Code standards require that all outdoor light fixtures be fully shielded or full cut off, with limited exceptions. The Code states, all lights shall be directed and oriented to prevent light spillover and glare onto adjacent properties. The Code further requires that lighting be designed so as not to interfere with vehicular traffic on any portion of a street.

The Gaviota Coast Plan, adopted in 2016, designated a Critical Viewshed Corridor (CVC) Overlay within the Plan's boundaries. The CVC overlay zone is applied to property in the Gaviota Coast Plan area to provide enhanced protection of the critical coastal viewsheds of the Gaviota Coast from inappropriate development. The CVC Overlay applies to AG-II zoned lands both north and south of US 101 within Gaviota. New development within the CVC Overlay must be screened to the maximum extent feasible as seen from public viewing places. Much of the Gaviota Coast is rural agricultural land, while the undeveloped areas contain coast live oak woodland, chaparral, and riparian habitats.

The Design Control (D) Overlay Zone (Section 35.28.080) is applied where, because of visual resources and or unique neighborhood characteristics, plans for new or altered structures require design review. The intent is to ensure well designed development to protect scenic qualities, property values, and neighborhood characteristics. Design Control (D) Overlay currently applies to AG-I zoned lands within the Mission Canyon Community Plan area, and AG-I and AG-II zoned lands within the Toro Canyon Area Plan and Santa Ynez Valley Community Plan areas. Outside of community plan areas, there exist a limited number of AG-II zoned lands with the Design Control (D) Overlay.

3.1.4 Project Impact Analysis

Thresholds of Significance

CEQA Guidelines

Pursuant to Appendix G of the CEQA Guidelines, potentially significant impacts on aesthetics would result if the Project would:

a) Have a substantial adverse effect on a scenic vista;

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality; or

d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area.

County of Santa Barbara Environmental Thresholds

The County Visual Aesthetics Impact Guidelines set forth in the County's Environmental Thresholds and Guidelines Manual provide information to address the criteria specified in the CEQA Guidelines (County of Santa Barbara 2024). The Guidelines note that an assessment of visual impacts involves two major steps. First, the visual resources of a project site must be evaluated, including the physical attributes of a site, its relative visibility and uniqueness, particularly in coastal and mountainous areas, the urban fringe, and travel corridors. Next, the potential impact of the project on visual resources (both within and on views in the vicinity) should be determined. The latter consideration includes whether a project would partially or fully obstruct views. All views under consideration in the County Guidelines are public views, not private views. Affirmative answers to the following questions indicate potentially significant impacts to visual resources.

1a. Does the project site have significant visual resources by virtue of surface waters, vegetation, elevation, slope, or other natural or man-made features which are publicly visible?

1b. If so, does the proposed project have the potential to degrade or significantly interfere with the public's enjoyment of the site's existing visual resources?

2a. Does the project have the potential to impact visual resources of the Coastal Zone or other visually important area (i.e., mountainous area, public park, urban fringe, or scenic travel corridor)?

2b. If so, does the project have the potential to conflict with the policies set forth in the Coastal Land Use Plan, the Comprehensive Plan or any applicable community plan to protect the identified views?

3. Does the project have the potential to create a significantly adverse aesthetic impact though obstruction of public views, incompatibility with surrounding uses, structures, or intensity of development, removal of significant amounts of vegetation, loss of important open space, substantial alteration of natural character, lack of adequate landscaping, or extensive grading visible from public areas?

Methodology

As described in Chapter 2, *Project Description*, the County proposes to amend several land use plans and regulations to allow the development of utility-scale solar energy facilities (and smaller scales of solar energy facilities and systems) on land in unincorporated Santa Barbara County. However, future project-level siting and design details, as well as the timing of potential future solar development, are unknown at this time. The magnitude of impacts on aesthetic and visual quality with a given solar facility would depend on site and facility-specific factors such as distance from the facility to public vantage points and their placement within the context of public views, as well as the size of the facility and the addition of lighting and glare, among other factors. The impact analysis, therefore, does not evaluate potential impacts on aesthetic and visual resources on a project- or site-specific level. The technical approach for the qualitative assessment of aesthetic and visual impacts in the study area generally includes the following:

- Existing visual and rural character and land uses in the county that may be sensitive to strong visual contrasts (including those generated by added light and glare), and sensitive viewer groups;
- Potential impacts of solar facilities on existing visual or rural character and sensitive viewer groups or land uses;
- Potential impacts of added light and glare on sensitive viewers.

A brief evaluation of potential visual impacts associated with Tier 1 and 2 solar systems is provided. However, the primary focus of the impact discussion is on Tier 3 and Tier 4 facilities since, due to their size and scale, such facilities would be most likely to add prominent structures to the visual environment. The temporal scope of the analysis assumes that such facilities would be constructed, operated, maintained (and decommissioned) within a 30-year timeframe. However, the proposed amendments would not require facilities to be decommissioned within a certain timeframe, and therefore visual impacts of a project could be permanent.

The information and analysis in this section are based on the County's long-range planning documents, EIRs, and related technical studies that apply to the Project area. The section relies on existing evaluations and visual resources mapping of the Santa Barbara County Comprehensive Plan, Coastal Land Use Plan, and associated community plans (described in Chapter 2 and Section 3.1.3). The impact determinations are based on consistency with CEQA and the CEQA Guidelines thresholds, the County's Visual Aesthetic Impact Guidelines (section 12 of the 2024 Environmental Thresholds and Guidelines Manual), and the County's existing policies and regulations related to aesthetics and visual resources. Because the specific siting and design for future facilities is unknown, it is assumed that future solar facilities would be required to demonstrate compliance with the LUDC, CZO, and other applicable codes intended for the protection of scenic and visual resources of the County.

Project Impacts

This section provides an analysis of potential impacts associated with aesthetics and visual quality that could occur for solar energy facilities. **Table 3.1-2** provides a summary of the Project's potential environmental impacts related to aesthetic and visual resources. A detailed discussion of each impact follows.

TABLE 3.1-2
SUMMARY OF AESTHETIC AND VISUAL RESOURCES IMPACTS

Aesthetic and Visual Resources Impacts	Impact Classification	Mitigation Measures	Residual Impact
Impact AV-1: Future solar energy systems and facilities enabled and streamlined for permitting under the Project could potentially result in substantial adverse effects on public scenic vistas.	Potentially significant	MM AV-1: Appearance and Measures to Reduce Visual Effects MM AV-2: Measures to Reduce Construction-Related Visual Impacts.	Significant and Unavoidable
Impact AV-2: Future solar energy facilities enabled and streamlined for permitting under the Project could substantially damage scenic resources, such as trees and rock outcroppings within a local or State Scenic Highway corridors.	Potentially significant	MM AV-1: Appearance and Measures to Reduce Visual Effects MM AV-2: Measures to Reduce Construction-Related Visual Impacts.	Significant and Unavoidable
Impact AV-3: The Project could potentially degrade the existing visual character or quality of public views of a site and its surroundings in rural areas or potentially conflict with zoning or other regulations governing scenic quality in urban areas, including policies and development standards in the County's Comprehensive Plan, Coastal Land Use Plan and Community Plans.	Potentially significant	MM AV-1: Appearance and Measures to Reduce Visual Effects MM AV-2: Measures to Reduce Construction-Related Visual Impacts.	Significant and Unavoidable

TABLE 3.1-2
SUMMARY OF AESTHETIC AND VISUAL RESOURCES IMPACTS

Aesthetic and Visual Resources Impacts	Impact Classification	Mitigation Measures	Residual Impact
Impact AV-4: The Project could result in a new source of substantial light and glare that may adversely affect day or nighttime views.	Potentially significant	MM AV-3: Measures to Reduce Reflection, Contrast, and Glare	Insignificant with mitigation
Cumulative Impacts	Potentially Significant	MM AV-1 though MM AV-3	Significant and unavoidable

Threshold a) The Project would have a significant impact if the Project would result in a substantial adverse effect on a scenic vista.

Impact AV-1: Future solar energy systems and facilities enabled for permitting under the Project could potentially result in substantial adverse effects on public scenic vistas.

As discussed in the Environmental Setting, Santa Barbara County is highly valued for its scenic views of the Santa Ynez Mountains, the coastal mountain range and foothills, and the Pacific Ocean. Rural inland agricultural lands also contain public views with scenic qualities, particularly as experienced from public roadways. To the extent that solar energy facilities could be proposed for placement within identified scenic viewsheds, the associated structures, such as those contemplated in Section 2.5, could alter or obstruct scenic vistas. Depending on the scale of the proposed facility and its visibility with respect to the scenic vista, impacts on public scenic vistas would be variable. The footprint of Tier 1 and 2 facilities would typically be considerably smaller than those installed under Tiers 3 and 4; therefore, overall effects would be relatively smaller for rooftop and small ground-mounted systems. As proposed in the amendments to the County zoning codes, Tier 1 solar energy systems would be limited to building rooftops, and small ground-mounted systems covering an area of up to 0.5 acres. Tier 2 solar energy systems would be limited to existing developed locations (e.g., parking lots) covering an area between 0.5 and 5 acres. Small systems would require limited access and staging to construct, compared to community-scale or utility-scale solar facilities. Though up to 5 acres in size, Tier 2 systems would have less substantial visual impacts because of the applicable development standards with which they must comply (e.g., setbacks, height limitations, and standards for outdoor lighting). The analysis below, therefore, focuses on solar facilities considered under Tiers 3 and 4.

Construction and Decommissioning

Construction of a utility-scale or community-scale solar facility would typically involve some combination of the following activities: establishing site access; clearing vegetation and site grading; the use of staging and laydown areas; construction of internal and external access routes; erection of security fencing; construction of foundation posts or pile driving to support the solar structures; assembling and installation of solar panel arrays and tracker systems; installing and connecting electrical systems, inverters/transformers and associated substations; construction of accessory structures for housing battery storage and remote monitoring systems; erection of meteorological towers for weather data collection; constructing and connecting electrical overhead generation tie lines to the battery ESS and solar facility substation(s); demobilization and site restoration. Although construction would be temporary, its potential

visual effects could remain on the landscape. To the extent that structures and equipment become visible during installation, public scenic views may be obstructed or altered during construction. Depending on the visual sensitivity of the location, visibility (with respect to public vistas), and the scale of facilities, visual impacts could be potentially significant. Decommissioning typically involves many of the same activities, but with structure demolition and waste removal as a major component of the work. Because decommissioning would entail temporary use of equipment and removal of above-ground solar facility components, such activities would not be expected to result in ongoing visual impacts. Impacts to scenic vistas during decommissioning would be considered insignificant.

Operation and Maintenance

Maintenance of solar facilities would involve activities such as vegetation control, panel cleaning, and occasional repairs or replacement of component parts. Similar to the construction phase, these activities would involve the use of equipment, the presence of which may be considered unsightly depending on the visual context and sensitivity of viewers. Once operational, utility-scale and community-scale solar energy facilities introduce industrial structures into the visual landscape that, depending on the specific location of the proposed solar facilities, could diminish the quality of public views in the study area. The nature, extent, and magnitude of these potential impacts would vary on a site-specific basis and depend on the specific phase of a facility's lifecycle (e.g., construction or operation). Similarly, aesthetic and visual quality impacts would vary on a site-specific basis and would depend on the specific phase of the facility. Depending on the scenic values of the specific place, impacts could be potentially significant. Consistent with the proposed amendments to the zoning code (inclusive of LUDC, MLUDC, and the CZO), an applicant would be required to demonstrate that the appearance of solar facilities would not interfere with public scenic views. Setback standards, height limits, landscape and screening plans, and exterior lighting requirements and development standards would help to limit adverse impacts to public views. Height limits on structures, applicable to the zoning district would be in effect with limited exceptions for poles and towers necessary to connect to the grid. A landscaping and screening plan subject to County review would be required to ensure that visible components would be screened from public view to the extent feasible. Solar energy facilities would also be required to conform to County outdoor lighting requirements, which would reduce nighttime light pollution. The LUDC Agricultural Zone Development Standards (35.21.050) would apply for development in AG-1 and AG-II, and depending on the specific location of proposed solar energy facilities, Community Plan overlay requirements may also be in effect (as applicable). The LUDC standards require preservation of natural features, landforms and native vegetation. In addition, lighting standards and building colors are addressed to ensure protection of the night sky and biological resources as well as compatibility.

Additionally, appearance, height limits, setback standards, and landscape screening plan requirements would be in effect as described in Section 3.1.3. For reference, the specific height limits and setback standards for zones proposed to allow Tier 3 and 4 facilities in the majority of the unincorporated areas are provided in Table 3.9-2, Zoning Designation Development Standards and Lot Sizes (County LUDC). To ensure that the quality of public scenic vistas is maintained, and components of future solar energy facilities (Tier 3 and Tier 4) do not reduce the quality of public views, mitigation measures would be required to be implemented, as applicable (depending on the specific proposed location and zoning).

Mitigation measures are required to provide guidance about the types of considerations needed to reduce adverse visual impacts of future solar energy facilities that could be constructed and operated as a result

of the Project. Because specific details about potential future projects remain unknown, the measure is intended as part of the programmatic analysis to inform siting and design considerations rather than prescribe an exact approach that would fit every project. To reduce potential visual impacts, MM AV-1: Appearance and Measures to Reduce Visual Effects and MM AV-2: Measures to Reduce Construction-Related Visual Impacts would be implemented.

Mitigation Measures

MM AV-1: Appearance and Measures to Reduce Visual Effects. The County shall require Design Review approval for Tier 3 or 4 solar energy facilities proposed in a viewshed of a state or local scenic highway corridor. The applicant/owner shall provide for County review visual photo simulations, site plan, aerial imagery, and other materials of the proposed solar energy facility from key observation points as a site-specific evaluation to demonstrate from key perspectives the approximate appearance of a proposed facility and its related infrastructure. Locations for key observation points shall be determined through consultation with the County and land managers with jurisdiction, as appropriate, over the specific locations proposed.

Site-specific actions may be enhanced or modified during project-specific County reviews and permitting for each facility proposed in the future. The following types of actions are appropriate for the facility applicant/owner to consider to avoid, minimize, and mitigate potential aesthetic and visual quality impacts. In addition to visual simulation requirements, the applicant/owner shall submit a narrative to demonstrate how the appearance of solar facilities would not interfere with public scenic views. The application narrative shall describe the site-specific siting and design methods planned for the solar energy facility to demonstrate how the siting and design of the facility will reduce adverse visual impacts. Suggested siting and design considerations shall include, but are not limited to, the following measures.

Measures to reduce visual dominance in the landscape:

- Avoid locating facilities where placement would alter the visual setting and reduce the historic significance or function.
- Avoid locating facilities in areas of high scenic value or in scenic corridors, as identified in the County Comprehensive Plan. Site solar energy facilities outside the viewsheds of highly scenic value areas, scenic corridors, highly sensitive viewing locations, and/or areas with limited visual absorption capability and/or high scenic integrity. If they must be sited within viewsheds of scenic resources, they should be as far away as possible, as visual impacts generally diminish as viewing distance increases.
- Preserve existing rocks, vegetation, and drainage patterns to the maximum extent possible.
- Consult with the appropriate land management agencies, planning entities, Tribes, and the local public early to provide advanced input on the identification of important visual, historic, cultural or tribal cultural resources near a proposed facility site and on the siting and design process to foster communication with interested parties and rectify potential conflicts. Evidence of the applicant/project owner's consultation efforts may be requested by County staff to support permit applications.
- Use GIS tools, the County Scenic Values Model, and visual impact simulations for conducting project level visual analyses (including mapping), analyzing the visual characteristics of landscapes, visualizing the potential impacts of facility siting and design.
- Utilize topography and vegetation as screening devices to limit public views of the facility from visually sensitive areas.

- Avoid siting near prominent landscape features (e.g., peaks and waterfalls, coastal scenic views).
- Avoid siting higher profile structures on ridgelines, summits, or other locations where structures would be silhouetted against the sky from important viewing locations or scenic vistas. Avoid siting interconnections/ gen-tie lines and access roads (associated with solar facilities) along ridge tops or through valley bottoms.
- Site linear features to follow natural land contours rather than straight lines, particularly up slopes. Fall-line cuts should be avoided. Site facilities to take advantage of natural topographic breaks and avoid siting on steep slopes.
- Where array fields would be bisected by public roadways, railways, trails, and other linear features used by the public, set the edges of the solar array fields on either side of the feature back enough so as not to create a visual "tunnel" effect.
- In oak woodlands, chaparral areas or shrublands, linear facilities should follow the edges of clearings rather than pass through their center. Limit tree removal to the greatest extent feasible; openings in vegetation for facilities, structures, and roads should mimic the size, shape, and characteristics of naturally occurring openings.
- Match the siting and design of facilities, structures, roads, and other elements with the existing landscape. Added features should be visually subordinate to the landscape.
- Provide visual order and unity among clusters of solar panel arrays to avoid visual disruptions.
- Where screening topography and vegetation are absent, use natural-looking earthwork berms and vegetative or architectural screening to minimize visual impacts. Vegetative screening can be particularly effective along roadways.
- Set structures, roads, and other facility elements as far back from road, trail, and river crossings as possible to avoid a visual tunnel effect and use vegetation to screen views from crossings.

Measures for siting interconnections, gen tie lines and access roads:

- Choose locations for interconnection and gen-tie line and right-of-way road crossings of other roads, streams, and other linear features within a corridor to avoid areas of high scenic value and other visually sensitive areas and to minimize disturbance to vegetation and landforms. The rights-of-way should cross linear features (e.g., trails, roads, and rivers) at right angles whenever possible to minimize the viewing area and duration.
- Co-locate interconnector and gen-tie lines and roads within a corridor to use existing/shared rights-of-way, existing/shared access and maintenance roads, and other infrastructure, or place gen-tie lines underground in order to reduce visual impacts. Minimize the number of structures required or co-locate to share pads, fences, access roads, lighting, etc.
- Choose low-profile structures for solar panels, ancillary buildings, and other structures to reduce their visibility in the landscape.
- Minimize signage. Paint or coat reverse sides of signs to reduce color contrasts with the existing landscape. Verify that proposed signage conforms to community land use requirements and County codes.
- Design structures and roads to minimize and balance cuts and fills.

MM AV-2: Measures to Reduce Construction-Related Visual Impacts. The County shall require Tier 3 and 4 solar energy facilities to incorporate measures to reduce potential visual impacts from construction-related activities. The applicant/owner shall incorporate the following measures into their site plans prior to permit approval and implement at the conclusion of construction as applicable. P&D staff shall confirm implementation of the measures prior to Final Building Inspection Clearance.

- Restore disturbed surfaces to their original contours as closely as possible and revegetate immediately at the conclusion of construction and decommissioning.
- Slash from vegetation removal should be mulched and spread to cover fresh soil disturbances (preferred) or should be buried. Topsoil from cut/fill activities should be segregated and spread on freshly disturbed areas to reduce color contrast and aid rapid revegetation. Piles should not be left in sensitive viewing areas.
- Round road-cut slopes and vary the cut/fill pitch to reduce contrasts in form and line.
- Excess fill material should not be disposed of downslope in order to avoid creating color contrast with existing vegetation/soils. Minimize color and form contrast from fill piles.
- Implement dust abatement measures in arid environments to minimize the impacts of vehicular and pedestrian traffic, construction, and wind on exposed surface soils.

Residual Impacts

With the implementation of MM AV-1 and MM AV-2, as well as zoning code development standards that require landscape screening plans and various siting considerations, many of the potential direct and indirect adverse effects to public scenic vistas associated with Tier 3 and Tier 4 solar energy facilities would be reduced. A range of insignificant to potentially significant effects could remain following implementation of MM AV-1 and MM AV-2. Because the specific locations, designs, and visual outcomes for future projects are unknown at this time, potentially significant and unavoidable impacts could result even with implementation of MM AV-1 and MM AV-2.

Threshold b) The Project would have a significant impact if the Project would substantially damage scenic resources including, but not limited to trees and rock outcroppings, and historic buildings within a state scenic highway.

Impact AV-2: Future solar energy facilities that would occur under the Project could substantially damage scenic resources, such as trees and rock outcroppings within a local or State Scenic Highway corridors.

An impact would occur under this criterion if construction, operation, maintenance, or decommissioning of a solar energy facility would directly damage scenic resources and be sited in a local or state scenic highway corridor. As described in the setting, scenic corridors and high-value scenic resource overlays have been established to protect the scenic values of County and coastal lands and travel routes. Multiple factors, including contextual setting, viewer perspective, siting (or placement in the context of the landscape or scenic corridor), visibility, design, and vegetative screening, can influence whether its placement indirectly damages scenic resources.

Construction and Decommissioning

As discussed under Impact AV-1, construction of a utility-scale solar energy facility would typically involve site disturbance and the use of vehicles and equipment, among other activities, which would introduce changes to the study area. Some of the effects associated with construction or decommissioning, such as the presence of equipment and materials, would be temporary; others would persist as structures are erected. To the extent that structures and equipment become visible during installation, public views in scenic corridors may be obstructed or altered during construction. Tree or rock outcropping removal or clearing vegetation (if required), along with any of the aforementioned construction activities, could result in damage to scenic resources if proposed within a local or state scenic highway corridor. It is anticipated that County regulations could reduce some visual effects associated with construction and decommissioning. Construction or decommissioning-related impacts would depend on the location, visibility, and scale of facilities proposed. Depending on site-specific factors, such as the extent of site alteration required, related impacts could range from insignificant (if proposed outside of scenic corridors) to potentially significant.

Operation and Maintenance

Once operational, depending on the specific location of a proposed solar facility, there could be a range of impacts associated with damage to scenic resources within identified scenic corridors. As noted in the environmental setting, the County has conducted a visual resources evaluation for travel corridors including those within the State Scenic Highways. Figure 3.1-1 depicts these scenic highways and the County-identified scenic corridors. Given that state scenic highways provide travelers with sweeping views of scenic resources such as the Pacific Coast and its foothills and mountains, considerations should be made for siting facilities appropriately to minimize damage to scenic corridors.

County LUDC development standards would help to minimize damage to scenic resources. Solar energy facilities would be required to demonstrate through preparing photo simulations and site plans, among other materials, that the proposed facilities would not be visible or visually intrusive if located within the scenic highway corridor. Most Tier 3 and 4 facilities would be ground-mounted with low-profile PV solar installation; however, interconnections and on-site substations would likely require taller structures. Under existing zoning code requirements, transmission interconnections would be exempt from height restrictions. As discussed under Impact AV-1, future solar facilities contemplated under the Project would also be required to conform to setback standards, height limitations, landscape screening plan requirements, and lighting requirements, subject to County review. For example, the AG-I, AG-I, M-2, M-CR, and PU zones require a 50-foot setback from road centerlines (front setback). The PI zone requires a 45-foot front setback, and the M-RP and M-1 zones have an 80-foot front setback. More stringent setback requirements may be applied within overlay zones. With respect to landscaping, future solar facility projects would be required to prepare landscape screening plans to help reduce visual impacts as seen from scenic corridors and other public roads and viewpoints.

MM AV-1 requires design review for all structures if proposed in a state or local scenic corridor. MM AV-1 would ensure that siting and design considerations would be implemented where possible to reduce visual dominance of the Project in the landscape. to reduce visual dominance of the Project in the landscape. The measures to reduce visual effects (as stated in Impact AV-1) would limit potential conflicts with visual and aesthetic resources in identified scenic corridors. Although resource avoidance methods would help to reduce direct and indirect effects, depending on the specific location and viewer sensitivity, impacts could still occur even with appropriate siting and design. MM AV-2 would reduce impacts from construction-

related activities. As discussed under Impact AV-1, even with incorporation of the mitigation measures, adverse residual visual effects could remain. Depending on the scale and location with respect to scenic resources in the state and local scenic corridors, significant and unavoidable impacts could result.

Mitigation Measures

Implement MM AV-1 and MM AV-2 (as stated under Impact AV-1).

Residual Impacts

Although resource avoidance methods would help to reduce direct and indirect effects, depending on the specific location and viewer sensitivity, impacts could still occur even with appropriate siting and design. Therefore, even with incorporation of the mitigation measures, and compliance with applicable development standards in the zoning codes that address visual resources and screening, residual effects could remain and impacts would be significant and unavoidable.

Threshold c) The Project would result in a significant impact if the Project would, in nonurban areas, substantially degrade the existing visual character or quality of public views of the site and surroundings or (in urban areas) conflict with applicable zoning or other regulations governing scenic quality.

Impact AV-3. The Project could degrade the existing visual character or quality of public views of a site and its surroundings in rural areas or potentially conflict with zoning or other regulations governing scenic quality in urban areas, including policies and development standards in the County's Comprehensive Plan, Coastal Land Use Plan and Community Plans.

Construction and Decommissioning

Visual impacts associated with construction would vary depending on the intensity, scale, and duration of the activity. Temporary impacts include those associated with the use of equipment, which can generate dust and emissions (as discussed in Section 3.3). Site disturbance, along with the presence and use of construction vehicles, equipment, and materials, can temporarily alter public views in rural areas or conflict with scenic quality in urban areas. The nature and extent of visual impacts associated with construction laydown/staging areas would depend on the size of the area, the nature of required clearing and grading, and on the types and amounts of materials stored at laydown areas. The presence of materials and equipment in such areas would introduce temporary changes in the visible landscape, and additional visual contrasts could be introduced by any vegetation clearing or grading required. Following construction, the equipment would be removed and the sites restored to the extent feasible; however, some features and structures would remain following the construction phase.

Development of access roads can alter the visual landscape through removal of trees and scrub vegetation, grading, and placement of surface aggregate or other treatments upon lands that may or may not have similar access roads. Changes to the landscape may alter the visual characteristics of public views depending on viewer sensitivity and perspective. Over time, some initial visual effects may diminish as road cuts soften with regrowth of vegetation or installed landscape screening.

During decommissioning, it is anticipated that all above-ground structures would be required to be removed and the site returned to pre-construction conditions. A site decommissioning and reclamation plan, describing the protocols for dismantling structures, recycling components, and returning the land to a condition similar to preconstruction is recommended consistent with zoning code requirements.

Operation and Maintenance

Context is an important factor for consideration. Depending on the specific location of a proposed solar energy facility, there could be a range of impacts associated with this criterion. As described in Section 3.1.3, the LUDC development standards require that structures be compatible with the character of the surrounding environment, subordinate in appearance to natural landforms, and sited so as not to intrude into the skyline as seen from public viewing places. Additional requirements specific to the Coastal Zone are in effect for coastal views subject to the CLUP. Depending on the specific locations proposed, there may be situations where proposed Project facilities are less visible due to intervening structures, trees, or other vegetative screening. Conversely, if industrial structures such as solar arrays, battery storage containers, substations, and electrical interconnections are introduced into scenic viewsheds, the quality of public views may decrease or become obstructed. Facilities proposed in sparsely populated areas or sited in industrial locations with limited sensitive viewers would be perceived as less visually intrusive than those on lands with scenic values subject to recreational uses, for example.

This analysis recognizes that zoning code (inclusive of LUDC, MLUDC, and the CZO) exemption parameters and development standards intended for solar energy systems and facilities would minimize conflicts with zoning. For example, consistent with the zoning code, solar energy facilities would not be allowed to be placed on ridgelines that are visible from public roads, trails, or other recreation areas. Setback standards and height limits would be in effect (as applicable to the zoning district wherein facilities are proposed). As discussed, the zoning code contains requirements for photo simulations, site plans and other materials that would be required to be submitted as part of the conditional use permit process. Additionally, the Project would amend the zoning code to specify development standards applicable to solar facilities. These requirements would help to limit visual effects and the associated conflicts with regulations governing visual resources. In the absence of appropriate siting and design development standards, potentially significant adverse visual impacts would result.

Mitigation Measures

MM AV-1 and MM AV-2 (as stated under Impact AV-1) would be implemented to reduce some potentially significant adverse impacts to visual character or quality.

Residual Impacts

While the implementation of applicable zoning code requirements and mitigation measures would reduce some adverse visual impacts, future solar energy projects could degrade the existing visual character or quality of public views or conflict with applicable regulations governing scenic quality. Therefore, residual impacts would be significant and unavoidable.

Threshold d) The Project would result in a significant impact if the Project would create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Impact AV-4: The Project could result in a new source of substantial light and glare that may adversely affect day or nighttime views.

Construction and Decommissioning

This analysis assumes that site characterization, preconstruction, construction, and decommissioning of utility-scale solar facilities would occur predominantly during daytime hours. However, some activities such as connection, commissioning, or testing may involve nighttime work. Temporary lighting may be required during construction but would likely be focused on the immediate work areas and would not be expected to add any new sources of permanent lighting. Exterior lighting would be subject to the County's existing lighting regulations and standards, as presented in Section 3.1.3.

Metallic materials and equipment can generate glare effects. New sources of glare could potentially include construction equipment, new metallic reflective materials (i.e., not yet subjected to weathering), and vehicle windows. However, an increase in glare that could result from the presence of construction equipment or materials would be temporary. Only portions of a facility site would be actively under construction at any particular time. Such new temporary sources of glare would not remain in a fixed location for the entire duration of construction but could be present at different locations depending on the phase of construction activities throughout the site. Facility construction would not introduce new, substantial sources of glare that could affect daytime views in the vicinity. Construction- and decommissioning-related impacts would be insignificant.

Operation and Maintenance

Although solar panels tend to be low profile compared to other structures in the built environment, auxiliary components could add light and glare to the visual landscape. Solar energy facilities would be likely to include exterior lighting around buildings, parking areas, and other work areas. Security and other lighting around and on support structures (e.g., the control building) or near energy storage units could contribute to light pollution. Maintenance activities, such as panel washing (if conducted at night) might require vehicle-mounted lights, which also could contribute to light pollution. Light pollution impacts associated with utility-scale and other solar energy facilities include skyglow, light trespass, glare, light clutter, and over-illumination.

The reflection of sunlight off the surfaces of solar panels could be the primary source of potential glare from a facility. However, solar panels are comprised of many solar cells that are designed to capture solar energy in order to convert it into usable energy. Anti-reflective glass (as is commonly used in PV solar panels) further reduces glare. Therefore, solar panels are designed to be as light-absorptive as possible in order to maximize the efficiency of energy production.

Additionally, the light reflected from the PV panels would travel above the line of sight of most viewers, as development would not be permitted on slopes greater than 30 percent. PV panel tracking systems are designed to position the arrays so that the sun's rays are perpendicular to the face of the panel during peak daylight hours (Figure 2-4). Therefore, light reflected from the panel would reflect back toward the sun. During midday conditions, light would be reflected upward toward the sky. The maximum downward

angle of the panels would not be below 30 degrees. Therefore, even when the sun angle is low, the reflected sunlight would be directed away from ground-level receptors and motorists along local roads.

Future solar energy facilities would be required to adhere to the County's standards for outdoor lighting (as updated in 2025) intended to reduce light trespass and protect the night sky. The LUDC (35.30.120) standards require that all lights shall be directed and oriented to prevent light spillover and glare onto adjacent properties; all outdoor light fixtures be fully shielded or full cut off, with limited exceptions. Additional code provision limit conflicts between lights and vehicular traffic. Compliance with County development standards and zoning code requirements would reduce some light and glare effects. The proposed Project includes a development standard that would apply to future projects, which would require screening of ground-mounted solar panel arrays with a vegetative buffer along public roadways. These proposed standards would also help to minimize any potential glare impacts. With these design features and adherence to development standards, the arrays of solar PV panels would not contribute substantially to glare.

Other than solar panels, the facilities' battery storage units, and auxiliary structures may include other components with reflective surfaces. Panel support structures, building windows, fencing, and interconnector and gen-tie towers and lines may also cause glint, glare, or other unusual visual effects, depending on the angle of view. Substations, weather monitoring equipment, fencing and metallic support structures can reflect light and generate conditions for glare. In the absence of measures to ensure careful siting and minimize reflectivity of added structures, impacts could be potentially significant. However, MM AV-1 and MM AV-3 include measures for siting and design, visual screening requirements, and glare reduction measures, which would effectively limit adverse light and glare impacts to insignificant levels.

Mitigation Measures

To limit potentially significant direct and indirect effects of light and glare, MM AV-3, Measures to Reduce Reflection and Glare Effects, would be implemented.

> **MM AV-3: Measures to Reduce Reflection, Contrast, and Glare.** The County shall require Tier 3 and 4 solar energy facilities to minimize glare, color contrast, and reflectivity to the extent feasible. The applicant/owner shall incorporate the following measures into their construction and operational plans:
>
> - Paint grouped structures the same color to reduce visual complexity and color contrast.
> - Use materials and surface treatments that repeat and/or blend with the existing landscape.
> - Use nonreflective paints and coatings on visible structures to reduce reflection and glare. Paint structures before or immediately after installation.
> - Use non-specular conductors and nonreflective coatings on insulators for interconnector and gen-tie lines, as appropriate.
> - Establish a toll-free number or website comment form for the public to report complaints related to glare from solar panels. If a complaint is received regarding glare from panels, investigate to determine whether the complaint is legitimate and whether the facility is the source of the glare. If it is determined that the facility is the source of glare and it is causing human health or safety hazards (e.g., road or air travel concerns), take all feasible measures to reduce the glare.

Residual Impacts

County zoning code requirements for outdoor lighting (35.30.120) would limit light trespass associated with necessary lighting. Additionally, with the implementation of MM AV-3, the impact related to light and glare would be reduced to insignificant.

3.1.5 Cumulative Impact Analysis

For the purposes of cumulative visual resources analysis, the study area encompasses the Countywide unincorporated lands. As discussed, due to the visual sensitivity of scenic vistas in the coastal zone and in areas of high scenic value, some significant adverse visual effects would remain even with the mitigation measure implemented. Some of the features, notably the PV solar arrays would be low profile; however, depending on their size, scale, and location, community-scale and utility-scale solar facilities may include battery storage containers, energy substations, or add other taller industrial elements (such as generation tie lines) to the visual landscape. Therefore, the Project has the potential for adding industrial features in scenic locations and may alter the character or degrade the visual quality of the environment. The Project could directly or incrementally contribute to cumulative visual effects. As listed in Table 3.0-1, various current and reasonably foreseeable projects throughout the County are considered as part of the cumulative scenario. Among these are energy and battery storage projects and residential development that also add structures to the visual landscape. The components of these projects also have the potential to exacerbate conditions of light and glare. As with the Project, these cumulative projects would be subject to standard conditions of approval, which would require adherence to development standards intended to maintain the visual quality of the environment, limit light pollution, and preserve scenic views. These projects along with the Project have the potential to alter the visual quality of the landscape as most of the study area includes lands zoned for agricultural purposes. Compared to agricultural or open space land uses, the proposed land uses (and those uses identified in Table 3.0-1) are more industrial in nature and more likely to add structures to open lands. When considered together in this cumulative scenario, these projects could result in a noticeable change to the visual character and scenic quality of lands in the county. The resulting cumulative visual impact could be significant. As discussed in Section 3.1.4, *Project Impact Analysis*, various mitigation measures are proposed to reduce direct and indirect adverse impacts. MM AV-1, MM AV-2, and MM AV-3 would be implemented to reduce direct and cumulative effects associated with the Project.

Community-scale and utility-scale solar energy facilities (considered under Tiers 3 and 4, respectively) would likely also require a connection to the electrical grid. Given that there are a discrete number of transmission lines under existing conditions, it is likely that future enhancements to the grid may be needed to convey the solar energy generated to the grid. Depending on the location with respect to existing transmission lines, development of solar facilities would contribute to an enhanced need for transmission infrastructure necessary to deliver the energy generated by solar to the electrical grid, especially given the limited number of transmission lines in the county. Although such transmission infrastructure is not under County jurisdiction (and outside the scope of this programmatic review), the Project could indirectly spur the need for future energy grid enhancements, which would contribute to reasonably foreseeable cumulative visual effects. Even with mitigation implemented, the Project's incremental contribution would be cumulatively considerable when considered in this context. Overall, the cumulative visual effects would be significant and unavoidable.

3.2 Agricultural Resources

3.2.1 Introduction

This section describes potential impacts on agricultural resources related to future development of solar energy facilities enabled under the Project. The analysis considers direct, indirect, and cumulative impacts on agricultural resources, including the potential for conflicts with agricultural operations and other changes in land use resulting in a loss of agricultural viability. The analysis also provides an assessment of consistency with agricultural zoning, agricultural policies, and agricultural preserves or Williamson Act contracts, as guided by the County's Uniform Rules for Agricultural Preserves and Farmland Security Zones, as amended in 2024 (County of Santa Barbara 2024a).

The County received several comments pertaining to agricultural lands and resources during the public scoping period. In a public meeting in September 2024, the County Agricultural Preservation Committee (APAC) recommended inclusion of an agricultural viability analysis of the resulting agricultural use with solar development, including the commercial agricultural viability of agrivoltaics or shared agricultural and solar uses. The City of Carpinteria requested an evaluation of impacts on coastal agriculture. The comments suggested the EIR consider a prohibition on Tier 3 and 4 facilities in the Carpinteria Agricultural Overlay District either as part of the Project or as an alternative. Carpinteria also suggested limiting Tier 3 and 4 facilities to sites with existing development (i.e., avoiding open agricultural land). The City of Goleta (Goleta) raised concerns about long-term viability of agricultural land. Goleta commented that cumulative impacts of large-scale solar development on agricultural productivity, water resources, and soil health should be studied. Additionally, Goleta suggested that the County prioritize the siting of solar facilities on disturbed or marginal lands rather than on prime agricultural lands. Goleta also suggested that mitigation measures should include clear requirements for restoration plans to ensure that agricultural land can return to its prior use when solar energy facilities are no longer in operation.

3.2.2 Environmental Setting

Santa Barbara County has a mild Mediterranean climate, with abundant sunshine, a long growing season, and a variety of soils, all of which contribute to a thriving agricultural sector in the County. Depending on the microclimate (aspect and topography), average rainfall totals range from 8 to 36 inches annually. Steep slopes in the coastal mountain ranges and scarce water resources limit some agricultural lands from intensive production in the County. The topography of mountain ranges, foothills, and intervening valleys provides a moderating coastal influence conducive to wine grapes and subtropical fruit orchards, among other high value agricultural products.

Important Farmland in Santa Barbara County

Agricultural production in the County encompasses approximately 703,861 acres of agricultural lands,[1] including 65,049 acres of Prime Farmland, as defined by the California Department of Conservation Farmland Mapping program (defined and described under State regulations), 13,022 acres of Farmland of Statewide Importance, 34,305 acres of Unique Farmland, 6,206 acres of Farmland of Local Importance, and

[1] The study area includes unincorporated lands in Santa Barbara County. Agricultural production acreage reported includes lands within the cities, some of which is outside of the study area.

504,220 acres of grazing lands (California Department of Conservation 2020). **Figure 3.2-1**, *Important Farmland in Santa Barbara County*, depicts the various categories of farmland within the county.

Agricultural Preservation

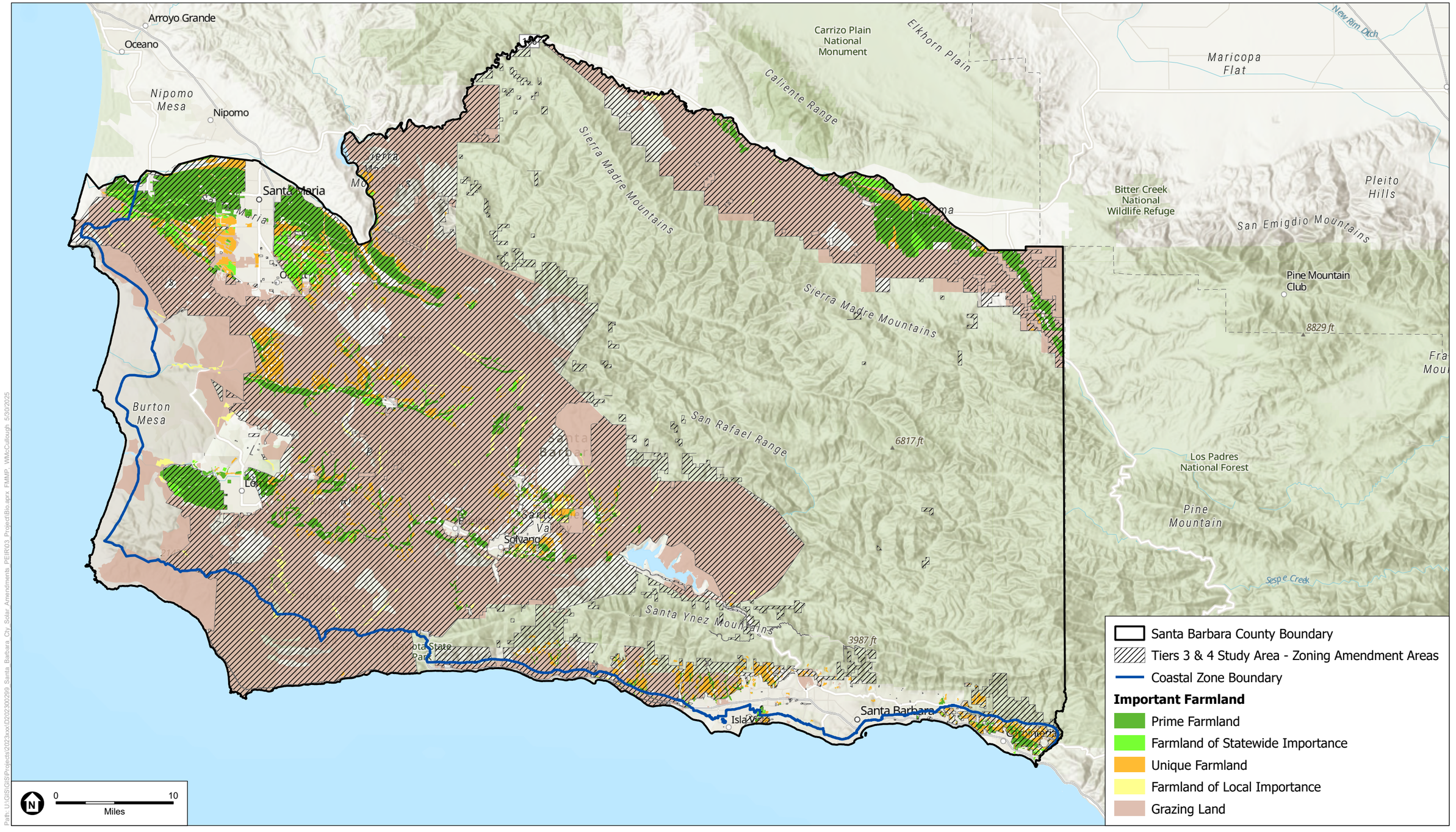
Agricultural land is protected by the county's agricultural preserve program through Williamson Act contracts (discussed in further detail in Section 3.2.3, *Regulatory Framework*) to prevent conversion to non-agricultural uses. The Agricultural Preserve Program enrolls land in Agricultural Preserve or Farmland Security Zone contracts where the land is restricted to agricultural, open space, or recreational uses in exchange for reduced property tax assessments (County of Santa Barbara 2024). A Williamson Act contract is an agreement between private landowners and the government to restrict specific parcels of land to agricultural or related open space uses in return for reduced property tax assessments. Approximately 490,052 acres of agricultural lands within the unincorporated county are enrolled in Williamson Act contracts[2] (County of Santa Barbara 2023). A substantial amount of agricultural lands are also non-irrigated grazing and pasture lands where steep slopes and less fertile, dryer lands may limit agricultural uses (Department of Conservation, Division of Land Resource Protection 2023a). **Figure 3.2-2**, *Agricultural Preserves in Santa Barbara County*, depicts the Williamson Act contracted land within the solar study area in the County.

Santa Barbara County has developed a "superprime" category denoting prime farmland in the context of the County's agricultural preserve program within specific geographic locations of the County. As described in the County's Uniform Rules (described in additional detail in the local regulatory framework (Section 3.2.3), superprime land is a subset of prime land and can be combined with either prime contracts or other superprime contracts to form a prime preserve of at least 40 acres. Prime agricultural lands south of the Santa Ynez Mountains and east of Gaviota Pass qualify for this designation. These lands are highly productive due to the combination of soils and climate, which are uniquely suitable to specialty horticultural produce and floral varieties, and are capable of supporting commercially viable agricultural operations on parcels as small as five acres.

Agricultural Production

Whereas grazing land constitutes the most agricultural acreage in the county, irrigated crops produce the greatest value. The county's agricultural industry continues to grow and change over time with trends of converting grazing lands to more intensive farming uses with higher value irrigated crops. Gross agricultural production in the County exceeded $1.875 billion in 2023, which was a 2.8 percent decrease from the prior year. The top agricultural commodities in 2023 (in decreasing order) included strawberries, nursery products, wine grapes, broccoli, cauliflower, lettuce, celery, blackberries, and livestock. Fruit and nut crops represented 50 percent of gross production; vegetables 33 percent; nursery products 7 percent; wine grapes 5 percent; cut flowers and foliage 2 percent and livestock and animal products represented 2 percent. Agricultural products produced in Santa Barbara County are exported to more than 38 countries around the world with over 45,000 tons shipped abroad. Organic farming is a thriving enterprise in the County driven by consumer demand. Currently, there are 197 registered organic farms in the County, cultivating 15,864 acres as of 2023. There are 10 certified farmers' markets and more than 100 certified producers offering fresh produce directly to consumers throughout the County (County of Santa Barbara 2023). The County's main agricultural production areas are briefly discussed below.

[2] 2023 County Assessor's parcel data shows that 503,512 acres of land are under Williamson Act contracts. The reported 490,052 acres excludes parcels that have filed for nonrenewal.



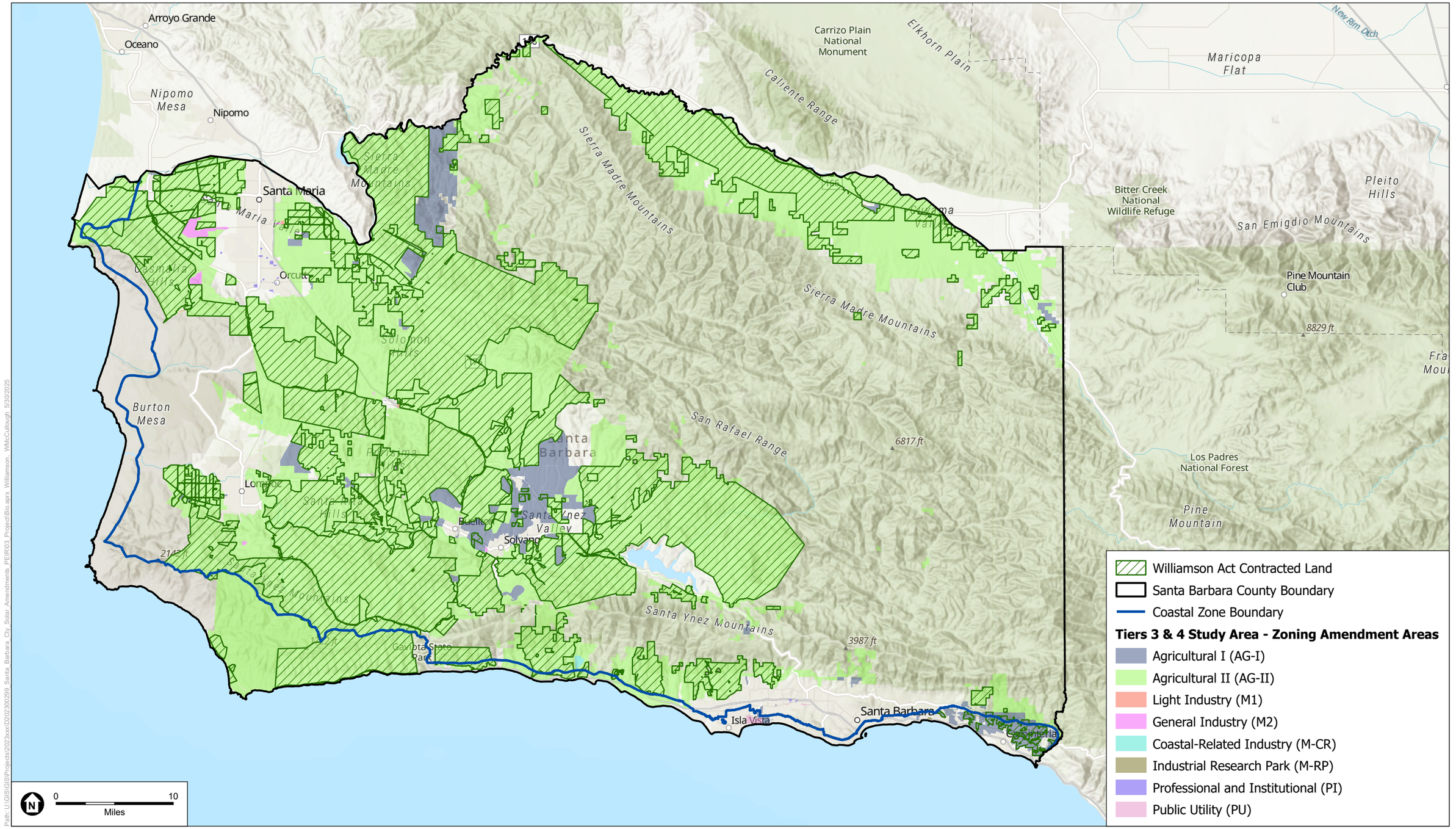
Path: U:\GIS\GIS\Projects\2023xxx\D2023002\99_Santa_Barbara_Cty_Solar_Amendments_PEIR\03_Project\Bio.aprx FMMP WMcCullough 5/30/2025

SOURCE: ESA, 2025; CDOC, 2020

Santa Barbara County Utility-Scale Solar Amendments

Figure 3.2-1
Important Farmland in Santa Barbara County

ESA



Path: U:\GIS\GIS\Projects\2023xxx\D20230029\9_Santa_Barbara_Cty_Solar_Amendments_PEIR\03_Project\Bio.aprx Williamson, WMcCullough 5/30/2025

SOURCE: ESA, 2025; CDOC, 2024

Santa Barbara County Utility-Scale Solar Amendments

Figure 3.2-2
Agricultural Preserves in Santa Barbara County

ESA

Carpinteria Valley and Toro Canyon

Carpinteria Valley has a rich agricultural history. An extensive diversity of farming occurs throughout the coastal community of Carpinteria. Agricultural products range from fruit orchards and row crops to greenhouse cultivated flowers and cannabis (in recent years). Located within the Carpinteria Valley, Toro Canyon contains almost 2,700 acres of land designated for agriculture. In addition, agricultural uses are permitted in the foothills subject to permit requirements. Avocado, cherimoya, and citrus orchards grow largely on terraced hillsides in the northeast part of Toro Canyon; field crops are present in the coastal plain south of East Valley and Foothill Road. Greenhouses support cut flowers, vegetable crops, cannabis, and potted plants. Thirty-five agricultural parcels in Toro Canyon (or 1,340 acres) are enrolled in the County's Williamson Act Program. The majority of these parcels are located in areas with steep topography (Santa Barbara County 2004).

Cuyama Valley

Agricultural activity in the Cuyama Valley consists of irrigated row crops in areas with moderate slopes with livestock grazing more prevalent in the foothills. Although there is limited water in Cuyama Valley, agricultural land uses are dominant within the region. This area contains approximately 361,771 acres of agricultural land and includes approximately 16,554 acres of Prime Farmland. Irrigated crops include alfalfa, apples, carrots, garlic, deciduous fruit orchards, pistachios, wine grapes, hay/grain, peppers, potatoes, and onions. Rangeland livestock, cattle grazing, sheep, and horses, as well as small-scale dairy operations also occur in the Cuyama Valley. Approximately 129,925 acres (36 percent) of lands zoned for agriculture in Cuyama Valley are enrolled in Williamson Act contracts in the County's agricultural preserve program.

Gaviota Coast

The climate and soils of the Gaviota Coast provide ample opportunities for grazing and the cultivation of various crops. Agricultural operations in the eastern Gaviota Coast area support cattle grazing operations, flower production, abalone aquaculture, and a variety of orchard crops such as avocado, citrus and cherimoya. The Gaviota Coast Plan Area contains 94,267 acres (93.2 percent) of lands zoned for agricultural use. 3,204 acres of these lands are classified as Important Farmlands by the Department of Conservation as highly suitable for agricultural cultivation. However, not all of the agriculturally zoned lands can be farmed or grazed due to rugged topography, use restrictions on public lands (national forest), or other factors. In addition, 60,321 acres (60 percent) of the Plan Area, or 76 percent of privately held land, is under Williamson Act contracts (County of Santa Barbara 2016a).

Goleta Valley

Goleta Valley contains a mix of agricultural and urban land uses. The foothills support rural agriculture, which includes orchards, large-scale crop production, and grazing land. Approximately 2,043 acres are in agricultural production, with a small portion of these lands on the valley floor. Avocados are the dominant crop, with lemons, horticultural products, and row crops comprising the remainder in Goleta Valley. Due in part to the desirability of the region's quality of life and housing pressures, more than 1,000 acres of agricultural land were converted to residential uses between the 1980s and mid-2000s (GVC 2006). The County's 2015 Housing Element upzoned some properties and allowed for mixed-use development to facilitate housing in the area, outside of agriculturally zoned parcels. However, to accommodate State housing mandates and local/regional growth patterns, the County's 2023 Housing Element Update

rezoned some agricultural properties, including farmlands south of Patterson Avenue (County of Santa Barbara 2024), making them available for future housing development.

Lompoc Valley

The Lompoc Valley contains 13,125 acres of Prime Farmlands associated with the Santa Ynez River watershed, which contributes to the fertility of this agricultural region. Approximately 275,500 acres of unincorporated lands in Lompoc Valley are designated for agricultural uses. 118,669 acres of these lands are enrolled in Williamson Act contracts in the County's agricultural preserve program. This constitutes approximately 43 percent of the region's agriculturally-zoned lands (County of Santa Barbara 2024).

Santa Maria and Orcutt

The Santa Maria Valley is the largest agricultural region in the county, produces the majority of high-value agricultural crops, and contains the largest concentration of prime farmland. The Santa Maria and Sisquoc River floodplains provide level fields and highly fertile soils. High yield crops produced in this region include strawberries, broccoli, lettuce, cauliflower, and celery. The majority of agriculturally zoned lands near larger communities, such as Santa Maria, Guadalupe, and Orcutt are on the outskirts of developed areas and are zoned AG-II. A few parcels to the east of Santa Maria are zoned AG-I-10. Prime Farmland and Farmland of Statewide Importance are also concentrated on the outskirts of these developed areas. Most land in and around the communities of Sisquoc, Garey, and Casmalia is classified as Prime Farmland or Farmland of Statewide Importance. The community of Orcutt is located directly south of the City of Santa Maria and north of Solomon Hills, Los Alamos, and the Santa Ynez Valley. All agriculturally zoned land in Orcutt is outside of the concentrated urban areas and residential neighborhoods. West Orcutt contains the largest concentration of cultivated agriculture, encompassing roughly 830 acres on the outskirts of the residential areas. Agriculture in and around Orcutt is predominantly non-irrigated livestock grazing and strawberries (County of Santa Barbara 2024).

Santa Ynez Valley

Santa Ynez Valley is the second largest agricultural region in Santa Barbara County with an estimated 247,456 acres designated for agricultural land uses. Much of the agricultural production occurs on the 7,361 acres of Prime Farmland surrounding developed communities and along the Santa Ynez River. Wine grapes, vineyards, row crops, and related agricultural tourism have expanded rapidly in the upper Santa Ynez Valley in recent decades. The terrain in the hills and along the valley edges supports cattle grazing and vineyards; orchards, grains, hay and alfalfa are produced in the valley floor. Approximately 54 percent (133,755 acres) of unincorporated agriculturally-zoned land in Santa Ynez Valley are agricultural preserves enrolled in the County's Williamson Act Program (County of Santa Barbara 2024).

3.2.3 Regulatory Framework

Federal

Farmland Protection Policy Act

The Farmland Protection Policy Act (FPPA) of 1981, administered by the U.S. Department of Agriculture (USDA) is intended to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to non-agricultural uses. The Act assures that to the extent possible,

federal programs are administered in a manner compatible with state, local, and private efforts to protect farmland. The Act does not authorize the federal government to regulate the use of private or non-federal land or otherwise affect the rights of property owners. Projects are subject to FPPA requirements if they may irreversibly convert Prime Farmland, Unique Farmland, and Farmland of Statewide or Local Importance to non-agricultural uses and are completed with assistance of a federal agency (NRCS 2025). If any federal assistance or federal permits are required as part of the Project, the FPPA may apply.

Land Evaluation and Site Assessment

The USDA administers the Land Use and Site Assessment (LESA) system to help state and local governments make informed land use decisions. Efforts to classify and evaluate agricultural lands for land use policy have been undertaken in the United States since at least the 1930s. LESA is an analytical tool, not a farmland protection program. However, state and local governments can use LESA to provide systematic and objective procedures to rate and rank sites for agricultural importance to inform preservation and other land use decisions. LESA provides a technical framework to categorize land use parcels based on ranked resource soils evaluation and site considerations (USDA 2022).

State

California Department of Conservation, Division of Land Resources Farmland Monitoring and Mapping Program

The California Department of Conservation (DOC) established the Farmland Monitoring and Mapping Program (FMMP) in 1982 to assess the location, quality, and quantity of agricultural lands and track land conversion trends throughout California. The FMMP is a nonregulatory program, which provides consistent and impartial analysis of agricultural land and land use changes throughout California. The FMMP produces important farmland maps at the county level consisting of a hybrid of resource quality (soils) and land use information. Data is also released in statistical formats compiled every other year into the California Farmland Conversion Report (DOC 2025a). The FMMP uses seven categories to describe the physical and chemical properties of agricultural capability based on soil quality and other constraints. The descriptions used by the DOC, Division of Land Resource Protection (DOC 2025a) are as follows:

- **Prime Farmland.** Prime Farmland has the best combination of physical and chemical features and is able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to sustain high yields. Land must have been used for irrigated production at some time during the prior four years of the mapping date.
- **Farmland of Statewide Importance.** Farmland of Statewide Importance is similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- **Unique Farmland.** Farmland of lesser quality soils (classified as Unique Farmland) may be used for the production of the state's leading agricultural crops. This land is usually irrigated but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.
- **Farmland of Local Importance.** Farmland of Local Importance is defined as land of importance to the local agricultural economy as determined by each county’s board of supervisors and a local

advisory committee. FMMP also includes a subcategory of Farmland of Local Importance, Farmland of Local Potential; however, this subcategory is not applicable to Santa Barbara County.

- **Grazing Land.** Grazing Land is defined as land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities.
- **Urban and Built-up Land.** Urban or Built-up Land is land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.
- **Other Land.** Land not included in any other mapping category is categorized as "other land." Common examples include low-density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres. Vacant and non-agricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

California Land Conservation Act (Williamson Act)

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, is promulgated in Government Code Section 51200-51297.4. The Williamson Act enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space uses in return for reduced property tax assessments. Specifically, this legislation enables landowners who voluntarily agree to participate in the Williamson Act program to receive assessed property taxes according to the income-producing value of their property in agricultural use, rather than the assessed market value.

Specifically, regarding solar energy facilities on Williamson-Act contracted lands, the State legislature created "solar-use easements" in 2011 (reauthorized in 2022). Government Code Section 51255.1 authorizes local governments and landowners to rescind their Williamson Act and Farmland Security Zone contracts when simultaneously entering solar-use easements. The new easement requires that the land be used for solar photovoltaic facilities for a term of 20 years, or if the landowner requests, for a term of not less than 10 years, on marginal and impaired farmland. Rescission and simultaneous entry of a solar-use easement is a potential avenue for solar energy development on land subject to Williamson Act and Farmland Security Zone contracts. Other potential options include contract cancellation, non-renewal, or local government determinations that certain solar projects are compatible with contract restrictions. Any local decision to rescind a Williamson Act or Farmland Security Zone contract in favor of a solar-use easement requires Department of Conservation (DOC) approval in consultation with the Department of Food and Agriculture (DOC 2025b).

Farmland Security Zone Act

The Farmland Security Zone Act was passed by the state legislature in 1999 to ensure that long-term farmland preservation is part of public policy. Under the provisions of the act, a property owner already under a Williamson Act contract can apply for Farmland Security Zone status by entering into a contract with the county in which the land is located. Farmland Security Zone classification renews each year automatically for an additional 20 years. In addition to the Williamson Act tax benefits, the owner is

entitled to a further 35 percent reduction in taxable land value provided the owner agrees not to convert agricultural land to non-agricultural uses.

California Right to Farm Act

The Right-to-Farm Act in California, codified in California Civil Code Section 3482.5, is intended to allow agricultural activity and processing of agricultural goods provided that such activities do not result in nuisance conditions. For the purposes of the section, "agricultural activity" includes cultivation of soil, dairying, the production, cultivation, growing, and harvesting of any agricultural commodity including timber, viticulture, apiculture, or horticulture, the raising of livestock, fur bearing animals, fish, or poultry, and any practices performed by a farmer or on a farm as incident to or in conjunction with those farming operations, including preparation for market, delivery to storage or to market, or delivery to carriers for transportation to market (Farmland Info. 2019).

Local

Santa Barbara County Uniform Rules for Agricultural Preserves and Farmland Security Zones

At the county level, Santa Barbara County has established Uniform Rules for Agricultural Preserves and Farmland Security Zones (Uniform Rules) to implement the Williamson Act and administer the Agricultural Preserve Program. As updated in December of 2024, the Uniform Rules define eligibility requirements and qualifying uses that each participating landowner must follow to obtain reduced property tax assessments under the Williamson Act. The Uniform Rules, in many cases, are more restrictive for the preservation of farmland than the county's agricultural zoning requirements. Land under Williamson Act contracts must meet and maintain eligibility requirements, including minimum size and average annual production value. These requirements vary based on whether the contract is on nonprime land, prime land, or superprime land. The County has an established agricultural preserve program with a high level of participation, covering approximately 550,000 acres, representing 75 percent of all privately held agricultural lands in the County (County of Santa Barbara 2025).

The Uniform Rules establish principles of compatibility for the agricultural preserve program and identify supportive and permissible land uses. Among the permissible uses deemed compatible with agricultural preserves are certain energy production facilities.

Rule 2-9 Gas, Electric, Water and Communications Facilities states:

A. The erection, construction, alteration or maintenance of gas, electric, water, or communication utilities are compatible uses. Communication facilities shall include, among others, radio, television, telecommunications, Cable TV and facilities necessary for the air of navigation by land, air or sea.

B. Agricultural accessory structures, including but not limited to, windmills or solar panels for pumping water wind turbines for frost protection, and water generation for on-site agricultural uses are deemed compatible uses.

C. Energy production structures, such as wind energy conversion systems and solar panels, are permitted subject to applicable zoning requirements and review by the Agricultural Preserve Advisory Committee pursuant to the compatibility guidelines as stated in Section 2-1 of this Rule.

The Uniform Rules establish standards for the termination of Williamson Act contracts and withdrawal of land from the Agricultural Preservation program, such that the integrity of the program remains unimpaired. Uniform Rule 6 contains established standards and procedures for terminating Williamson Act and Farmland Security Zone contracts. Methods include nonrenewal (of contract), cancellation (petition by owner), recission, annexation (by a city in Santa Barbara County through the local agency formation commission) or by eminent domain or other acquisition (in lieu of eminent domain) by a public agency. Upon serving a notice of non-renewal, the existing contract remains in effect for the balance of the period remaining, typically a period of 10 years. Uniform Rule 6-1.2 identifies the Williamson Act or Farmland Security Zone contract cancellation process. The Board of Supervisors may grant tentative approval for cancellation of a Williamson Act Contract only if it can make all the findings for either Government Code Section 51282 (a)(1)(b), or Government Code Section 51282 (a)(2)(c). The following principles of compatibility outlined in the Uniform Rules are applicable to the Project:

Principles of Compatibility

A. Uses approved on contracted lands shall be consistent with all of the following principles of compatibility:
    1. The use will not significantly compromise the long-term productive agricultural capability of the subject contracted parcel or parcels or on other contracted lands in agricultural preserves.
    2. The use will not significantly displace or impair current or reasonably foreseeable agricultural operations on the subject contracted parcel or parcels or on other contracted lands in agricultural preserves. Uses that significantly displace agricultural operations on the subject contracted parcel or parcels may be deemed compatible if they relate directly to the production of commercial agricultural products on the subject contracted parcel or parcels or neighboring lands, including activities such as harvesting, processing, or shipping.
    3. The use will not result in the significant removal of adjacent contracted land from agricultural or open-space use. In evaluating compatibility, the Board of Supervisors shall consider the impacts on non-contracted lands in the agricultural preserve or preserves.

Other Compatibility Criteria

A. The use does not result in the significant increase in the density of the temporary or permanent human population that could hinder or impair agricultural operations on the subject property and/or other agricultural lands in the vicinity.
B. The use does not require and will not encourage the extension of urban services such as sewer or the upgrade of public roads to urban standards that could encourage premature conversion of agricultural land to non-agricultural uses.

County of Santa Barbara Agricultural Preserve Advisory Committee

The Agricultural Preserve Advisory Committee (APAC) was created by, and is advisory to, the Board of Supervisors and includes representatives from the Agricultural Commissioner's Office, County Assessor's Office, County Surveyor's Office, UC Cooperative Extension, and County Planning and Development. APAC is responsible for administering the County's Agricultural Preserve Program and the Uniform Rules. APAC's duties include reviewing applications and making recommendations for creating agricultural preserves, entering new contracts, making revisions to existing preserves or contracts, terminating contracts, and disestablishing preserves. APAC is also responsible for monitoring and enforcement of the County's Agricultural Preserve (Williamson Act) Program (County of Santa Barbara 2025).

County of Santa Barbara Agricultural Advisory Committee

Established in 1995, the County's Agricultural Advisory Committee (AAC) represents agricultural interests in the county (such as the Santa Barbara Cattleman's Association and the Central Coast Winegrowers, among others). The AAC advises to the Board of Supervisors, Planning Commission, and other County departments on matters related to agriculture. The AAC may review matters that have agricultural resource issues (i.e., land use, economics, pesticides, legislation, water, regulatory issues, property rights, agricultural practices) or may affect agricultural resources including (but not limited to) policy and ordinance changes, departmental projects or programs, annexation requests by cities, other agency programs, and specific projects with broad implications to agriculture. The AAC has an advisory role and has no authority to approve, deny, or require modifications to any matter or project under the committee's consideration.

Santa Barbara County Comprehensive Plan

The Santa Barbara County Comprehensive Plan establishes a framework for development in the unincorporated county, through the Agricultural, Environmental Resource Management, Conservation, Open Space, and Land Use elements, including the Coastal Land Use Plan. The goals and policies outlined in the Agricultural Element address agricultural viability and land preservation (County of Santa Barbara 2009).

Agricultural Element

In recognition of agriculture for its uniqueness and importance in Santa Barbara County, the Agricultural Element of the Comprehensive Plan (County of Santa Barbara 2009b) contains the following goals and policies related to agricultural resources.

> **Goal I:** Santa Barbara County shall assure and enhance the continuation of agriculture as a major viable production industry in Santa Barbara Country. Agriculture shall be encouraged. Where conditions allow, (taking into account environmental impacts) expansion and intensification shall be supported.
>
> > ***Policy IA*:** The integrity of agricultural operations shall not be violated by recreational or other non-compatible uses.
> >
> > ***Policy I.B*:** The County shall recognize the rights of operation, freedom of choice as to the methods of cultivation, choice of crops or types of livestock, rotation of crops and all other functions within the traditional scope of agricultural management decisions. These rights and freedoms shall be conducted in a manner which is consistent with: (1) sound agricultural practices that promote the long-term viability of agriculture and (2) applicable resource protection policies and regulations.
> >
> > ***Policy I.C*:** To increase agricultural productivity, the County shall encourage land improvement programs.
> >
> > ***Policy I.D*:** The use of the Williamson Act (Agricultural Preserve Program) shall be strongly encouraged and supported. The County shall also explore and support other agricultural land protection programs.
> >
> > ***Policy I.E*:** The County shall recognize that the generation of noise, smoke, odor, and dust is a natural consequence of the normal agricultural practices provided that agriculturalists exercise reasonable measures to minimize such effects.

***Policy I.F*:** The quality and availability of water, air, and soil resources shall be protected through provisions including but not limited to, the stability of Urban/Rural Boundary Lines, maintenance of buffer areas around agricultural areas, and the promotion of conservation practices.

***Policy I.G*:** Sustainable agricultural practices on agriculturally designated land should be encouraged in order to preserve the long-term health and viability of the soil.

Goal II: Agricultural lands shall be protected from adverse urban influence.

***Policy II.A*:** Santa Barbara County shall require measures designed for the prevention of flooding and silting from urbanization, especially as such damage relates to the approved development.

***Policy II.B*:** Santa Barbara County shall recognize, and give high priority to, the need for protection from trespass, thievery, vandalism, roaming dogs, etc., on all agricultural lands.

***Policy II.C*:** Santa Barbara County shall discourage the extension by the Local Agency Formation commission (LAFCO) of urban spheres of influence into productive agricultural lands designated Agriculture II (A-II) or Commercial Agriculture (AC) under the Comprehensive Plan.

***Policy II.D*:** Conversion of highly productive agricultural lands whether urban or rural, shall be discouraged. The County shall support programs which encourage the retention of highly productive agricultural lands.

Goal III: Where it is necessary for agricultural lands to be converted to other uses, this use shall not interfere with remaining agricultural operations.

***Policy III.A*:** Expansion of urban development into active agricultural areas outside of urban limits is to be discouraged as long as infill development is available.

***Policy III.B*:** It is a County priority to retain blocks of productive agriculture within Urban Areas where reasonable, to continue to explore programs to support that use, and to recognize the importance of the objectives of the County's Right to Farm Ordinance.

Goal IV: Recognizing that agriculture can enhance and protect natural resources, agricultural operations should be encouraged to incorporate such techniques as soil conservation and sound fire risk reduction practices.

***Policy IV.A*:** Major wildfires cause severe erosion, property damage, and safety hazards. The County shall encourage range improvement and fire hazard reduction programs, including prescribed burning of brush and alternative non-burning techniques. Such programs shall be designed and conducted to avoid excessive erosion and other significant adverse effects on the environment for the purpose of increasing water yields, improving wildlife habitat, wildlife protection, and increasing agricultural productivity.

***Policy IV.B*:** Because of fire-risk reduction or soil instability, the use of certain slopes for agricultural production may be preferable to leaving the land in its natural state, or allowing non-agricultural development provided that adverse effects are minimized.

***Policy IV.C*:** Grading and brush clearing for new agricultural improvements on hillsides shall not cause excessive erosion or downslope damage.

Goal V: Santa Barbara County shall allow areas and installations for those supportive activities needed as an integral part of the production and marketing process on and/or off the farm.

***Policy V.A*:** Santa Barbara County shall permit on-farm supportive installations for product handling and selling as prescribed in the Uniform Rules of the County's Agricultural Preserve Program.

***Policy V.B*:** Santa Barbara County should allow areas for supportive agricultural services within reasonable distance and access to the farm user.

Goal VI: The County should make effective provision for access to agricultural areas and for the necessary movement of agricultural crops and equipment.

***Policy VI.A*:** To the maximum extent feasible, the County Public Works Department shall design roads with the type and size of vehicles and/or equipment in mind which are used in the agricultural operations of the area.

Environmental Resource Management Element

The Environmental Resource Management Element (ERME) states that all existing croplands on prime soils should be preserved. Existing croplands with moderate or low soil series, even though they may be less productive than prime soil lands, should also be preserved, as possible. The ERME factors map proposed policies to limit the development of lands subject to environmental constraints. Under Category A, urbanization should be prohibited on lands with geologic problems; where existing croplands have a high agricultural suitability rating or a Class I or II soil capability classification; in floodways, streams, reservoirs, and groundwater recharge areas; areas with slopes 30 percent or greater; or where agricultural preserves are subject to Williamson Act agreements. Mineral resources sites, parks and recreation areas, historic sites and scientific preserves also fit into Category A. Under Category B, urbanization should be prohibited except in relatively few instances on lands where existing croplands have a moderate or low agricultural suitability rating (in urban areas), a Class III or IV soil capability classification, or are highly suitable for expansion of cultivated agriculture. It is noted that agricultural preserves, although not subject to environmental constraints, are included in Category A. With the execution of Williamson Act agreements, the County has made a legal commitment that the land will remain in agricultural use for a minimum of 10 years, subject to automatic annual renewal (County of Santa Barbara 2009c).

Land Use Element

The County's Land Use Element includes the following county and area goals related to agriculture (County of Santa Barbara amended 2024).

Agriculture: In the rural areas, cultivated agriculture shall be preserved and, where conditions allow, expansion and intensification shall be supported. Lands with both prime and non-prime soils shall be reserved for agricultural uses.

Carpinteria-Summerland Area Goal: The agricultural economy and the semi-rural qualities of the area should be preserved. Every effort should be made to preserve fertile lands for agriculture.

Goleta Area Goal: Existing orchards and groves should be preserved, and expansion of agricultural land use, particularly orchards and grazing, should be encouraged.

Lompoc Area Goal: Prime agricultural lands should be preserved for agricultural use only. Preservation of lesser grades of presently producing or potential agricultural land should be actively encouraged.

Santa Ynez Valley Area Goal: Agriculture should be preserved and protected as one of the primary economic bases of the Valley.

Open Space and Conservation Elements

The Open Space Element (County of Santa Barbara 2010) notes the importance of agriculture and suggests that reserving land for agricultural expansion rather than other uses is advisable, particularly where lands suitable for urban expansion are available elsewhere. Protection of agricultural open space was considered in the open space design concept for the managed production of resources. The Conservation Element developed agricultural suitability modeling and maps as defined by soil and hydrologic unit.

Coastal Land Use Plan

As an element of the County Comprehensive Plan, the Coastal Land Use Plan (CLUP) outlines goals and policies for the Coastal Zone within Santa Barbara County. The Coastal Zone extends inland a minimum of 1,000 yards from the mean high tide line, and further in some cases to encompass nearby habitat, agricultural, and recreational resources. The CLUP for the County was adopted in 1982 in response to the passage of the California Coastal Zone Conservation Act and republished in 2019. The legislature established goals for future activity in the Coastal Zone including the prioritization of Coastal Zone-dependent land uses over other uses; enhancement and restoration of natural and man-made resources; orderly and balanced utilization and conservation of resources; and recreational opportunities and public access. Policies 8-1 through 8-12 are generally applicable to all agricultural uses within the unincorporated County that are located within the Coastal Zone. Policies 8-1 through 8-4 (listed below) are the most applicable to this analysis.

> ***Policy 8-1*:** An agricultural land use designation shall be given to any parcel in rural areas that meets one or more of the following criteria:
>
> a. Prime agricultural soils (Capability Classes I and II as determined by the U.S. Soil Conservation Service).
>
> b. Other prime agricultural lands as defined in Section 51201 of the Public Resources Code.
>
> c. Lands in existing agricultural use.
>
> d. Lands with agricultural potential (e.g., soil, topography, and location that will support long term agricultural use).
>
> These criteria shall also be used for designating agricultural land use in urban areas, except where agricultural viability is already severely impaired by conflicts with urban uses.
>
> ***Policy 8-2*:** If a parcel is designated for agricultural use and is located in a rural area not contiguous with the urban/rural boundary, conversion to non-agricultural use shall not be permitted unless such conversion of the entire parcel would allow for another priority use under the Coastal Act, e.g., coastal dependent industry, recreation and access, or protection of an environmentally sensitive habitat. Such conversion shall not be in conflict with contiguous agricultural operations in the area, and shall be consistent with Section 30241 and 30242 of the Coastal Act.
>
> ***Policy 8-3*:** If a parcel is designated for agricultural use and is located in a rural area contiguous with the urban/rural boundary, conversion shall not be permitted unless:
>
> a. The agricultural use of the land is severely impaired because of physical factors (e.g., high water table), topographical constraints, or urban conflicts (e.g., surrounded by urban uses which inhibit production or make it impossible to qualify for agricultural preserve status), and
>
> b. Conversion would contribute to the logical completion of an existing urban neighborhood, and

c. There are no alternative areas appropriate for infilling within the urban area or there are no other parcels along the urban periphery where the agricultural potential is more severely restricted.

***Policy 8-4*:** As a requirement for approval of any proposed land division of agricultural land designated as Agriculture I or II in the land use plan, the County shall make a finding that the long-term agricultural productivity of the property will not be diminished by the proposed division.

Community Plans and Area Goals

Pertinent agricultural resources policies would apply to the development of solar energy systems and facilities within any designated community plan areas. Such development would be subject to the goals and policies of the following community plans:

- Eastern Goleta Valley Community Plan
- Gaviota Coast Plan
- Goleta Community Plan
- Los Alamos Community Plan
- Mission Canyon Community Plan
- Montecito Community Plan
- Orcutt Community Plan
- Santa Ynez Valley Community Plan
- Summerland Community Plan
- Toro Canyon Plan

Eastern Goleta Valley Community Plan

The following objectives, policies, and development standards in the Eastern Goleta Valley Community Plan (County of Santa Barbara 2015) pertain to agriculture. Additional agricultural policies as related to the Project, including requirements for land use conversion (from agriculture) are incorporated by reference.

Objective LUA-EGV-1: Sustain and enhance agricultural land, operations, and characteristics in Eastern Goleta Valley.

***Policy LUA-EGV-1.1*:** Agricultural resources, agricultural land uses and operations, and distinctive urban and rural agricultural characteristics shall be preserved to the greatest extent feasible.

DevStd LUA-E GV-1A: In the Rural Area and where agricultural resources are present in the Urban Area, urban land uses shall not partition or interrupt contiguous blocks of agriculturally-designated lands to the greatest extent feasible.

***Policy LUA-EGV-1.2*:** Non-agricultural development adjacent to agriculturally-designated property shall include buffers to protect agricultural land, operations, and characteristics.

DevStd LUA-EGV-1B: Buffers separating non-agricultural development from agricultural land and/or operations shall be established, maintained, and enforced. Agricultural buffers, as determined by the Planning and Development, shall be required for non-agricultural land uses adjacent to active agricultural operations and/or agriculturally-designated property.

DevStd LUA-EGV-1C: Greenbelt buffers composed of predominantly native and drought tolerant species, or other appropriate perimeter screening, such as compatible and attractive fences and walls and, if appropriate, orchard and food-producing plants should be established and included within the landscape plans for non-agricultural land uses adjacent to agriculturally-designated property or property in active production.

Gaviota Coast Plan

The agricultural goals, policies and development standards identified in the Gaviota Coast Plan (County of Santa Barbara 2016) are incorporated herein by reference. The policies pertaining most to this analysis are provided as follows.

> ***Policy AG-I.A: Protect and Support Agricultural Land Use.*** Land designated for agriculture shall be preserved and protected for agricultural use; the integrity of agricultural operations shall not be violated by non-compatible uses.
>
> ***Policy AG-1.B: Long-Term Agricultural Production.*** *(INLAND)* To the extent feasible, the County shall protect agricultural land, continued agricultural uses and the agricultural economy by sustaining agricultural production and discouraging conversions or other uses that are incompatible with long-term agricultural production.
>
> ***Policy AG-1.B: Long-Term Agricultural Production.*** *(COASTAL)* The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the area's agricultural economy, and conflicts shall be minimized between agricultural and other land uses. If a parcel is designated for agricultural use, the parcel shall not be converted to a non-agricultural use unless the conversion is consistent with CLUP Policy 8-2.

Goleta Community Plan

The Land Use Element of the Goleta Community Plan contains four fundamental goals, one of which is specifically related to agriculture (County of Santa Barbara 1995a).

> **Agriculture:** In rural areas, cultivated agricultural shall be preserved and where conditions allow, expansion and intensification should be supported.

Los Alamos Community Plan

The Los Alamos Community Plan contains general land use goals, policies, and development standards that pertain to the protection of agricultural resources (County of Santa Barbara 2011).

> **Goal LU-LA-1:** Encourage Growth Within the Community Plan Area Rather Than Expanding the Existing Urban Boundary.
>
> ***Policy LU-LA-1.1*:** In order to preserve surrounding agricultural lands and the rural character of Los Alamos, the County shall not support an extension of the urban boundary line unless:
>
> 1. The extension is proposed as part of an update to this community plan
> 2. For extensions pursuant to 1, the update of the Community Plan or other comprehensive review has first considered the inventory of all available vacant or underdeveloped land within the entire urban boundary and has considered the feasibility of changing land use designations and/or zoning on land within the urban boundary and west of Highway 101 to accommodate the desired additional growth;
> 3. The extension does not include parcels which are under Williamson Act contracts (including parcels which have filed for non-renewal of a Williamson Act contract) and;
> 4. A finding can be made that the capacity of urban services (e.g., sewer, water) is sufficient to serve potential development in the extension area.

Mission Canyon and Montecito Community Plans

There are no specific policies or development standards in the Mission Canyon Community Plan (County of Santa Barbara 2014) or Montecito Community Plan (County of Santa Barbara 1995b) related to agriculture that are applicable to the Project. Therefore, agricultural policies in the County's Comprehensive Plan are applicable to land use decisions in Mission Canyon and Montecito.

Orcutt Community Plan

The Orcutt Community Plan contains agricultural and rural policies and development standards to address new development adjacent to existing agricultural operations to help provide compatibility between uses in the Orcutt Planning Area (OPA) and the Santa Maria Valley (County of Santa Barbara 2024b).

3. Agricultural & Rural Policies and Development Standards

***Policy LUA-O-1*:** The County shall develop and promote programs to preserve agriculture in the Santa Maria Valley.

Action LUA-O-1.1: The County shall utilize all available agricultural preservation programs, including but not limited to, the Williamon Act, Transfer of Development Credits, Agricultural Clustered Development and purchase of Development Credits, to preserve agricultural resources in the OPA and the Santa Maria Valley.

***Policy LUA-O-2*:** Development in Orcutt shall be compatible with adjacent or nearby agricultural lands.

DevStd LUA-O-2.1: Fencing, berming, and/or landscaping shall be installed along property lines or across ends of street stubs contiguous with agricultural and/or permitted oil operations unless a waiver to the satisfaction of Planning and Development is obtained from the adjacent agriculturist(s) and property owner(s), and/or operators. Fencing, berming and/or landscaping shall be designed, installed, and maintained to protect agricultural land and permitted oil operations from effects of residential development.

DevStd LUA-O-2.3: All new urban and EDRN development which borders agriculturally designated lands shall include a minimum 100-foot buffer between structures and agricultural land and shall include appropriate landscaping, including but not limited to the planting of hedges and/or windrows with a sufficient density of trees and shrubs to reduce noise, odor, dust or chemical effects associated with the agricultural operations. This buffer is a minimum adjacent to lighter agricultural uses (such as grazing) and should be adjusted upward if the adjacent agricultural operation is considered more intensive (such as strawberry cultivation or oil development).

***Policy LUA-O-3*:** In consideration of conversion of any agricultural land within the urban boundary to urban uses, the County shall first consider smaller, more isolated parcels with greater urban/agricultural conflicts prior to considering larger blocks of agricultural land.

Santa Ynez Valley Community Plan

Based on the "Valley Blueprint" a community lead endeavor, which outlined consensus-based goals for development, public services, agriculture and infrastructure, the Santa Ynez Valley Community Plan (County of Santa Barbara 2009d) established policy to preserve the agricultural character of Santa Ynez Valley. Among the land use goals in the Santa Ynez Valley Community Plan are the following related to agriculture and open space:

3. **Agriculture:** In rural areas, cultivated agriculture shall be preserved and where conditions allow, expansion and intensification should be supported. Lands with both prime and nonprime soils shall be reserved for agricultural uses.

4. **Open Lands:** Certain areas may be unsuitable for agricultural uses due to poor or unstable soil conditions, step slopes, flooding, or lack of adequate water. These lands are usually located in areas that are not necessary or desirable for future urban uses. There is no basis for the proposition that all land, no matter where situated, must be planned for urban purposes if it cannot be put to some other profitable economic use.

Land Use Area Community Goal:

***Agriculture*:** Agriculture shall be preserved and protected as one of the primary economic bases of the Valley.

Summerland Community Plan

The following goals and policies outlined in the Summerland Community Plan pertain to protection of agricultural resources (County of Santa Barbara 2016b).

Agriculture: Agriculture shall be preserved in areas which possess prime agricultural soils, and in areas of existing agricultural operations. Such agricultural practices shall minimize the potential for erosion and flood hazards through appropriate soil protection measures and the siting of structures and improvements outside of areas with identified flood hazards.

***Policy LUA-S-1*:** Existing land designated for agriculture shall be preserved for agricultural use.

***Policy LUA-S-2*:** New development adjacent to agriculturally zoned property shall include buffers to protect the viability of agricultural operations adjacent to the community.

Toro Canyon Plan

Goals, policies, and development standards pertaining to agricultural resources from the Toro Canyon Plan (County of Santa Barbara 2004) are as follows:

Goal LUA-TC: Protect And Support Agricultural Land Use And Encourage Appropriate Agricultural Expansion, While Maintaining A Balance With Protection Of Coastal And Natural Resources And Protection Of Public Health And Safety.

***Policy LUA-TC-1*:** The County shall develop and promote programs to preserve agriculture in the Toro Canyon Plan Area.

***Policy LUA-TC-2*:** Land designated for agriculture within Toro Canyon shall be preserved and protected for agricultural use.

DevStd LUA-TC-2.1: Development of non-agricultural uses (other than residential uses and appropriately sited public trails) on land designated for agriculture, including land divisions and changes to a non-agricultural land use/zoning designation, shall only be permitted subject to all of the following findings:

a. Continued or renewed agricultural use of the property is not feasible;

b. Non-agricultural use shall be compatible with continued agricultural use on adjacent lands;

c. Non-agricultural use shall preserve prime agricultural land or concentrate development contiguous with or in close proximity to existing developed areas able to accommodate the use, including adequate public services;

d. Non-agricultural use shall not have a significant adverse impact on biological resources, visual resources and coastal resources (public access, recreation and coastal dependent uses);

e. Land divisions outside the Urban Boundary shall be permitted only where 50 percent of the usable parcels in the urban area have been developed and the proposed parcels would be no smaller than the average size of the surrounding parcels. Land divisions proposed in the Coastal Zone shall be consistent with Coastal Plan Policy 8.4;

f. For properties located in the Coastal Zone, the proposed non-agricultural use shall be consistent with Coastal Plan Policies 8.2 and/or 8.3.

DevStd LUA-TC-2.2: To the maximum extent feasible, hardscaped areas associated with agricultural and greenhouse development (i.e., parking lots, loading bays, interior walkways in greenhouses, and accessory building footprints) shall be minimized in order to preserve the maximum amount of prime agricultural soils. Minimizing the covering of soils shall be accomplished through efficient site and building design and the use of pervious surfaces wherever feasible.

***Policy LUA-TC-3*:** New development shall be compatible with adjacent agricultural lands.

DevStd LUA-TC-3.1: New non-agricultural development adjacent to agriculturally zoned property shall include appropriate buffers, such as trees, shrubs, walls, and fences, to protect adjacent agricultural operations from potential conflicts and claims of nuisance. The size and character of the buffers shall be determined through parcel-specific review on a case-by-case basis.

DevStd LUA-TC-3.2: (*NON-LCP*) Consistent with the County's adopted Right to Farm Ordinance, a Notice to Property Owner (NTPO) shall be recorded with the final tract and/or parcel map for properties within 1,000 feet of agriculturally zoned land. The NTPO shall inform the buyer that:

> *The adjacent property is zoned for agriculture and is located in an area that has been planned for agricultural uses, including permitted oil development, and that any inconvenience or discomfort from properly conducted agricultural operations, including permitted oil development, shall be allowed consistent with the intent of the Right to Farm Ordinance. For further information, contact Santa Barbara County Planning and Development.*

***Policy LUA-TC-4*: (*Coastal*)** Within the coastal zone, in areas with prime agricultural soils, structures, including greenhouses that do not rely on in-ground cultivation, shall be sited to avoid prime soils to the maximum extent feasible.

***Policy LUA-TC-5*: (*Coastal*)** The County should ensure that essential infrastructure for existing agricultural production is protected and maintained.

Santa Barbara County Right to Farm Ordinance

Article V of Chapter 3 of the County Code "Right-to-Farm Ordinance" contains limitations on nuisance and clarifies appropriate uses for agricultural lands. The purpose of the County's ordinance is to protect agricultural land uses from conflicts with non-agricultural land uses that may result in financial hardship

to agricultural operators or the termination of their operation. The ordinance is intended to preserve and protect agriculturally zoned lands for exclusive agricultural use; to support and encourage continued agricultural operations in the County; and to forewarn prospective purchasers or residents of property adjacent to or near agricultural operations of the inherent potential problems associated with such purchase or residence including, but not limited to, the sounds, odors, dust, and chemicals that may accompany agricultural operations. Projects that are proposed and/or approved in the County proximate to agriculturally zoned lands are often required to provide notice to future residents, tenants, and users of the Right-to-Farm (County of Santa Barbara 2025).

County of Santa Barbara Land Use and Development Code

As set forth in the County's Land Use and Development Code (LUDC) Chapter 35, Zoning, the LUDC classifies and regulates land use in the County to implement the County's Comprehensive Plan. The agricultural zones are established in the LUDC, as follows:

> **AG-I (Agricultural I):** The AG-I zone is applied to areas appropriate for agricultural use within Urban, Inner Rural, and Existing Developed Rural Neighborhood (EDRN) areas, as designated on the maps in the County's Comprehensive Plan. The intent is to provide standards that will support agriculture as a viable land use and encourage maximum agricultural productivity.
>
> **AG-II (Agricultural II):** The AG-II zone is applied to areas appropriate for agricultural land uses on prime and non-prime agricultural lands located within the Rural Area as shown on the maps in the County's Comprehensive Plan. The intent is to provide for agricultural land uses on large properties (minimum of 40 to 320-acre lots) with prime and non-prime soils for long-term agricultural use.

The LUDC is adopted to protect and promote the public health, safety, comfort, convenience, prosperity, and general welfare of residents and businesses in the County (Section 35.10.010 – Purpose of LUDC). Section 35.21.030 lists allowable land uses on agriculturally zoned lands. Development within agricultural zones should be designed, constructed, and established in compliance with the requirements and all applicable standards in the LUDC. Section 35.59 includes current solar energy regulations applicable to Cuyama Valley, within the Utility-Scale Solar Photovoltaic Overlay area.

Santa Barbara County Code Article II, Coastal Zoning Ordinance

Pursuant to Public Resources Code, Section 30500 of the California Coastal Act of 1976, the County must prepare a Local Coastal Program for unincorporated areas of the County that are within the Coastal Zone. Article II of the Coastal Zoning Ordinance (CZO) implements the Coastal Land Use Plan by classifying and regulating land uses, buildings, and structures, as applicable to unincorporated areas within the Coastal Zone. The County maintains a certified Local Coastal Program for unincorporated areas of the county within the Coastal Zone consisting of the Coastal Land Use Plan and Article II of the CZO. Article II CZO contains the coastal zoning district maps and sets forth regulations applicable to properties in the coastal areas based on their zoning designations.

Agriculture Buffer Ordinance

Section 35.30.025 of the LUDC, Section 35.430.025 of the MLUDC, and Section 35.1440 of the Article II CZO contain agricultural buffer regulations. Buffers minimize potential conflicts between agricultural and adjacent land uses that result from noise, dust, light, and odor incidental to normal agricultural operations as well as potential conflicts originating from residential and other non-agricultural uses such as domestic pets, insect pests, and invasive weeds. This ordinance applies to inland and coastal areas of the County

when there is a discretionary application for non-agricultural development which: 1) is located within an Urban or Inner Rural Area, on an Existing Developed Rural Neighborhood (EDRN), or located on property zoned industrial that is located in the Rural Areas; and 2) is a project site located immediately adjacent to agriculturally zoned land that is located in a Rural Area. The ordinance does not apply to agriculture in the Urban Area. The agricultural buffer width can range from 100 to 400 feet depending on the type of agriculture and proposed non-agricultural use or development. The buffer is required to be located on the lot which contains the non-agricultural project, adjacent to the common lot line between the project site and the adjacent agricultural lot.

3.2.4 Project Impact Analysis

Thresholds of Significance

CEQA Guidelines

Pursuant to Appendix G of the CEQA Guidelines a project would result in significant impact to agricultural resources if the project would:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract.

c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.

CEQA Guidelines Appendix G contains two questions that address forestry resources. Since the Project area does not contain zoning for forest land, timberland, or timberland zoned Timberland Production, there would be no potentially significant adverse impacts related to forest- and timberland-related resources. See Chapter 5, *Other CEQA Considerations*, for more detail.

County of Santa Barbara Environmental Thresholds

The County Agricultural Resource Guidelines are set forth in the County's Environmental Thresholds and Guidelines Manual (County of Santa Barbara 2024). The following agricultural and land use threshold questions from the County Guidelines supplement the CEQA Guidelines Appendix G questions related to agricultural resources provided above. The County thresholds shown below have been incorporated into criterion a) and are discussed in the analysis of direct and indirect effects.

- Will the proposal result in the conversion of prime agricultural land to non-agricultural use, impairment of agricultural land productivity (whether prime or nonprime), or conflict with agricultural preserve programs?
- Will the proposal result in any effect [potentially significant adverse effect] upon any unique or other farmland of State or Local Importance?

For site-specific analysis, a weighted point system is utilized to assign relative values to particular characteristics of a site's agricultural productivity (e.g., soil type, water supply, etc.). The weighting system is provided to perform a preliminary screening of a project's agricultural impacts during the initial

study process. The initial study screening looks at the value of a site's agricultural suitability and productivity, to determine whether the project's impact on loss or impairment of agricultural resources would be a potentially significant impact. The guidelines are intended to be used with flexibility in their application to specific sites, taking into account specific circumstances and agricultural uses. Where the points from the formula total 60 or more, the following types of projects will be considered to have a potentially significant impact:

- A division of land (including Parcel and Final Maps, etc.) which is currently considered viable but would result in parcels which would not be considered viable using the weighting system.
- A Development Plan, Conditional Use Permit, or other discretionary act which would result in the conversion from agricultural use of a parcel qualifying as viable using the weighting system.
- Discretionary projects which may result in substantial disruption of surrounding agricultural operations.

Methodology

As described in Chapter 2, *Project Description*, the County proposes to amend several land use plans and regulations to allow the development of solar energy systems and facilities on agricultural (and other) lands in unincorporated Santa Barbara County. However, as noted, future project-level siting and design details, as well as the timing of potential future solar development, are not known. The impact analysis, therefore, does not evaluate potential impacts on agricultural resources on a project- or site-specific level. The programmatic analysis provided in this Program EIR addresses the potential for the Project to directly or indirectly affect agricultural resources within unincorporated County lands, particularly within areas mapped as Prime Farmland or Other Important Farmland, such as Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance. The analysis addresses the potential for the Project's proposed LUDC and CZO amendments (related to solar facility development) to result in direct conversion of agricultural lands, conflicts with agricultural operations, and the loss of agricultural viability. The analysis considers potential conflicts with Williamson Act contracts or whether the Project would result in direct conversion of agricultural land to non-agricultural uses. The primary focus of this analysis is on Tier 3, community-scale and Tier 4, utility-scale solar energy facilities as, due to their size and scale, these tiers are most likely to result in agricultural and land conversion impacts. Additionally, proposed Tier 1 and Tier 2 solar energy systems are already allowed throughout the unincorporated county as rooftop and freestanding systems (refer to Table 1, *Solar Photovoltaic Systems Currently Allowed within Santa Barbara County*), so are part of the "baseline" condition. Physical impacts on agricultural lands and indirect impacts on surrounding lands are considered as part of this analysis.

The information and analysis provided herein is based on available long-range planning documents and resources described in Sections 3.2.2 and 3.2.3 and EIRs related to the Project area. Key resources and data used in preparation of this section include the Open Space Element, Agricultural Element, and Land Use Element of the County Comprehensive Plan, relevant Community Plans, Santa Barbara County Code, Department of Conservation FMMP maps, and County GIS data. The Project would entail land use amendments and amend the Uniform Rules to clarify compatible uses, specifically as such land uses pertain to an energy facility collocated with agriculture. The Project would also amend the Uniform Rules to add definitions for "agrivoltaics," "solar energy facility," and "solar-use easement." Refer to Chapter 2 for more information about the proposed amendments. Under the Project, the County's zoning ordinances would be amended to allow solar energy systems and facilities on agriculturally zoned land as conditionally

permitted uses provided these systems and facilities adhere to specific use regulations as proposed. Additional land use discussion and analysis is provided in Section 3.9, *Land Use and Planning*.

Project Impacts

This section provides an analysis of potential impacts to agricultural resources that could occur from the future development of solar energy systems and facilities. **Table 3.2-1**, *Summary of Agricultural Resources Impacts*, provides a summary of the Project's potential environmental impacts related to agricultural resources. A detailed discussion of each impact follows.

TABLE 3.2-1
SUMMARY OF AGRICULTURAL RESOURCES IMPACTS

Agricultural Resources Impacts	Impact Classification	Mitigation Measures	Residual Significance
Impact AG-1: Future solar energy facilities enabled under the Project could potentially convert Prime Farmland, Unique Farmland, Farmland of Statewide or Local Importance to non-agricultural uses or otherwise impair agricultural land productivity.	Potentially Significant	MM AG-1: Decommissioning Plan Agricultural Viability Analysis	Significant and unavoidable
Impact AG-2: Future solar facilities enabled under the Project would potentially conflict with existing zoning for agricultural use, or a Williamson Act contract.	Potentially Significant	MM AG-1: Decommissioning Plan Agricultural Viability Analysis	Significant and unavoidable
Impact AG-3: Future solar facilities enabled under the Project could potentially involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use.	Insignificant	No mitigation required	Insignificant
Cumulative Impacts	Potentially Significant	MM AG-1: Decommissioning Plan Agricultural Viability Analysis	Significant and unavoidable

Threshold a) The Project would result in a significant impact if the Project would convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, or Farmland of Local Importance to non-agricultural use or otherwise impair agricultural land productivity.

Impact AG-1: Future solar energy facilities enabled under the Project could potentially convert Prime Farmland, Unique Farmland, Farmland of Statewide or Local Importance to non-agricultural uses or otherwise impair agricultural land productivity.

Solar energy systems contemplated under Tier 1 would either be building-integrated rooftop systems or small ground-mounted systems on land up to 0.5 acres in size. Tier 2 systems would encompass more land (greater than 0.5 acres and up to 5 acres) but would only be allowed on existing developed land (e.g.,

existing parking lots). In the Coastal Zone, Tier 2 systems would be permitted with a Coastal Development Permit. Because Tier 1 and 2 systems would be of a limited size (up to 5.0 acres) or installed upon previously developed structures or lands, these solar energy installations would not convert a substantial amount of farmland to non-agricultural uses. As a general guideline, pursuant to the County environmental thresholds, an agricultural parcel of land is only considered to be viable if it is of sufficient size and capability to support an agricultural enterprise independent of another parcel. Therefore, because of the size limits on their development, the potential agricultural impacts of the Tier 1 and Tier 2 energy systems would be insignificant.

This analysis pertains to the potential farmland conversion associated with future community-scale and utility-scale solar facility development under Tier 3 and Tier 4, respectively. The amendments would apply to lands zoned AG-I, AG-II, PI, M-1, M-2, M-RP, M-CR, and PU. This analysis considers lands zoned for agriculture, specifically AG-I and AG-II. These lands zoned for agriculture encompass the vast majority of the study area (as depicted on Figure 3.2-2). Although there is a potential for lands not zoned for agriculture to be used for agricultural purposes, there are a limited number of parcels zoned PI, M-1, M-2, M-RP, M-CR, and PU in the study area. Because these lands are zoned for purposes other than agriculture, the chance that any of these parcels contain Prime Farmland, Unique Farmland, or Farmland of Statewide or Local Importance is very small and any impacts are negligible.

As discussed in the Environmental Setting section, there are approximately 65,049 acres of prime farmland in the county, most of which are in the study area and therefore, potentially affected by the Project. Tier 3 and Tier 4 solar energy facilities could result in the conversion of existing agricultural land into non-agricultural uses or alter their productivity. However, following the anticipated 30-year term of use, if a facility ceases operating, the lands could be decommissioned, reclaimed, and remediated, as necessary to a condition comparable to preconstruction, under the proposed ordinance development standards. Currently, LUDC Section 35.59.040B.3 for the Cuyama Utility-Scale Photovoltaic Overlay area requires a Demolition and Reclamation Plan to, in part, allow the land to be restored for agricultural use or other consistent land uses after the solar energy facility has ceased operating. When the Project's solar energy facility ceases operating, the proposed amendments would require a decommissioning plan requiring the site to be restored (following the solar term of use) to a condition suitable to resume agricultural uses, within all three proposed zoning ordinance amendments. The proposed amendments do not require decommissioning after a certain time period, however.

Tier 3 and Tier 4 solar energy facilities could directly convert farmland into non-agricultural uses through constructing, operating, and maintaining facilities on agricultural land. The significance of effects hinges on whether such uses are compatible with the intended agricultural uses. Facilities considered under Tier 3 would be limited to (up to) 30 acres of land as described in Chapter 2. Facilities considered under Tier 4 would occupy larger acreages. Construction could entail site work, grading, excavation, removal of vegetation and trees, installation of support structures, access road development, and other land-disturbing activities, which could alter soil structure and generate dust, among other direct effects on the site and surrounding vicinity.

Site development requiring a use permit for solar facilities would be subject to land use and development code requirements and development standards that are intended to minimize adverse agricultural impacts. The County's existing Utility-Scale Solar Overlay requirements state that solar energy facilities shall

minimize adverse agricultural impacts by permanently preserving off-site agricultural land if the solar facility requires conversion of prime farmland and/or important farmland shown on the Department of Conservation FMMP maps to non-agricultural use, or if a proposed solar facility impairs agricultural productivity. Pursuant to existing LUDC Section 35.59.040.B, off-site agricultural land preservation must be at a 1:1 ratio for each acre converted or impaired. Agricultural buffers are required for land development activities adjacent to land with an agricultural zoning designation at the urban-rural boundary, consistent with the agricultural buffer implementation guidelines (LUDC Appendix G). Among the requirements as part of the Agricultural Buffers Ordinance is the guideline to terminate roads away from agricultural areas to reduce trespassing on agricultural lands. Additionally, existing LUDC requirements include standards for vegetation establishment and maintenance and require that an integrated pest and weed management plan, subject to County review, be submitted as a permit requirement. The Project incorporates these existing LUDC requirements into all three zoning ordinances. As described in LUDC amendments [Section 35.59.040 C(7)] Protection of agricultural land] Tier 3 and Tier 4 solar energy facilities shall minimize adverse agricultural impacts by permanently preserving off-site agricultural land (of equivalent value or better) if the project requires the conversion of prime agricultural land and/or important farmland. These requirements would help to reduce potential direct impacts on Important Farmland in the County.

Once operational, a Tier 3 or 4 site would be maintained and monitored for the intended uses related to renewable solar energy generation and storage. Maintenance activities typically associated with solar energy facilities include mowing, grazing, or other activities to control vegetation under solar arrays and gen-tie lines, herbicide application, photovoltaic panel cleaning with water or other cleaning methods, site monitoring, and occasional repairs or replacement of faulty components. Depending on the facility, operation and maintenance personnel may be present. Alternatively, sites may be unstaffed (or remotely monitored).

Some Tier 3 and 4 solar facilities may opt for shared use of agriculture and renewable energy generation uses. Agrivoltaics (or shared solar and agriculture land uses) may involve cultivation of row crops under solar panels, using sheep, goats, or other livestock for grazing and weed control, or engaging in other innovative shared land use practices, which could minimize the loss of productive farmland and provide for other beneficial effects. Shade provided by solar panels has been shown to enhance the health of livestock with improved thermal comfort during extreme weather and better quality of forage (Daily Galaxy 2025). Cultivation of crops under solar panels can reduce evapotranspiration and cool the land, resulting in more efficient use of water resources (UC Davis 2022). Agrivoltaics' facilities may opt to intentionally plant pollinator crops upon the land or as hedgerows, which can benefit neighboring farmlands. Depending on the specific practices of future solar energy facilities, there could be a range of effects, some of which could offset other potentially adverse impacts.

Following the operational life of a solar facility, decommissioning would be required. Under the Project, the applicant (or project owner) would perform site closure activities including rehabilitation and revegetation of the site according to an approved decommissioning plan. If the site is located within an agricultural zoning designation, the site must be restored to a condition suitable for the resumption of agricultural uses. These development standards proposed in the zoning code and Uniform Rules would help to restore the viability of agricultural lands; however, it is unknown whether topsoil will be retained and if the specific site decommissioning activities would be effective such that the lands would remain viable for future agricultural production at the time of decommissioning.

Further, because the scale and extent of future solar facilities are not known, it is uncertain whether offsite agricultural land preservation at a 1:1 ratio would be feasible in all circumstances, recognizing that prime and important farmland is a limited resource. Therefore, the Project may result in the loss of prime farmland, unique farmland, or important farmland, and impacts would be potentially significant.

Mitigation Measures

For the loss of prime farmland, compliance with development standards identified in LUDC Section 35.59.040, including compensation for the loss of prime farmland at a 1:1 ratio, will help to mitigate impacts.

To document pre-construction agricultural conditions and reduce the potential impacts associated with the loss of Prime Farmland, Unique Farmland, or Farmland of Statewide or Local Importance, the following mitigation measure is also recommended.

> **MM AG-1: Decommissioning Plan Agricultural Viability Analysis.** For Tier 3 and 4 facilities proposed to be located on Prime Farmland, Unique Farmland, or Farmland of Statewide or Local Importance, (as defined by the California Department of Conservation), the owner/applicant shall perform a pre-project agricultural viability analysis to document the baseline conditions for agriculture and clarify planned solar or agrivoltaics development on the parcels. The analysis shall consist of a Land Evaluation and Site Assessment (LESA) for the subject parcels proposed for solar facility use. The analysis shall be prepared using the standard U.S. Department of Agriculture LESA system methodology (USDA 2022 or successor) or a similar method recognized by the U.C. Cooperative Extension or other locally recognized agricultural standard, subject to County approval. The analysis shall be submitted to the County and shall include, but not be limited to, the following information:
>
> - A list of crop history for the past 10 years, including a statement whether irrigated or dry farming practices were in effect; estimated annual water use and source (as applicable, if known).
> - Specify whether the land was used for organic farming; under organic certification; or if integrated pest management practices were utilized at the subject parcels.
> - Site photos;
> - A description of the proposed use of the parcels (or a site plan);
> - A brief description of neighboring land uses and access considerations;
> - A brief description of any proposed (planned) shared agricultural and solar site development (agrivoltaics use); and
> - The decommissioning plan shall require the planned conservation of topsoil (as part of the planned solar development) to reestablish agricultural viability following the solar facility term of use.

Residual Impacts

As discussed, the zoning code amendments considered as part of the Project require minimizing adverse agricultural impacts by permanently preserving off-site agricultural land (of equivalent value or better) if the project requires the conversion of prime agricultural land and/or important farmland. Compliance with these development standards in the zoning code would help preserve farmland, restore the viability of

agricultural lands, and alleviate land use conflicts. Toward the objective of maintaining viable prime farmland, MM AG-1 augments this and provides a basis to document pre-construction agricultural site conditions as a baseline to effectively remediate or restore prime farmland (at the time of decommissioning) to pre-construction conditions or better. Although the zoning code amendments and mitigation measures would reduce most of the prime farmland impacts to insignificant levels with implementation of MM AG-1, this analysis recognizes that the effectiveness at reducing all impacts is unknown. Some impacts would be reduced through planned conservation of topsoil, for example. However, even if measures are taken to salvage soils, the Project could still result in a net loss of viable prime agricultural lands or a loss of productivity of those lands. Additionally, while the Program EIR assumes an operational life of a facility of 30 years, with decommissioning to follow, there is no guarantee that a facility will cease operations within any specific period of time, so impacts to agricultural lands from the installation of a solar facility are considered permanent for the purposes of this analysis. Although MM AG-1 would reduce most potentially significant impacts to agricultural resources, some impacts would remain significant and unavoidable.

Threshold b) The Project would result in a significant impact if the Project would conflict with existing zoning for agricultural use, or a Williamson Act contract.

Impact AG-2: Future solar facilities enabled under the Project would potentially conflict with existing zoning for agricultural use, or a Williamson Act contract.

There is a potential for Tier 1 and 2 energy systems to be installed and operated in agriculturally zoned land under the Project. Such systems are currently allowed as accessory uses and would continue to be allowed, therefore they would not conflict with existing agricultural zoning or a Williamson Act agricultural preserve agreement. Consequently, there would be no impact associated with zoning conflicts or Williamson Act contracts related to these energy systems.

With regard to Tier 3 and Tier 4 facilities, all Tier 3 and 4 development proposals would be required to undergo County permit review to determine compliance with relevant plans, and their consistency with policies, development standards, and practices. In addition, the development standards (as amended under the Project) would require Tier 3 and Tier 4 facilities to compensate for adverse agricultural impacts by permanently preserving off-site agricultural land (at a 1:1 ratio) if a future solar energy facility requires the conversion of Prime Farmland and/or Important Farmland shown on the DOC's Important Farmland Maps to non-agricultural use. The development standards (as amended by the Project) would require the applicant/owner to provide documentation demonstrating preservation of off-site agricultural land (of equal or better agricultural quality). Conceptually, such standards would ensure that any solar energy facility developments converting land to non-agricultural uses would preserve off-site agricultural land, assuming such land is available for preservation. However, it is unclear if there would be such farmland available for permanent preservation that is not already protected to some degree. As such, the practical effect of more permanent preservation may be limited in terms of compensating for the conversion of agriculture to a non-agricultural use.

As described under Impact AG-1, the development standards (as amended under the Project) would require the implementation of a decommissioning plan, subject to County review and consistent with

federal, state and local regulatory requirements. If the future site is within an agricultural zoning designation, then the site would be restored to a condition suitable to resume agricultural usage upon decommissioning. The development standards would minimize permitted land use conversions such as those considered under the Project and associated permanent loss of agricultural viability. Additionally, the requirements would include standards for vegetation establishment and maintenance, and require that an integrated pest and weed management plan (subject to County review) be submitted as a permit requirement. However, as noted above, there is no requirement that a solar energy facility cease operating after a certain period of time, so there is no guarantee that a site will be restored back to its prior use at any particular time. Thus, for the purposes of this analysis, any impacts to agriculture from the conversion of agricultural land to a non-agricultural use are considered permanent.

Setback standards and other development standards pertinent to the applicable zone district would continue to apply. For agricultural zones, these setback standards would help to provide buffers between the solar energy facility sites and other primarily agricultural uses as well as agricultural preserves.

In addition, the Project would amend the Uniform Rules to establish limits and compatibility standards for solar energy facilities in agricultural preserves. Solar energy facilities would not be a compatible use on superprime lands. The proposed amendments include adding a definition for "agrivoltaics," defining "compatible use" specifically as it pertains to an energy facility on land shared with agriculture, and adding a definition for "solar energy facility" and "solar-use easement." This component of the Project would:

- Amend Uniform Rule 2, Compatible Uses within Agricultural Preserves, to expand the compatibility guidelines under the Williamson Act. It also includes updating Section 2-9 to include solar energy facilities as a compatible use, including agrivoltaics and solar energy facilities separated from agricultural uses on contracted land.
- Amend Uniform Rule 6, Administration, to add Solar Use Easement allowances in lieu of a Williamson Act contract. This means a Williamson Act contract could be rescinded or cancelled to allow for utility-scale solar development under a Solar Use Easement.

Amending Uniform Rule 2-9 would establish compatibility guidelines for the development and operation of solar energy facilities in agricultural preserves, provided that the development is within the specified areas and meets the compatibility requirements, as described in Section 3.2.3, Local Regulations. The compatible uses established under Uniform Rule 2 would also be considered compatible uses in a Farmland Security Zone and are governed by those requirements and restrictions. Among the requirements in the proposed Uniform Rule amendments is that a land restoration or remediation plan be prepared to return the facility site to agriculture upon termination (or decommissioning) of the solar energy facility use. The plan must provide details on the solar energy facility improvements, timeline for removal of the improvements, and specific measures to be implemented to return the site to at least the same level of agricultural capability that existed prior to installation of the solar energy facility. These compatibility requirements would help to minimize the long-term loss of agricultural capability for these agricultural preserve lands associated with solar facility uses, should the use cease at some point in the future.

The proposed Uniform Rule amendments would promote both agrivoltaics facilities and solar energy facilities "separate from agricultural uses" on contracted land, subject to certain requirements. The footprint of a compatible solar energy facility would include all access roads, utility poles, fencing,

storage buildings, and other permanent improvements. As proposed, the footprint of a solar energy facility could be no more than 10 percent of the premises, or 10 acres (whichever is less) on prime farmland under Williamson Act contracts. Therefore, Tier 4 facilities would effectively not be allowed on prime contracted land, since Tier 4 facilities would be greater than 30 acres in size. On nonprime lands, a Tier 3 or Tier 4 facility could be up to 15 percent of the premises, or 100 acres, whichever is less. The size restrictions would limit impacts on prime lands within Williamson Act-contracted lands, help to ensure that the agricultural premises continue to meet the eligibility requirements under the Uniform Rules, and that productive agriculture remains as the primary use.

Regardless of farmland type or solar energy facility tier, the facility footprint, with the potential exception of access roads and utility connections, would be required to be one contiguous, consolidated area within the contracted land. This requirement would minimize fragmentation and disturbance to ongoing and surrounding agricultural operations.

The proposed amendments to Uniform Rule 6, in accordance with State regulations, would allow for solar-use easements to supplant Williamson Act contracts. The State has allowed solar-use easements to be entered into since 2011. The legislature authorized local governments to provide an option for solar energy projects on marginal and impaired farmland, pursuant to Gov. Code Section 51191. Local governments and landowners can opt to rescind their Williamson Act and Farmland Security Zone contracts when simultaneously entering into solar-use easement contracts. While the County does not have a history of landowners seeking solar-use easements under existing State code, it would continue to be an option under State regulations and the Project. The Project would simply clarify that solar-use easements are allowed, in accordance with State codes and guidelines. Consistent with State codes, the Project would allow solar use easements only on marginal or impaired land (and not on prime agricultural land). In lieu of solar-use easements, Williamson Act or Farmland Security Zone contracts would be rescinded. Other potential options include contract cancellation, non-renewal, or local government determination that certain solar projects are compatible with contract restrictions. Any local decision to rescind a Williamson Act or Farmland Security Zone contract in favor of a solar use easement requires the Department of Conservation approval in consultation with the Department of Food and Agriculture (DOC 2025b). If landowners or solar developers decided to cancel agricultural preserve contracts, the Project could result in the loss of agricultural preserves.

To ensure that the Project would support agriculture as a viable long-term land use and encourage maximum agricultural productivity, consistent with zoning code standards, mitigation would be required. MM AG-1 (stated under Impact AG-1) would provide analysis and documentation supporting the future viability of agricultural lands, following the solar term of use.

Mitigation Measures

Implementation of the existing zoning code requirements and proposed development standards would ensure that solar energy systems and facilities would be consistent with existing zoning for agricultural uses. The standard conditions of approval related to agricultural resources would offset impacts and help preserve the viability of agricultural lands. For potential losses of prime farmland, compliance with development standards, including compensation for the loss of prime farmland at a 1:1 ratio, would help to mitigate impacts. In addition, implementation of MM AG-1 (Decommissioning Plan Agricultural Viability Analysis) would allow for documentation of pre-construction agricultural conditions and would

reduce the potential impacts associated with the loss of Prime Farmland, Unique Farmland, or Farmland of Statewide or Local Importance. However, while this Program EIR assumes an operational life of a facility of 30 years, with decommissioning to follow, there is no guarantee that a facility will cease operations within any specific period of time, so impacts to agricultural lands from the installation of a solar facility are considered permanent for the purposes of this analysis. Compliance with the Uniform Rules, as determined by the APAC review, would help to avoid or mitigate potential impacts resulting from conflicts with a Williamson Act contract.

Residual Impacts

Compliance with the Uniform Rules and proposed development standards would offset most impacts and help preserve the viability of agricultural lands. The Uniform Rules amendments would support the planning for shared (agrivoltaics) uses on agricultural preserve lands and plan for land restoration or remediation if or when the solar energy facility is terminated. Implementation of MM AG-1 would document pre-construction agricultural conditions on designated Farmlands and provide a baseline for decommissioning. Together, the Uniform Rules and development standards (as amended by the Project) and MM AG-1 would reduce potentially significant impacts to agricultural preserves and zoning conflicts. However, the proposed amendments and MM AG-1 do not require decommissioning within a certain time frame. Additionally, landowners may elect to cancel or unenroll Williamson Act contracts to develop Tier 3 or 4 facilities without being subject to the Uniform Rules. Therefore, even with implementation of MM AG-1, impacts would remain significant and unavoidable.

Threshold c) The Project would result in a significant impact if the Project would involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.

Impact AG-3: Future solar facilities enabled under the Project could potentially involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use.

There could be a range of potential impacts associated with the development of future solar energy facilities, depending on the size, location, and scale of the facility. As discussed under Impact AG-1, direct and indirect physical effects on farmland are foreseeable related to construction, operation and maintenance of solar energy facilities on lands zoned for agricultural uses. Direct effects could include changes to soil structure such as compaction associated with grading or other site work, water demand and use (depending on maintenance requirements), alteration of site hydrology, mobilization of dust (emissions) or sediment (through runoff), use of herbicides that could generate airborne drift, among others. These potential impacts could adversely affect the environment or neighboring agricultural endeavors. Ground disturbance during construction or decommissioning also has the potential to result in indirect effects on agricultural lands such as an increase in non-native invasive weeds that could be transported to neighboring agricultural operations.

Urban influences and incompatible industrial uses adjacent to agricultural lands may make agricultural uses less viable over time. It is foreseeable that agriculturally-zoned land in the vicinity of the Project would have increased burdens from future community- and utility-scale solar energy facilities, as

industrial uses could alter the contiguity of agricultural areas, potentially add pressures to limited roadway access, and introduce potentially incompatible adjacent industrial uses to agricultural lands. The County reviews development applications and evaluates conformance to County zoning code regulations such as the Agricultural Buffer Ordinance standards. Buffers range from 100-400 feet in size (depending on the neighboring land uses) and are intended to minimize potential conflicts and nuisance conditions between agricultural and adjacent land uses along the designated rural/urban boundary. In order for the land use to be approved, within Rural areas as designated on the Comprehensive Plan maps, the proposed use must be compatible with and subordinate to the rural and scenic character of the area.

The development standards would also help to ensure that solar energy facilities would be designed, sited, constructed and operated in a manner that would be compatible with continued agricultural use on surrounding lands. For example, proposed standards would require vegetation establishment and maintenance. Prior to issuance of any grading or building permit, the applicant would be required to submit a site-specific Ground Cover Vegetation Establishment and Management Plan and an Integrated Pest and Weed Management Plan, in a form acceptable to the County. The plans would restrict use of herbicides to those approved by the county and prohibit their use in high wind conditions, which would minimize airborne drift. An applicant would be required to document measures used for pest control (if part of a solar facility). The proposed standards would also specify siting and design standards for solar energy facilities to avoid geologic hazards and specify erosion control and soil stabilization requirements. Adherence to these development standards would limit changes in the environment that could otherwise adversely affect agricultural lands in the vicinity. As discussed, the majority of acreage available and considered for solar development under the Project is zoned as agricultural (Figure 3.2-1). Where subject development is contiguous to land in an agricultural operation, the County's standard condition regarding buyer notification would be required.

Adherence to development standards and standard conditions would limit potentially adverse impacts of the Project to insignificant levels.

Mitigation Measures

None required.

Residual Impacts

Residual impacts would be insignificant.

3.2.5 Cumulative Impacts Analysis

The Project could individually and cumulatively result in the conversion of substantial areas of active, high-value agriculture on FMMP land zoned for viable agricultural uses. The Project would streamline renewable energy development that could involve cumulative effects resulting in the loss of or conversion of agricultural lands to non-agricultural uses, or otherwise reduce productivity for remaining agricultural lands due to land use conflicts. Community-scale and utility-scale solar facilities (considered under Tiers 3 and 4, respectively) would require a connection to the electricity grid. Depending on the location, development of solar facilities on agricultural lands would likely contribute to an enhanced need for transmission infrastructure necessary to deliver the energy generated by solar to the electrical grid. Although such transmission infrastructure is not under County jurisdiction (and outside the scope of this

programmatic review), the Project could indirectly spur the need for future energy grid enhancements on agricultural lands resulting in foreseeable future (cumulative) farmland conversion.

Although not a physical effect, economic pressures to capitalize on utility-scale solar energy generation as a profitable land use option could lead to a reduction in agricultural operations and agricultural preserves in the county. Thus, it is reasonable to foresee that the Project may indirectly result in fewer productive farms in the county. However, agriculture is one of the dominant economic sectors in the county and demand for agricultural resources will continue even under Project implementation. Demand for housing, related utilities, and growth of the energy transmission grid, when considered along with the Project would combine to result in cumulative effects on agricultural resources. When considered along with the recent housing element update, the Project could result in a foreseeable cumulative loss of agricultural land in the county. The Project would incrementally contribute to a cumulative loss of farmland. For these reasons, cumulative effects would be potentially significant and unavoidable.

3.3 Air Quality

3.3.1 Introduction

This section analyzes the impacts of the Project on local and regional air quality. Impacts relating to construction, operation, and decommissioning are evaluated. This section describes the physical environmental and regulatory setting, the criteria and thresholds used to evaluate the significance of impacts, the methods used in evaluating these impacts, and the results of the impact assessment. Greenhouse gas emissions are analyzed in Section 3.7, G*reenhouse Gas Emissions.*

3.3.2 Environmental Setting

Existing Conditions

Climate and Meteorology

The Project is in the unincorporated areas of Santa Barbara County, which is located within the South Central Coast Air Basin (SCCAB). The SCCAB includes all of San Luis Obispo, Santa Barbara, and Ventura counties. The Santa Barbara County (County) portion of the SCCAB is under the jurisdiction of the Santa Barbara County Air Pollution Control District (SBCAPCD). The climate of the SCCAB is strongly influenced by its proximity to the Pacific Ocean and the location of the high-pressure cell in the northeastern Pacific. With a Mediterranean-type climate, Santa Barbara County is characterized by warm, dry summers and cool winters with occasional rainy periods.

Cool, humid marine air causes frequent fog and low clouds along the coast, generally during the night and morning hours in the late spring and early summer months. The County is subject to a diurnal cycle in which daily onshore winds from the west and northwest are replaced by mild offshore breezes flowing from warm inland valleys during night and early morning hours. This alternating cycle can create a situation where suspended pollutants are swept offshore at night, and then carried back onshore the following day. Dispersion of pollutants is further degraded when the wind velocity for both day and nighttime breezes is low. The region is also subject to seasonal “Santa Ana” winds. These are typically hot, dry northerly winds which blow offshore at 15 to 20 miles per hour (mph), but can reach speeds in excess of 60 mph.

Two types of temperature inversions (warmer air on top of cooler air) are created in the area: subsidence and radiational. The subsidence inversion is a regional effect created by the Pacific high in which air is heated as it is compressed when it flows from the high-pressure area to the low-pressure areas inland. This type of inversion generally forms at about 1,000 to 2,000 feet and can occur throughout the year, but it is most evident during the summer months. Radiational, or surface, inversions are formed by the more rapid cooling of air near the ground during the night, especially during winter. This type of inversion is typically lower (0 to 500 feet at Vandenberg Space Force Base, for example) and is generally accompanied by stable air. Both types of inversions limit the dispersal of air pollutants within the regional airshed, the more stable the air (low wind speeds, uniform temperatures), the lower the amount of pollutant dispersion. **Table 3.3-1**, *Santa Barbara County Climate Conditions*, shows the average climate within the Santa Barbara County Association of Governments (SBCAG) region.

TABLE 3.3-1
SANTA BARBARA COUNTY CLIMATE CONDITIONS

Temperature Condition	Amount
Average annual rainfall	18 inches
Average annual maximum temperature	71°F
Average annual minimum temperature	50°F
Warmest month	August
Coolest month	January
Average annual mean temperature	61°F
Average wind speed	7 miles per hour
Predominant wind direction	North

NOTES:

°F = degrees Fahrenheit

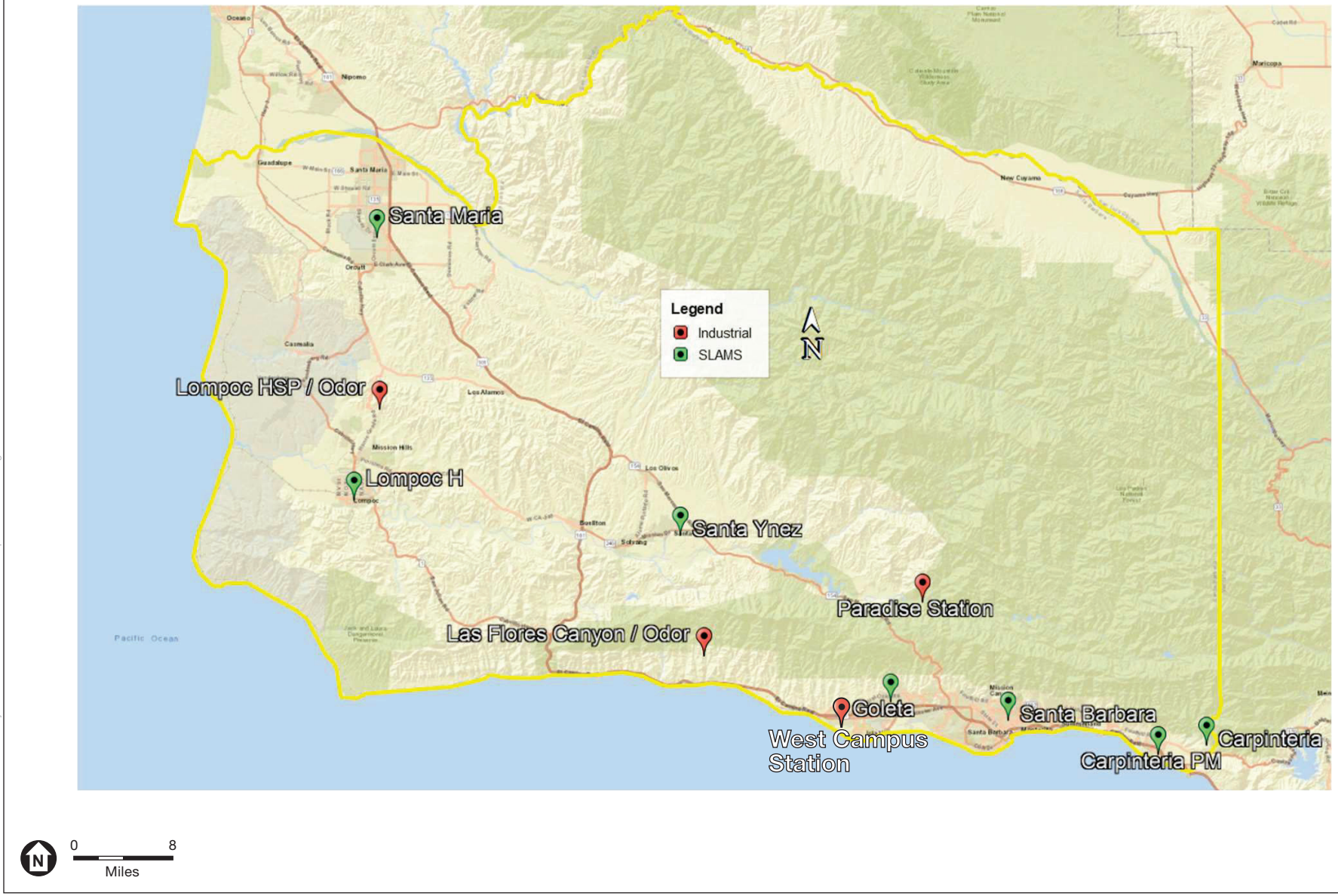
Averages are based on the period of record from January 1893 to June 2016 with the exception of average annual mean temperature. Wind Speed and direction data averages are based on the period on record from January 1980 to December 2016.

SOURCES: Santa Barbara County Association of Governments (SBCAG), Connected 2050: Regional Transportation Plan & Sustainable Communities Strategy (RTP/SCS)

Current Air Quality

Monitoring of ambient air pollutant concentrations is conducted by the California Air Resources Board (CARB) and SBCAPCD. Monitors operated by CARB and SBCAPCD are part of the State and Local Air Monitoring System (SLAMS). The SLAMS stations are located to provide local and regional air quality information. Monitors operated by industry, at the direction of the SBCAPCD, are called Prevention of Significant Deterioration (PSD) stations. PSD stations are required by the SBCAPCD to ensure that new and modified sources under SBCAPCD permit do not interfere with the County's ability to attain or maintain air quality standards. **Figure 3.3-1**, *Santa Barbara County Air Quality Monitoring Stations (2022)*, shows the locations of all monitoring stations in Santa Barbara County that were in operation in 2022.

The SBCAPCD is required to monitor air pollutant levels to assure that the air quality standards are met and, if they are not, to develop strategies to meet these standards. Depending on whether the standards are met or exceeded, the local air basin is classified as being in "attainment" or "nonattainment." Countywide historical data on the number of State 8-hour and State 1-hour ozone exceedances between 2001 and 2022 is provided in **Figure 3.3-2**, *Historical Santa Barbara County Ozone Exceedances (2001-2022)*, which shows fewer exceedances occurring over time. Figure 3.3-2 also depicts the estimated Countywide population. While the Countywide population exhibits an increasing trend of approximately 11 percent since 2001, ozone exceedances have been decreasing, indicating that Countywide population growth does not necessarily result in an increase in ozone exceedances. Countywide historical data on the number of State and Federal Particulate Matter (PM) exceedances between 2006 and 2022 is provided in **Figure 3.3-3**, *Historical Santa Barbara County Particulate Matter (PM) Exceedances (2022)*, which shows that PM levels vary year-to-year, and the number of days that the County exceeds the air quality standards is influenced by natural events such as wildfires and droughts.



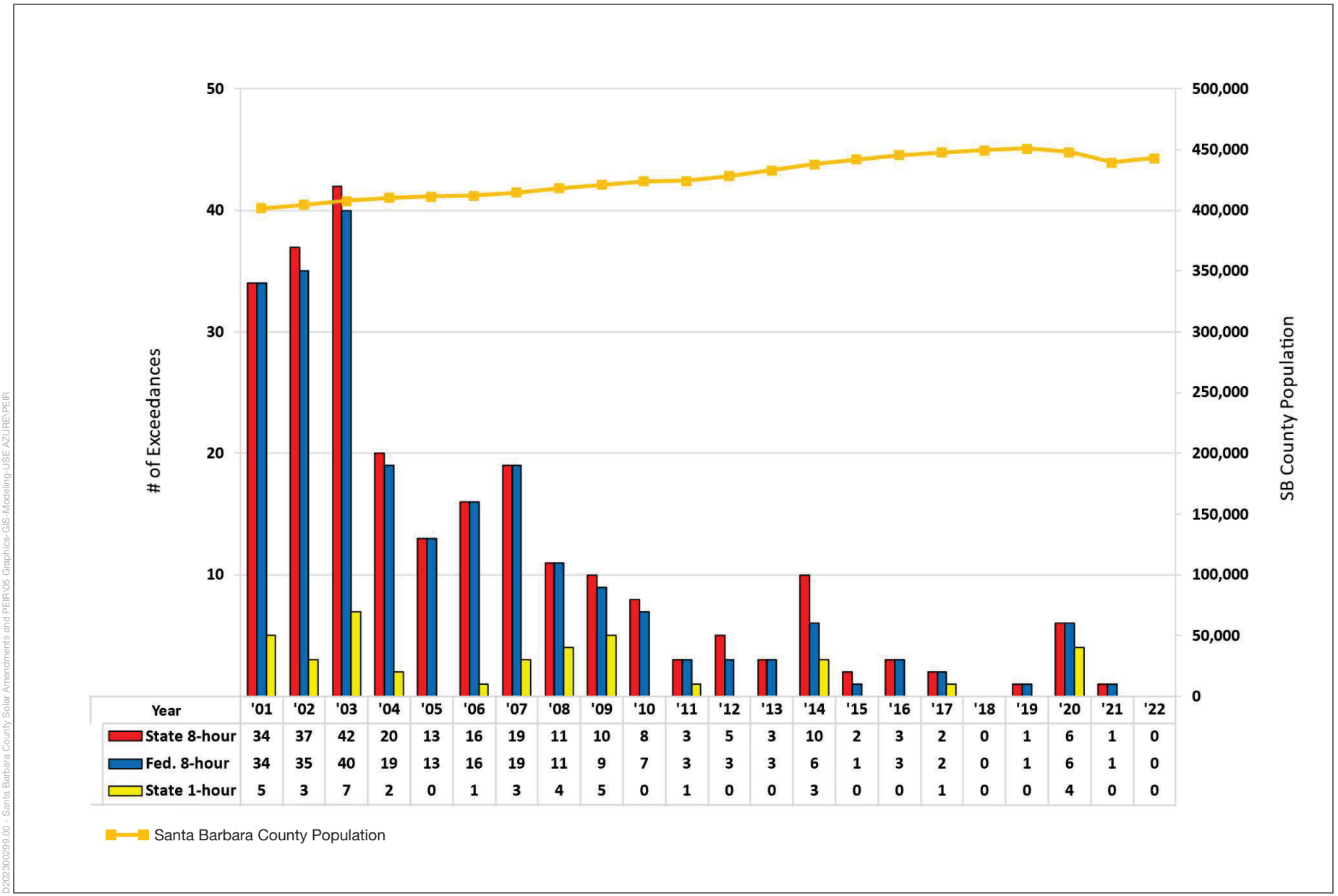
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SOURCE: Santa Barbara County Air Pollution Control District, 2022

Santa Barbara County Utility Scale Solar Amendments Draft PEIR

Figure 3.3-1
Santa Barbara County Air Quality Monitoring Stations (2022)

ESA



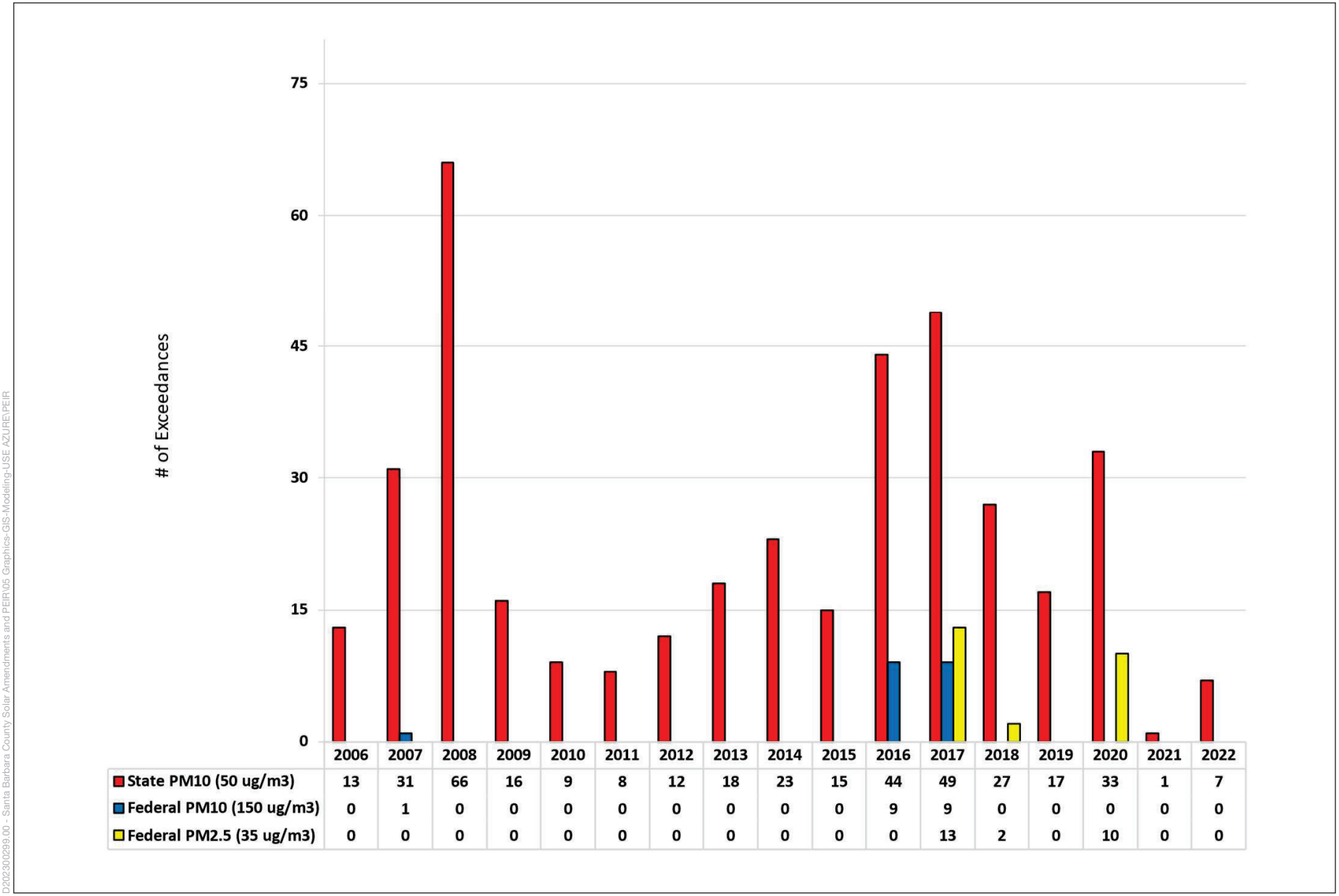
Year	'01	'02	'03	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16	'17	'18	'19	'20	'21	'22
State 8-hour	34	37	42	20	13	16	19	11	10	8	3	5	3	10	2	3	2	0	1	6	1	0
Fed. 8-hour	34	35	40	19	13	16	19	11	9	7	3	3	3	6	1	3	2	0	1	6	1	0
State 1-hour	5	3	7	2	0	1	3	4	5	0	1	0	0	3	0	0	1	0	0	4	0	0

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SOURCE: Santa Barbara County Air Pollution Control District, 2022

Santa Barbara County Utility Scale Solar Amendments Draft PEIR

Figure 3.3-2
Historical Santa Barbara County Ozone Exceedances (2001-2021)



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
State PM10 (50 ug/m3)	13	31	66	16	9	8	12	18	23	15	44	49	27	17	33	1	7
Federal PM10 (150 ug/m3)	0	1	0	0	0	0	0	0	0	0	9	9	0	0	0	0	0
Federal PM2.5 (35 ug/m3)	0	0	0	0	0	0	0	0	0	0	0	13	2	0	10	0	0

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SOURCE: Santa Barbara County Air Pollution Control District, 2022

Santa Barbara County Utility Scale Solar Amendments Draft PEIR

Figure 3.3-3
Historical Santa Barbara County Particular Matter (PM) Exceedances (2006-2021)

Santa Barbara County's air quality improved dramatically over the years, as evidenced by the declining number of state 1-hour and 8-hour ozone exceedances. An exceedance is a measured concentration at a monitoring station that surpasses the standard. As displayed in Figure 3.3-2, 1-hour ozone exceedances have decreased from a high of 7 days in 2003 to zero days in 2022. The number of 8-hour ozone exceedance days ranged from a high of 42 days in 2003 to zero days in 2022.

Air Quality Attainment Plan

The Federal Clean Air Act (FCAA) Amendments of 1990 set a schedule for the attainment of the National Ambient Air Quality Standards (NAAQS). States are required to prepare a State Implementation Plan (SIP) to develop strategies to bring about attainment of the standards. In addition, the California Clean Air Act (CCAA) of 1988 requires areas that exceed the California Ambient Air Quality Standards (CAAQS) to plan for the eventual attainment of the State standards. Under both the 1990 Amendments to the FCAA and the 1988 CCAA, the level of Santa Barbara County's ozone originally resulted in the county being classified as a "moderate" non-attainment area. As discussed below, the County has had air quality attainment plans to reduce ozone since 1991. The County recently enacted a plan for exceptional events for PM10. In summary, the County is currently classified as nonattainment-transitional[1] for the 1-hour and 8-hour ozone CAAQS and nonattainment for the PM10 CAAQS (SBCAPCD 2024a). The County is in attainment for the other CAAQS and all NAAQS (SBCAPCD 2024a).

2022 Ozone Plan

The 2022 Ozone Plan (2022 Plan) is the tenth triennial update to the initial state Air Quality Attainment Plan adopted by the Santa Barbara County Air Pollution Control District Board of Directors in 1991 (other updates were done in 1994, 1998, 2001, 2004, 2007, 2010, 2013, 2019, and 2019). Each of the plan updates has implemented an "every feasible measure" strategy to ensure continued progress toward attainment of the state ozone standards. Since 1991, SBCAPCD has adopted or amended more than 30 control measures aimed at reducing emissions from stationary sources of air pollution (SBCAPCD 2022a). These measures have substantially reduced ozone precursor pollutants, which include nitrogen oxides (NOx) and reactive organic compounds (ROCs). In the past, the SBCAPCD has prepared air quality attainment plans that have addressed both the state and federal ozone standards. The 2022 Plan only addresses the state ozone standards because Santa Barbara County is designated attainment for the 8-hour ozone NAAQS of 0.070 parts per million (ppm), which was promulgated by the U.S. Environmental Protection Agency (USEPA) in December 2015. The federal attainment designation for Santa Barbara County was finalized in April 2018.

After decades of improved air quality conditions resulting from state and local air quality regulatory and compliance efforts, Santa Barbara County was designated as attainment for the state ozone standards in 2019. However, unpredictable weather patterns and air pollutant emission dispersion can lead to different pollutant concentration outcomes from one year to the next. The 2019 attainment designation was applicable for only a single year, and due to the ozone exceedances occurring in 2019, 2020, and 2021, the County is currently designated as nonattainment-transitional for ozone CAAQS (SBCAPCD 2024a).

[1] The nonattainment transitional category is a subcategory of nonattainment. For ozone, the nonattainment-transitional requirements are specified in Health and Safety Code section 40925.5, which states that a nonattainment district (or entire portion of a district within an air basin) is designated as nonattainment-transitional for ozone if air quality data show three or fewer exceedances of the State standard at each site in the area during the most recent calendar year.

Exceptional Events Mitigation Plan

The Exceptional Events Mitigation Plan (SBCAPCD 2024b) was developed for mitigation of PM impacts from exceptional events such as wildfires, high wind dust events, prescribed fires, stratospheric ozone intrusions, and firework demonstrations. Exceptional events are unusual or naturally occurring events that can affect air quality but are not reasonably controllable using techniques that state or local air agencies may implement in order to attain and maintain the NAAQS. Since these events cannot be reasonably controlled, the USEPA has adopted requirements and procedures to exclude air quality monitoring data affected by an exceptional event from regulatory determinations. However, to further verify that the public is being protected from exceptional events, the 2016 revisions to the federal Exceptional Events Rule require states to develop mitigation plans for areas with historically documented or known recurring exceptional events. In April 2022, the USEPA identified additional areas subject to the mitigation plan requirements. Specifically, a mitigation plan requirement is triggered if an initial notification is submitted for three or more exceptional events of the same type and pollutant within a three-year period. Based on this revision, Santa Barbara County was included as a designated area due to PM10 (particulate matter that is 10 microns or less in diameter) exceedances from wildfires.

This Exceptional Events Mitigation Plan was prepared to demonstrate SBCAPCD's practices to minimize public exposure to the impacts of PM10 during wildfires and other exceptional events. This Plan outlines the procedures the SBCAPCD will take to protect public health in cases where exceptional events increase PM10 concentrations in the region to a level where they exceed or are expected to exceed the 24-hour PM10 ambient air quality standard. The Plan includes public notification and education programs, steps to identify, study, and implement mitigation measures, and provisions for periodic review and evaluation (SBCAPCD 2024b).

Source of Air Pollution

Air pollutant emissions in the SCCAB are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories:

- Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat.
- Area sources are widely distributed and include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products.

Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and can also be divided into two major subcategories:

- On-road sources may be legally operated on roadways and highways.
- Off-road sources include aircraft, ships, trains, and construction equipment.

Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles or wildfires.

Air Pollutants of Primary Concern

The FCAA and CCAA mandate the control and reduction of certain air pollutants. Under these laws, the USEPA and CARB have established the NAAQS and the CAAQS for "criteria pollutants" and other

pollutants. Some pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere, including carbon monoxide (CO), volatile organic compounds (VOC)/reactive organic gases (ROC),[2] nitrogen oxides (NO_X), particulate matter with diameters of up to ten microns (PM10) and up to 2.5 microns (PM2.5), sulfur dioxide, and lead. Other pollutants are created indirectly through chemical reactions in the atmosphere, such as ozone, which is created by atmospheric chemical and photochemical reactions primarily between ROC and NO_X. Secondary pollutants include oxidants, ozone, and sulfate and nitrate particulates (smog). The characteristics, sources, and effects of criteria pollutants are discussed in the following subsections. The following subsections describe the characteristics, sources, and health and atmospheric effects of air pollutants of primary concern.

Ozone

Ozone is produced by a photochemical reaction (triggered by sunlight) between NO_X and ROC. ROC are composed of non-methane hydrocarbons (with some specific exclusions), and NO_X is composed of different chemical combinations of nitrogen and oxygen, mainly nitric oxide and nitrogen dioxide. NO_X are formed during the combustion of fuels, while ROC are formed during combustion and evaporation of organic solvents. As a highly reactive molecule, ozone readily combines with many different components of the atmosphere. Consequently, high levels of ozone tend to exist only while high ROC and NO_X levels are present to sustain the ozone formation process. Once the precursors have been depleted, ozone levels rapidly decline. Because these reactions occur on a regional rather than local scale, ozone is considered a regional pollutant. In addition, because ozone requires sunlight to form, it mostly occurs in concentrations considered serious between the months of April and October. Ozone is a pungent, colorless, toxic gas with direct health effects on humans, including changes in breathing patterns, reduction of breathing capacity, increased susceptibility to infections, inflammation of lung tissue, and some immunological changes (USEPA 2024a). Groups most sensitive to ozone include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors.

Carbon Monoxide

Carbon monoxide is a localized pollutant that is found in high concentrations only near its source. The major source of CO, a colorless, odorless, poisonous gas, is the incomplete combustion of petroleum fuels by automobile traffic. Therefore, elevated concentrations are usually only found near areas of high traffic volumes. Other sources of CO include the incomplete combustion of petroleum fuels at power plants and fuel combustion from wood stoves and fireplaces during the winter. The health effects of CO are related to its affinity for hemoglobin in the blood. Carbon monoxide causes a number of health problems, including aggravation of some heart diseases (e.g., angina), reduced ability to exercise, impaired mental function, and impaired fetal development (USEPA 2023a). At high levels of exposure, CO tends to dissipate rapidly into the atmosphere; consequently, violations of the NAAQS and/or CAAQS for CO are generally associated with localized CO "hotspots" that can occur at major roadway intersections during heavy peak-hour traffic conditions.

[2] CARB defines VOC and ROC similarly as, "any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate," with the exception that VOC are compounds that participate in atmospheric photochemical reactions. For the purposes of this analysis, ROC and VOC are considered comparable in terms of mass emissions, and the term ROC is used in this EIR.

Nitrogen Dioxide

Nitrogen dioxide is a by-product of fuel combustion; the primary sources are motor vehicles and industrial boilers and furnaces. The principal form of NO_X produced by combustion is nitric oxide, but nitric oxide reacts rapidly to form nitrogen dioxide, creating the mixture of nitric oxide and nitrogen dioxide commonly called NO_X. Nitrogen dioxide is an acute irritant that can aggravate respiratory illnesses and symptoms, particularly in sensitive groups (USEPA 2023b). A relationship between nitrogen dioxide and chronic pulmonary fibrosis may exist, and an increase in bronchitis in young children at concentrations below 0.3 parts per million (ppm) may occur. Nitrogen dioxide absorbs blue light, gives a reddish-brown cast to the atmosphere, and reduces visibility (CARB 2024a). It can also contribute to the formation of PM10 and acid rain.

Sulfur Dioxide

Sulfur dioxide is included in a group of highly reactive gases known as "oxides of sulfur." The largest sources of sulfur dioxide emissions are from fossil fuel combustion at power plants and other industrial facilities. Smaller sources of sulfur dioxide emissions include industrial processes such as extracting metal from ore and the burning of fuels with a high sulfur content by locomotives, large ships, and off-road equipment. Sulfur dioxide is linked to a number of adverse effects on the respiratory system, including aggravation of respiratory diseases, such as asthma and emphysema, and reduced lung function (USEPA 2025).

Particulate Matter

Suspended atmospheric PM10 and PM2.5 are comprised of finely divided solids and liquids such as dust, soot, aerosols, fumes, and mist. Both PM10 and PM2.5 are directly emitted into the atmosphere as by-products of fuel combustion and wind erosion of soil and unpaved roads. Particulate matter is also created in the atmosphere through chemical reactions. The characteristics, sources, and potential health effects associated with PM10 and PM2.5 can be very different. PM10 is generally associated with dust mobilized by wind and vehicles, while PM2.5 is generally associated with combustion processes as well as formation in the atmosphere as a secondary pollutant through chemical reactions. PM2.5 is more likely to penetrate deeply into the lungs and poses a health threat to all groups, but particularly to the elderly, children, and those with respiratory and heart problems (CARB 2024b). More than half of PM2.5 that is inhaled into the lungs remains there. These materials can damage health by interfering with the body's mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance. Suspended particulates can also reduce lung function, aggravate respiratory and cardiovascular diseases, increase mortality rates, and reduce lung function growth in children (CARB 2024b).

Lead

Lead is a metal found naturally in the environment, as well as in manufacturing products. The major sources of lead emissions historically have been vehicles, industrial sources, and lead-based paint in homes. USEPA's regulatory efforts to remove lead from gasoline has helped to reduce the amount of lead in air, drinking water, soil, consumer products, and food. The most dramatic reductions in lead emissions occurred prior to 1990 due to the removal of lead from gasoline sold for most highway vehicles. Lead emissions were further reduced substantially between 1990 and 2008, with reductions occurring in the metals industries at least in part as a result of national emissions standards for hazardous air pollutants (USEPA 2014). As a result of phasing out leaded gasoline, metal processing currently is the primary

source of lead emissions. The highest level of lead in the air is generally found near lead smelters. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers. The health impacts of lead include behavioral problems, hearing disabilities, slowed growth, lower IQ, anemia, and nervous system impairment in children (USEPA 2024b).

Toxic Air Contaminants

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or serious illness, or that may pose a present or potential hazard to human health. TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. One of the main sources of TACs in California is diesel engine exhaust that contains solid material known as diesel particulate matter (DPM). More than 90 percent of DPM is less than one micron in diameter (about 1/70th the diameter of a human hair) and thus is a subset of PM2.5. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lungs (CARB 2024c).

TACs are different than criteria pollutants because ambient air quality standards have not been established for TACs. TACs occurring at extremely low levels may still cause health effects and it is typically difficult to identify levels of exposure that do not produce adverse health effects. TAC impacts are described by carcinogenic risk and by chronic (i.e., long duration) and acute (i.e., severe but of short duration) adverse effects on human health. CARB's Air Quality and Land Use Handbook*: A Community Health Perspective* recommends that local agencies avoid siting new, sensitive land uses within specific distances of potential sources of TACs, such as freeways and high-traffic roads, distribution centers, railroads, and ports (CARB 2005).

3.3.3 Regulatory Framework

Federal and State Regulations

The FCAA governs air quality in the United States and is administered by the USEPA at the federal level. Air quality in California is also governed by regulations under the CCAA, which is administered by CARB at the state level. At the regional and local levels, local air districts such as the SBCAPCD typically administer the federal and California CAA. As part of implementing the federal and California CAA, the USEPA and CARB have established ambient air quality standards (AAQS) for major pollutants at thresholds intended to protect public health. **Table 3.3-2**, *Current Federal and State Ambient Air Quality Standards*, summarizes the CAAQS and the NAAQS. The CAAQS are more restrictive than the NAAQS for several pollutants, including the one-hour standard for carbon monoxide, the 24-hour standard for sulfur dioxide, and the 24-hour standard for PM10.

California is divided geographically into 15 air basins for managing the air resources of the state on a regional basis. Areas within each air basin are considered to share the same air masses and, therefore, are expected to have similar ambient air quality. Depending on whether the standards are met or exceeded, the local air basin is classified as in "attainment" or "nonattainment." Once a nonattainment area has achieved the air quality standards for a particular pollutant, it may be redesignated to an attainment area for that pollutant. To be redesignated, the area must meet air quality standards and have a 10-year plan for

continuing to meet and maintain air quality standards, as well as satisfy other requirements of the FCAA. Areas that have been redesignated to attainment are called maintenance areas. Some areas are unclassified, which means insufficient monitoring data are available; unclassified areas are considered to be in attainment. The Santa Barbara County portion of the SCCAB is classified as a nonattainment-transitional area for the State 1-hour and 8-hour ozone standards and a nonattainment area for the State PM10 standards. The other counties in the SCCAB are San Luis Obispo and Ventura. San Luis Obispo County is also classified as nonattainment for the 1-hour and 8-hour ozone CAAQS for Eastern San Luis Obispo County and the PM10 CAAQS (SLOCAPCD, 2025). Ventura County is also classified as nonattainment for the CAAQS for 1-hour and 8-hour ozone and PM10. Additionally, Ventura County is nonattainment for the NAAQS for 8-hour ozone (VCAPCD 2024). The SCCAB is classified as in attainment (or unclassifiable/attainment) for all other CAAQS and NAAQS.

TABLE 3.3-2
CURRENT FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	Federal Primary Standards	California Standards
Ozone	1-Hour 8-Hour	- 0.070 ppm	0.09 ppm 0.070 ppm
Carbon Monoxide	8-Hour 1-Hour	9.0 ppm 35.0 ppm	9.0 ppm 20.0 ppm
Nitrogen Dioxide	Annual 1-Hour	0.053 ppm 0.100 ppm	0.30 ppm 0.18 ppm
Sulfur Dioxide	Annual 24-Hour 1-Hour	0.30 ppm 0.14 ppm 0.075 ppm	- 0.04 ppm 0.25 ppm
PM_{10}	Annual 24-Hour	- 150 ug/m^3	20 ug/m^3 50 ug/m^3
$PM_{2.5}$	Annual 24-Hour	9 ug/m^3 35 ug/m^3	12 ug/m^3 -
Lead	30-Day Average 3-Month Average	- 0.15 ug/m^3	1.5 ug/m^3 -
Visibility Reducing Particles	8-Hour	-	-
Sulfates	24-Hour	-	25 ug/m^3
Hydrogen Sulfide	1-Hour	-	0.03 ppm
Vinyl Chloride	24-Hour	-	0.01 ppm

NOTES: ppm= parts per million, ug/m^3= micrograms per cubic meter

SOURCE: CARB, 2024. California Ambient Air Quality Standards. https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards. Accessed April 2025.

California Air Resources Board On-Road and Off-Road Vehicle Rules

In 2004, CARB adopted an Airborne Toxic Control Measure (ATCM) to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to DPM and other TACs (Title 13 California Code of Regulations [CCR], Section 2485). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure does not allow diesel-fueled commercial vehicles to idle for more than 5 minutes at any given time. These actions are also supplemented by the AB 2588 Air Toxics "Hot

Spots" program and SB 1731, which require facilities to report their air toxics emissions, assess health risks, notify nearby residents and workers of significant risks if present, and reduce their risk through implementation of a risk management plan.

In 2008, CARB also approved the Truck and Bus regulation to reduce PM and NOX emissions from existing diesel vehicles operating in California (13 CCR, Section 2025). The requirements were amended to apply to nearly all diesel-fueled trucks and buses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds. For the largest trucks and buses in the fleet, those with a GVWR greater than 26,000 pounds, all must be equipped with diesel particulate filters (DPFs) from 2014 and onward, and must have 2010 model year engines by January 1, 2023. For trucks and buses with a GVWR of 14,001 to 26,000 pounds, those with engine model years 14 to 20 years or older must be replaced with 2010 model year engines in accordance with the schedule specified in the regulation.

In 2020, CARB approved the Advanced Clean Trucks (ACT) regulation (13 CCR, Sections 1963–1963.5 and 2012–2012.3) to accelerate a large-scale transition to zero- and near-zero-emissions medium- and heavy-duty vehicles. The regulation requires manufacturers of medium- and heavy-duty vehicles to sell an increasing percentage of zero-emissions models from 2024 to 2035, with up to 55 percent of Classes 2b–3 trucks, 75 percent of Classes 4–8 trucks, and 40 percent of truck tractor sales. The regulation also includes reporting requirements to provide information that would be used to identify future strategies. The ACT is part of the statewide goal to considerably reduce NO_X and PM emissions in accordance with the NAAQS, reduce GHG emissions by 40 percent, and reduce petroleum use by 50 percent by 2030. By transitioning to zero-emissions trucks, the state would move away from petroleum dependency and emit fewer air pollutants from heavy-duty mobile sources.

CARB's Heavy-Duty Engine and Vehicle Omnibus Regulation (Omnibus Regulation) was adopted on September 9, 2021, and became effective on December 22, 2021, to drastically cut smog-forming NO_X from conventional heavy-duty engines. The Omnibus Regulation will significantly increase the stringency of NO_X emissions standards and will also lengthen the useful life and emissions warranty of heavy-duty diesel engines for use in vehicles with a GVWR greater than 10,000 pounds. The more stringent NO_X emission standards begin with the 2024 model year engines and become more stringent with 2027 and subsequent model year engines (CARB 2024d).

In addition to limiting exhaust from idling trucks, CARB also promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower (hp) such as bulldozers, loaders, backhoes and forklifts, as well as many other self-propelled off-road diesel vehicles. The regulation adopted by CARB on July 26, 2007, aims to reduce emissions by the installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models (13 CCR, Section 2449). Implementation is staggered based on fleet size (which is the total of all off-road horsepower under common ownership or control), with large fleets beginning compliance in 2014, medium fleets in 2017, and small fleets in 2019. Each fleet must demonstrate compliance through one of two methods. The first option is to calculate and maintain fleet average emissions targets, which encourages the retirement or repowering of older equipment and rewards the introduction of newer, cleaner units into the fleet. The second option is to meet the Best Available Control Technology (BACT) requirements by turning over or installing Verified Diesel Emission Control Strategies (VDECS) on a certain percentage of its total fleet horsepower. The compliance schedule

requires that BACT turnovers or retrofits (VDECS installation) be fully implemented by 2023 in all equipment for large and medium fleets and by 2028 for small fleets.

California Air Resources Board Air Quality and Land Use Handbook

CARB published the Air Quality and Land Use Handbook in 2005 to serve as a general guide for considering impacts to sensitive receptors from facilities that emit TAC emissions. The recommendations provided therein are voluntary and do not constitute a requirement or mandate for either land use agencies or local air districts. The goal of the guidance document is to protect sensitive receptors, such as children, the elderly, acutely ill, and chronically ill persons, from exposure to TAC emissions. Some examples of CARB's siting recommendations include the following: (1) avoid siting sensitive receptors within 500 feet of a freeway, urban road with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day; (2) avoid siting sensitive receptors within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units per day, or where transport refrigeration unit operations exceed 300 hours per week); (3) avoid siting sensitive receptors within 300 feet of any dry cleaning operation using perchloroethylene and within 500 feet of operations with two or more machines, and (4) avoid siting sensitive receptors within 300 feet of a large gasoline dispensing facility (3.6 million gallons per year or more) or 50 feet of a typical gasoline dispensing facility (less than 3.6 million gallons per year) (CARB 2005).

In April 2017, CARB published a Technical Advisory supplement to the Air Quality and Land Use Handbook, recognizing that infill developments as promoted by the State can place sensitive individuals in close proximity to high-volume roadways. The Technical Advisory provides planners and other stakeholders involved in land use planning and decision-making with information on scientifically based strategies to reduce exposure to traffic emissions near high-volume roadways. The strategies include those that reduce traffic emissions, such as vehicle speed reduction mechanisms, including roundabouts, traffic signal management, and speed limit reductions on high-speed roadways. Strategies also include those that increase the dispersion of traffic emissions, such as implementing designs that promote air flow and pollutant dispersion along street corridors (e.g., wider sidewalks, bicycle lanes, streets characterized by buildings of varying heights), solid barriers such as sound walls, and vegetation for pollutant dispersion. Other strategies include those that remove pollution from the air, such as indoor high-efficiency filtration. This Technical Advisory is not intended as guidance for any specific project, nor does it create any presumption regarding the feasibility of mitigation measures for purposes of compliance with CEQA (CARB 2005).

Regional

Santa Barbara County Air Pollution Control District

The SBCAPCD has jurisdiction over air quality planning for all of Santa Barbara County within the SCCAB to meet the state and federal air standards. To meet these standards, the SBCAPCD has implemented air quality plans, discussed previously in Air Quality Attainment Plans. Additionally, the SBCAPCD has adopted rules to implement portions of the Air Quality Attainment Plans which may apply to the Project. The SBCAPCD also monitors air quality conditions in the County as discussed previously in Current Air Quality.

Environmental Guidance Document

The SBCAPCD acts as lead agency, responsible agency, or a concerned agency with jurisdiction by law over the air resources of the County under the California Environmental Quality Act (CEQA). In this capacity, the SBCAPCD reviews environmental documents for the air quality impacts of land use projects. This SBCAPCD has developed a guidance document titled *Scope and Content of Air Quality Sections in Environmental Documents* (2022b) which provides guidance for assessing and mitigating air quality and greenhouse gas impacts of development projects. This document discusses the required elements of the different CEQA documents and provides significance thresholds, see Section 3.3.3, below. Additionally, it discusses measures to reduce PM10 emissions that are required of all construction projects involving earthmoving activities. These measures are:

- During construction, use water trucks, sprinkler systems, or dust suppressants in all areas of vehicle movement to prevent dust from leaving the site and from exceeding the SBCAPCD's limit of 20% opacity for greater than 3 minutes in any 60-minute period. When using water, this includes wetting down areas as needed but at least once in the late morning and after work is completed for the day. Increased watering frequency should be required when sustained wind speed exceeds 15 mph. Reclaimed water should be used whenever possible. However, reclaimed water should not be used in or around crops for human consumption.
- On-site vehicle speeds shall be no greater than 15 miles per hour when traveling on unpaved surfaces.
- Install and operate a track-out prevention device where vehicles enter and exit unpaved roads onto paved streets. The track-out prevention device can include any device or combination of devices that are effective at preventing track out of dirt such as gravel pads, pipe-grid track-out control devices, rumble strips, or wheel-washing systems.
- If importation, exportation, and stockpiling of fill material are involved, soil stockpiled for more than one day shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.
- Minimize the amount of disturbed area. After clearing, grading, earthmoving, or excavation is completed, treat the disturbed area by watering, or using roll-compaction, or revegetating, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur. All roadways, driveways, sidewalks etc. to be paved should be completed as soon as possible.
- Schedule clearing, grading, earthmoving, and excavation activities during periods of low wind speed to the extent feasible. During periods of high winds (>25 mph) clearing, grading, earthmoving, and excavation operations shall be minimized to prevent fugitive dust created by onsite operations from becoming a nuisance or hazard.
- The contractor or builder shall designate a person or persons to monitor and document the dust control program requirements to ensure any fugitive dust emissions do not result in a nuisance and to enhance the implementation of the mitigation measures as necessary to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Air Pollution Control District prior to grading/building permit issuance and/or map clearance.

Rules and Regulations

Rules and regulations that are most relevant to future solar energy systems and facilities that could occur under the Project include the following:

Regulation III – Prohibitions: This regulation sets forth restrictions for visible emissions, odor nuisance, fugitive dust, various air emissions, fuel contaminants, start-up/shutdown exemptions and breakdown events. The following is a list of rules that apply to the Project:

- ***Rule 302 – Visible Emissions*:** The rule states that a person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart or of such opacity as to obscure an observer's view.
- ***Rule 303 – Nuisance*:** This rule states that a person shall not discharge from any source whatsoever such quantities of air contaminants or other material in violation of Section 41700 of the Health and Safety Code which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
- ***Rule 319 – Asphalt Air Blowing Southern Zone*:** A person shall not operate or use any article, machine, equipment or other contrivance for the air blowing of asphalt unless all gases, vapors and gas-entrained effluents from such an article, machine, equipment or other contrivance are:
  A. Incinerated at temperatures of not less than 1400°F for a period of not less than 0.3 seconds; or
  B. Processed in a manner determined by the Control Officer to be equally, or more, effective for the purpose of air pollution control than A. above, and considered Best Available Control Technology.
- ***Rule 323 and 323.1 – Architectural Coatings*:** The rules require manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.
- ***Rule 329 – Cutback and Emulsified Asphalt Paving Materials*:** This rule applies to manufacturers, distributors, and end users of cutback and emulsified asphalt materials for paving, construction and maintenance of streets, highways, parking lots, and driveways. It limits the amount of ROC and requires recordkeeping, testing, and compliance.
- ***Rule 333 – Control of Emissions from Reciprocating Internal Combustion Engines*:** This rule applies to any engine with a rated brake horsepower of 50 or greater except for those engines exempted in the rule. This rule sets emissions limits for NO_X, ROC, and CO for owners and operators and requires that engines be inspected and maintained.
- ***Rule 345 – Control of Fugitive Dust from Construction and Demolition Activities*:** This rule applies to any activity associated with construction or demolition of a structure or structures. Activities subject to this regulation are also subject to Rule 302 (Visible Emissions) and Rule 303 (Nuisance). This rule requires projects to prevent, reduce or mitigate fugitive dust emissions from a site. Rule 345 restricts visible fugitive dust to the project property line and restricts the tracking out of bulk materials onto public roads. Additionally, projects must utilize one or more of the dust prevention techniques (identified within the rule). Visible roadway dust shall be minimized by utilizing the measures in the rule. Furthermore, the rule also states the work practice standards that shall be followed during structure demolition to prevent visible emissions.

- ***Rule 353 – Adhesives and Sealants*:** This rule applies to any person who supplies, sells, offers for sale, distributes, manufactures, solicits the application of, or uses any adhesive product, sealant product, or associated solvent for use within the SBCAPCD. This rule sets emissions limits for ROC from adhesives and sealants.

Local

County of Santa Barbara Comprehensive Plan

The County of Santa Barbara Comprehensive Plan was first adopted in 1981 and has been updated and republished several times in recent years (County of Santa Barbara, 2009). The Comprehensive Plan is a long-range planning document that is applicable to the unincorporated communities within the County where the Project would be implemented. The Comprehensive Plan includes a Land Use Element with an Air Quality Supplement, which contains the following goals and policies that address air quality:

Goal: Significant increases in the use of bicycles, walking, and transit. Reduced use of the automobile.

***Policy A*:** Direct new urban development to areas within existing urbanized areas without endangering environmentally sensitive areas or open space resources.

***Policy B*:** Promote the conservation and rehabilitation of existing urban development.

***Policy E*:** Improve the integration of long-range planning and project approval procedures with air quality planning requirements.

The County of Santa Barbara Comprehensive Plan includes an Energy Element (County of Santa Barbara 2015) and was adopted in 1994, republished June 2015, and amended in August 2024. The Energy Element supersedes the Energy Conservation Element of the Santa Barbara County Comprehensive Plan. The Energy Element contains long-range planning guidelines and mechanisms to encourage energy efficiency and alternative energies in Santa Barbara County, which has co-benefits to reducing air pollutant emissions. The Energy Element contains the following goals and policies that address air pollutant emissions that apply to the Project:

Goal 5: Alternative Energy. Encourage the use of alternative energy for environmental and economic benefits and encourage opportunities for businesses that develop or market alternative energy technologies.

***Policy 5.1: Environmental Analysis*.** In the consideration of alternative energy, the County shall consider the full life-cycle environmental effects and embedded energy requirements to provide such alternative energy. The County shall encourage the use of those alternatives determined to present sufficient environmental benefits.

***Policy 5.2: Alternative Energy Technologies*.** The County shall encourage the use of alternative energy technology in appropriate new and existing development.

***Policy 5.4: Solar Photovoltaic Equipment*.** The County shall use solar photovoltaic equipment in county applications when it is cost-effective on a life-cycle cost basis.

Policy 5.13: Alternative energy Technology Businesses. Among broader county-wide efforts to attract businesses, the County shall initiate planning efforts to pursue desired businesses that develop or market alternative energy technologies.

3.3.4 Project Impact Analysis

Thresholds of Significance

CEQA Appendix G Significance Thresholds

This analysis follows the guidance and methodologies recommended in the CEQA Appendix G thresholds, SBCAPCD's *Scope and Content of Air Quality Sections in Environmental Documents* (2022b), and the County of Santa Barbara *Environmental Thresholds and Guidelines Manual* (2021). While there is some overlap in the thresholds from these three sources, each listed below because thresholds from these sources may be applicable to individual projects under the Project.

Pursuant to the *CEQA Guidelines*, air quality impacts related to the proposed project would be significant if the project would:

a) Conflict with or obstruct implementation of the applicable air quality plan;

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative guidelines for ozone precursors);

c) Expose sensitive receptors to substantial pollutant concentrations; and/or

d) Create objectionable odors affecting a substantial number of people.

SBCAPCD Significance Thresholds

According to the SBCAPCD *Scope and Content of Air Quality Sections in Environmental Documents* (2022), a proposed project would have a significant air quality impact on the environment if operation of the project would:

a) Emit (from all project sources, both stationary and mobile) more than the daily trigger for offsets or Air Quality Impact Analysis set in the SBCAPCD New Source Review Rule, for any pollutant (i.e., 240 lbs/day for ROC or NO_X and 80 lbs/day for PM10; there is no daily operational threshold for CO since it is an attainment pollutant);

b) Emit more than 25 lbs/day of NO_X or ROC from motor vehicle trips only;

c) Cause or contribute to a violation of any California or National Ambient Air Quality Standard (except ozone);

d) Exceed the SBCAPCD health risk public notification thresholds adopted by the SBCAPCD Board (10 excess cancer cases in a million for cancer risk and/or a Hazard Index of greater than (1.0) for non-cancer risk);

e) Be inconsistent with the latest adopted federal and State air quality plans for Santa Barbara County.

The SBCAPCD has not adopted quantitative thresholds of significance for short-term or construction emissions but suggests that construction-related NO_X, ROC, PM10, and PM2.5 emissions from diesel- and gasoline-powered equipment, paving and other activities, should be quantified. Additionally, SBCAPCD suggests using 25 tons per year for ROC or NO_X as a guideline for determining the significance of construction impacts for individual projects. Under SBCAPCD Rule 202 D.16, if combined emissions from all construction equipment used to construct a stationary source which requires an Authority to Construct permit have the potential to exceed 25 tons of any pollutant, except CO, in a 12-month period,

the owner of the stationary source shall provide offsets under the provisions of SBCAPCD Rule 804 and shall demonstrate that no ambient air quality standard will be violated. Furthermore, standard dust control measures discussed above under Section 3.3.3 must be implemented for any discretionary project involving earth-moving activities.

County of Santa Barbara Environmental Thresholds

According to the County's Environmental Thresholds and Guidelines Manual (2024), a significant adverse air quality impact may occur when a project, individually or cumulatively, triggers any one of the following:

a) Interferes with progress toward the attainment of the ozone standard by releasing emissions which equal or exceed the established long-term quantitative thresholds for NOX and ROC;

b) Equals or exceeds the state or federal ambient air quality standards for any criteria pollutants (as determined by modeling).

Additionally, the County of Santa Barbara has set quantitative emissions thresholds. However, the County has not set a quantitative threshold for short term/construction emissions but expects the CEQA document will discuss short-term/construction emissions for PM10 if it involves ground disturbance. For construction activities occurring for future solar energy systems and facilities enabled under the Project involving ground disturbance, dust control measures would be required as identified in the regulatory discussion in Section 3.3.3. The long-term/operational emissions significance thresholds for NO_X and ROC are the same as those of the SBCAPCD. Additionally, for CO, a significant air quality impact would occur if it causes, by adding to the existing background CO levels, a CO "hot spot" where the CAAQS of 20 ppm CO is exceeded. The County has developed Project Screening for CO Impacts:

1. If a project contributes less than 800 peak hour trips, then CO modeling is not required.
2. Projects contributing more than 800 peak hour trips to an existing congested intersection at level of service (LOS) D or below, or will cause an intersection to reach LOS D or below, may be required to model for CO impacts. However, projects that will incorporate intersection modifications to ease traffic congestion, are not required to perform modeling to determine potential CO impacts.

Methodology

Short-Term Emissions

Emissions from construction activities represent temporary impacts that are typically short in duration, depending on the size, phasing and type of project. Air quality impacts can nevertheless be acute during construction periods, resulting in significant localized impacts to air quality. Construction-related activities from future solar energy systems and facilities enabled under the Project would generate temporary criteria pollutant emissions, primarily due to the use of construction equipment and the generation of vehicle and truck trips.

As discussed in Chapter 2, *Project Description*, the Project would allow solar development categorized into four tiers, ranging from small roof or ground-mounted systems to utility-scale solar energy facilities. Tier 1 projects are those up to and including 0.5 acres in size and Tier 2 projects are those greater than 0.5 acres and up to and including 5.0 acres on developed lands. Tier 3 projects are those greater than 0.5 acres and up to and including 30.0 acres on undeveloped lands and Tier 4 projects are those greater than 30.0 acres. Solar energy facilities may include features such as solar PV modules and arrays, racking or

other pole structures to hold the arrays, inverters, and a connection to the local distribution network or regional transmission grid. Depending on the site, they may also include internal access roads, fencing, signage, storage or control buildings, and a battery energy storage system (battery ESS). For the purposes of this analysis and to provide for a conservative and environmentally protective analysis, it is assumed that construction of any future solar project could begin as early as 2026, which includes any necessary permitting and construction of the new facilities.

Short-term construction-generated air pollutant emissions were calculated using the California Emissions Estimator model (CalEEMod), Version 2022.1 (see Appendix B), as recommended by the SBCAPCD. Model assumptions are based on typical construction activities of solar projects and default values in CalEEMod that are based on the project location and land use types. For the purposes of this Program EIR and to provide a conservative and environmentally protective analysis, air quality impacts are modeled based on the proposed category of tiers of solar energy systems and facilities (as described above and shown in Table 2-2 of Chapter 2) that specifies allowable size and classification. While no project-level information is known at this time, it is assumed that the nature and intensity of such future solar energy projects would be similar to or less than the scope and scale of the two models analyzed. As such, for the purposes of analysis in this CEQA document, construction activities and methods employed for the model projects have been quantitatively analyzed and would be comparable to those necessary for the installation of future facilities in the County. Representative construction emissions are provided for the two models analyzed. As noted above, the emissions were modeled assuming the earliest potential time frame (i.e., start date of 2026) to provide for a conservative analysis. Construction that would occur after 2026 would be lower than those analyzed herein, under the same set of assumptions, due to the phasing in of more energy-efficient and cleaner-burning construction equipment and vehicle fleet mix, pursuant to State regulations that require vehicle fleet operators to phase in less polluting heavy-duty equipment.

Tier 1 and Tier 2 projects are modeled as a 5-acre project size with the following general assumptions described below (see Appendix B). Projects less than 5 acres in size would typically result in lesser impacts than those disclosed herein for a 5-acre project. Construction phases would typically include site preparation, grading, and solar facility installation and construction, potentially lasting up to approximately 34 months (about three years) of construction based on conservative assumptions, although most Tier 1 and Tier 2 projects would likely be closer to one to two years of construction. Tier 1 and Tier 2 projects are assumed to have a daily round-trip maximum of up to 60 worker trips, 50 vendor truck trips, and 20 haul truck trips. It is assumed on-site construction equipment would be required throughout the construction duration, and may include but are not limited to graders, forklifts, backhoes, and cranes. Model assumptions for Tier 1 and Tier 2 projects are summarized in Appendix B.

Tier 3 and Tier 4 projects are modeled as a 600-acre project size with the following general assumptions described below (see Appendix B). Projects less than 600 acres in size would typically result in fewer impacts than those disclosed herein for a 600-acre project. Construction phases would typically include site preparation, grading, and solar facility installation and construction, potentially lasting up to approximately 53 months (about four and a half years) of construction based on conservative assumptions, although most Tier 3 and Tier 4 projects would likely be closer to one to three years of construction. Tier 3 and Tier 4 projects are assumed to have a daily maximum of up to 120 worker trips, 100 vendor truck trips, and 50 haul truck trips. It is assumed on-site construction equipment would be required throughout the construction duration, and may include but are not limited to graders, forklifts, backhoes, and cranes. Model assumptions for Tier 3 and Tier 4 projects are summarized in Appendix B.

Emissions associated with decommissioning would be similar to or less than for construction as decommissioning would involve the use of similar types of heavy-duty equipment and vehicles, but at a lesser intensity, reduced numbers of equipment, and/or reduced duration. Therefore, emissions associated with decommissioning are assessed within the construction assessment.

Long-Term Emissions

Once constructed, the solar energy systems and facilities would generally operate passively, with only incidental maintenance typically consisting of weed abatement and periodic maintenance of the solar energy systems such as water demand for cleaning operations. Operational activities that would generate mobile source emissions for any given facilities developed under the Project would be limited to routine maintenance checks. It was assumed that activities would induce minimal vehicles per month and would not result in significant mobile emissions. The Project involves the installment of solar systems and facilities, as such, would not induce new substantial electrical demand or generate solid waste or wastewater beyond existing conditions. Additionally, individual projects may include battery ESS. Battery ESS is assumed not to generate any air quality emissions other than mobile source emissions from periodic maintenance.

Health Impacts

Short-term and long-term exposure to criteria pollutants and TACs may result in adverse health effects, which may include aggravated asthma, increases in respiratory symptoms like coughing and difficult or painful breathing, chronic bronchitis, decreased lung function, increased cancer risk, heart attack and premature death. The ambient air quality standards are health-based standards. Therefore, in this impact analysis, if the future solar energy systems and facilities would result in a new violation of a particulate standard or substantially contribute to an existing violation, it would also contribute to these adverse health effects.

Project Impacts

This section identifies and discusses potential air quality impacts associated with the Project. **Table 3.3-3**, *Summary of Air Quality Impacts*, provides a summary of the air quality impacts. A detailed discussion of each impact follows.

TABLE 3.3-3
SUMMARY OF AIR QUALITY IMPACTS

Air Quality Impacts	Impact Classification	Mitigation Measures	Residual Impact
Impact AQ-1: Implementation of the Project would result in insignificant impacts in regard to conflict with or interference with the applicable air quality plan.	Insignificant	No mitigation required	Insignificant
Impact AQ-2: Implementation of the Project would result in an insignificant cumulatively considerable net increase of ROC, NO_X, or PM10 for which the SCCAB is in nonattainment for an applicable federal or state ambient air quality standard.	Insignificant	No mitigation required	Insignificant
Impact AQ-3: Implementation of the Project could expose sensitive receptors to substantial pollutant concentrations and impacts would be potentially significant.	Potentially significant	MM AQ-1: Fugitive Dust Control MM AQ-2: Valley Fever	Insignificant with Mitigation

TABLE 3.3-3
SUMMARY OF AIR QUALITY IMPACTS

Air Quality Impacts	Impact Classification	Mitigation Measures	Residual Impact
Impact AQ-4: Implementation of the Project would not result in other emissions, such as odors, adversely affecting a substantial number of people.	Insignificant	No mitigation required	Insignificant
Cumulative Impacts	Potentially significant	MM AQ-1 and MM AQ-2	Insignificant with Mitigation

Threshold a) The Project would result in a potentially significant impact if the Project would conflict with or obstruct implementation of the applicable air quality plan.

Impact AQ-1: Implementation of the Project would result in insignificant impacts in regard to conflict with or interference with the applicable air quality plan.

Construction and Decommissioning

The Project is subject to the SBCAPCD 2022 Plan. As discussed above, the SBCAPCD has developed the 2022 Plan to meet the requirements of the CCAA. A significant air quality impact may occur if a project is not consistent with the 2022 Plan. The Project would result in the future installation of solar energy systems and facilities in various locations throughout the unincorporated areas of Santa Barbara County. Construction of the future solar energy facilities would result in temporary emissions and would not include permanent stationary emissions sources regulated by the SBCAPCD.

The Project would generate an increase in short-term construction employment; however, such short-term employment would be expected to be filled by employees within the construction industry in the SCCAB region. Construction industry jobs generally have no regular place of business, as construction workers commute to job sites throughout the region, which may change several times a year. Moreover, these jobs would be temporary in nature. With respect to temporary construction emission sources, construction contractors would be required to comply with the CARB Air Toxic Control Measure that limits heavy duty diesel motor vehicle idling to no more than five minutes at any given location with certain limited exceptions defined in the regulation for equipment in which idling is integral to the function of the equipment or activity (such as concrete trucks and concrete pouring). In addition, contractors would be required to comply with required and applicable BACT and the CARB In-Use Off-Road Diesel Vehicle Regulation to use lower-emitting equipment in accordance with the phased-in compliance schedule for equipment fleet operators, which is enforced by CARB through regulatory reporting requirements from equipment fleet operators. The Project would not conflict with implementation of these strategies. Additionally, the Project would comply with all applicable SBCAPCD rules and regulations, such as Rule 345, which ensures that fugitive dust emissions are reduced. Additionally, as discussed in SBCAPCD's *Scope and Content of Air Quality Sections in Environmental Documents* (2022b), a project contractor(s) would be required to comply with measures to reduce PM10 emissions during any earthmoving activities. Furthermore, as detailed in Impact AQ-2, below, the projected construction emissions for criteria pollutants, particularly ROC and NO_X would not exceed the SBCAPCD's regional significance thresholds for construction activities. Thus, the Project would not conflict with the County's

ability to meet the CAAQS as outlined in the 2022 Plan. Compliance with these requirements is consistent with and meets or exceeds the 2022 Plan requirements for control strategies intended to reduce emissions from construction equipment and activities. Therefore, construction associated with the Project would not conflict with or obstruct implementation of the 2022 Plan. Impacts would be insignificant.

The process of decommissioning would involve several steps that may include site assessment, system disconnection, removal of panels and associated equipment (inverters, wiring, racking), transportation of materials, and proper recycling or disposal. Decommissioning may include land restoration for ground-mounted systems projects on undeveloped lands. This process may involve on-site heavy-duty equipment and off-site vehicle trips similar to or less than those assumed for construction. Similarly to construction, decommissioning activities would be required to comply with all applicable rules and regulations. Therefore, decommissioning activities associated with the Project would not conflict with or obstruct implementation of the 2022 Plan. Impacts would be insignificant.

Operation

Once constructed, solar components for future solar energy systems and facilities enabled under the Project would generally operate passively, with minimal employee trips, occasional maintenance, and periodic solar panel washing. Projects that are considered consistent with the 2022 Plan would not interfere with attainment because this growth is included in the projections used in the formulation of the 2022 Plan. Operation of the future solar energy systems and facilities would result in minimal new growth with regards to employees and would not increase population, and would therefore not interfere with employee or population growth projections contained within the SBCAG Connected 2050: Regional Transportation Plan & Sustainable Communities Strategy (SBCAG 2021), which forms the basis of the growth projections in the 2022 Plan. Additionally, operation of the future solar energy systems and facilities would not result in significant new emissions compared to those of existing conditions. As a result, the Project would not conflict with or obstruct implementation of the 2022 Plan. Impacts would be insignificant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be insignificant.

Threshold b) The Project would result in a significant impact if the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

Impact AQ-2: Implementation of the Project would result in an insignificant cumulatively considerable net increase of ROC, NO_X, or PM10 for which the SCCAB is in nonattainment for an applicable federal or state ambient air quality standard.

Construction and Decommissioning

Construction of the Project has the potential to generate temporary regional criteria pollutant emissions through the use of heavy-duty construction equipment, and may include but are not limited to graders,

forklifts, backhoes, pile drivers, and cranes; and through vehicle trips generated by workers and haul trucks traveling to and from the various installation sites within the County. In addition, fugitive dust emissions would result from site preparation and various soil-handling activities. Mobile source emissions, primarily NO_X, would result from the use of construction equipment and construction vehicles. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of construction activity, and prevailing weather conditions.

The SBCAPCD has not adopted quantitative thresholds of significance for short-term or construction emissions but suggests that construction-related NO_X, ROC, PM10, and PM2.5 emissions from diesel- and gasoline-powered equipment, paving and other activities, should be quantified. Additionally, SBCAPCD suggests using 25 tons per year for ROC or NO_X as a guideline for determining the significance of construction impacts for individual projects. The emissions associated with construction of one future Tier 1 or Tier 2 solar energy system and facility enabled under the Project based on the conservative assumptions described in the Methodology subsection and the applicable emissions thresholds are presented in **Table 3.3-4**, *Maximum Regional Construction Emissions for a Tier 1 or Tier 2 Project (Tons per Year)*. The emissions associated with construction of one future Tier 3 or Tier 4 solar energy system and facility enabled under the Project based on the conservative assumptions described in the Methodology subsection and the applicable emissions thresholds are presented in **Table 3.3-5**, *Maximum Regional Construction Emissions for a Tier 3 or Tier 4 Project (Tons per Year).*

As shown in Table 3.3-4 and Table 3.3-5, the maximum daily construction emissions generated for future solar energy projects under the two models analyzed representing maximum Tier 1 and Tier 2 projects, and Tier 3 and Tier 4 projects, would not exceed the SBCAPCD's annual significance threshold for ROC or NO_X. Therefore, the Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. Construction impacts would be insignificant.

TABLE 3.3-4
MAXIMUM REGIONAL CONSTRUCTION EMISSIONS FOR A TIER 1 OR TIER 2 PROJECT (TONS PER YEAR)[a]

Year	ROC	NO_X	CO	SO2	PM10	PM2.5
Site Preparation - Year 1	0.09	0.68	0.78	0.00	0.16	0.09
Grading - Year 1	0.05	0.41	0.45	0.00	0.09	0.05
Building Construction - Year 1	0.14	1.08	1.37	0.00	0.07	0.04
Building Construction - Year 2	0.27	2.06	2.70	0.01	0.14	0.08
Building Construction - Year 3	0.22	1.64	2.23	0.01	0.11	0.06
Maximum Annual Emissions	0.27	2.06	2.70	0.01	0.16	0.09
Significance Thresholds	25	25	--	--	--	--
Significant Impact?	No	No	No	No	No	No

NOTES:
a. Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B.
-- No significance threshold
Emissions were assumed to begin in the first Quarter of 2026.
SOURCE: ESA, 2025.

TABLE 3.3-5
MAXIMUM REGIONAL CONSTRUCTION EMISSIONS FOR A TIER 3 OR TIER 4 PROJECT
(TONS PER YEAR)[a]

Year	ROC	NO_X	CO	SO2	PM10	PM2.5
Site Preparation - Year 1	0.52	4.02	4.38	0.01	0.93	0.52
Grading - Year 1	0.37	3.19	3.30	0.01	0.61	0.32
Building Construction - Year 1	0.26	2.06	2.57	0.01	0.11	0.07
Building Construction - Year 2	1.01	7.84	10.14	0.02	0.40	0.26
Building Construction - Year 3	0.98	7.50	10.11	0.02	0.38	0.24
Building Construction - Year 4	0.95	7.18	9.98	0.02	0.36	0.22
Building Construction - Year 5	0.38	2.90	4.10	0.01	0.14	0.09
Maximum Annual Emissions	1.01	7.84	10.14	0.02	0.93	0.52
Significance Thresholds	25	25	--	--	--	--
Significant Impact?	No	No	No	No	No	No

NOTES:
a. Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B.
-- No significance threshold
Emissions were assumed to begin in the first Quarter of 2026.
SOURCE: ESA, 2025.

At the end of the operational life of the solar systems, the process of decommissioning would occur. This process involves several steps that may include site assessment, system disconnection, removal of panels and associated equipment (inverters, wiring, racking), transportation of materials, and proper recycling or disposal. Decommissioning may also include land restoration for ground-mounted systems. This process may involve on-site heavy-duty equipment and off-site vehicle trips similar to than those assumed under Project construction. Additionally, the implementation of MM AQ-1 and AQ-2, described below, would reduce any potential impacts. Therefore, the process of decommissioning would have similar air quality impacts as those assessed under Project construction. As such, decommissioning would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is non-attainment under an applicable federal or state ambient air quality standard and decommissioning impacts would be insignificant.

Operation

Once constructed, solar components for future solar energy systems and facilities enabled under the Project would generally operate passively, with minimal employee trips, occasional maintenance, and periodic solar panel washing. Thus, operation of the Project would result in minimal new growth with regard to employees and maintenance vehicles, and would result in negligible new emissions compared to those of existing conditions. Therefore, mobile emissions resulting from the Project would be below the SBCAPCD's daily significance threshold for ROC and NO_X, and would generate minimal amounts of PM10. Overall, given the sporadic usage of maintenance vehicles, Project operational-source emissions would not exceed applicable SBCAPCD thresholds of significance. As a result, the Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is

non-attainment under an applicable federal or state ambient air quality standard and operational impacts would be insignificant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be insignificant.

Threshold c) The Project would result in a significant impact if the project would expose sensitive receptors to substantial pollutant concentrations.

Impact AQ-3: Implementation of the Project could expose sensitive receptors to substantial pollutant concentrations and impacts would be potentially significant.

Toxic Air Contaminants

Temporary TAC emissions associated with DPM emissions from heavy construction equipment would occur during the construction phase of the Project. Construction activities associated with the Project would be sporadic, transitory, and short-term in nature, where construction activities for an individual project may occur up to 33 months for Tier 1 and Tier 2, and 55 months for Tier 3 and Tier 4. According to the California Office of Environmental Health Hazard Assessment (OEHHA), health effects from TACs are described in terms of individual cancer risk based on a lifetime (i.e., 70-year) resident exposure duration. Given the temporary maximum construction schedule (approximately a maximum of 55 months) for under the Project, Project construction would not result in a long-term (i.e., lifetime or 70-year) exposure to sensitive receptors. Furthermore, as discussed above, the construction emissions modeling shown above in Table 3.3-4 and Table 3.3-5 accounts for the regional construction of projects under Tier 1 through Tier 4, and as such, would not exceed any thresholds specified by SBCAPCD thresholds and sensitive receptor exposure would be insignificant. Construction contractors would also be required to comply with regulations that limit diesel emissions, such as the CARB Air Toxics Control Measure that limits diesel vehicle idling to no more than five minutes at a location, which requires owners and motor carriers that own or dispatch these vehicles to ensure compliance with the idling limit requirements and in some cases requires vehicles to be equipped with a non-programmable engine shutdown system that automatically shuts down the engine after five minutes of idling. Therefore, Project construction would not expose sensitive receptors to substantial TAC emissions. Impacts would be insignificant.

Operation of the Project would generally operate passively, with only occasional maintenance typically consisting of landscaping and maintenance activities. Mobile emissions from the few vehicles for periodic maintenance would result in minimal DPM emissions. In addition, individual projects may include battery ESS. Battery ESS are assumed to not generate any air quality emissions other than mobile source emissions from periodic maintenance. Health risk impacts from operation of the future solar energy facilities would not be anticipated at any nearby receptors due to the minimal maintenance vehicles and limited frequency of the Project's operational maintenance activities. Therefore, operation would not expose sensitive receptors to substantial TAC emissions and impacts would be insignificant.

At the end of the operational life of the solar systems, the process of decommissioning would occur. This process involves several steps that may include site assessment, system disconnection, removal of panels and associated equipment (inverters, wiring, racking), transportation of materials, and proper recycling or disposal. Decommissioning may also include land restoration for ground-mounted systems that may involve on-site heavy-duty equipment and off-site vehicle trips like those assumed under Project construction. Thus, similar to construction, contractors would be required to comply with regulations that limit diesel emissions, such as the CARB Air Toxics Control Measure that limits diesel vehicle idling to no more than five minutes at a location. Therefore, decommissioning would not expose sensitive receptors to substantial TAC emissions. Impacts would be insignificant.

CO Hotspots

The SCCAB is currently designated as a CO attainment area for both the NAAQS and CAAQS. The SBCAPCD does not have a significance threshold for CO as it is an attainment pollutant. However, the County of Santa Barbara has developed Project Screening guidance for CO Impacts as discussed above under Section 3.3.4, Significance Thresholds and Methodology, which utilizes 800 peak hour trips as the cutoff for conducting CO modeling. Construction activities under the Project would require a maximum+* of approximately 135 round trips per day or 270 one-way trips per day (i.e., 135 inbound and 135 outbound trips) of which approximately 120 one-way trips would be from worker commute vehicles and approximately 150 one-way trips would be from vendor and haul trucks, which would not exceed the County's Screening Threshold of 800 peak hour trips. Operation of the Project would only require a few vehicles per month for maintenance, which would not exceed the County's Screening Threshold of 800 peak hour trips. Thus, CO modeling is not required as the Project is not expected to result in a CO hotspot. Therefore, Project construction, operation, and decommissioning would not expose sensitive receptors to CO hotspots. impacts would be insignificant.

Fugitive Dust and Valley Fever

Valley Fever is an infective disease caused by the fungus *Coccidioides immitis*. Infection occurs via inhalation of *Coccidioides immitis* spores that have become airborne from the upturn of dry, dusty soil by wind, construction, farming, or other activities. Sensitive receptors may be exposed to Coccidioides immitis, the fungus that causes Valley Fever, if present in soil that is disturbance and made airborne as a result of the Project's construction activities. Onsite workers are the most at risk of contracting Valley Fever, due to their proximity to the potentially impacted soils. Soil criteria that may indicate the potential presence of Valley Fever fungus include the disturbance of undeveloped topsoil, the presence of dry, alkaline soils, or the disturbance of virgin undisturbed soil in non-urban areas. The Project would minimize the exposure to the *Coccidioides immitis* (Valley Fever) spores from the disruption of soil by complying with the SBCAPCD rules and regulations, such as Rule 345, which ensures that fugitive dust emissions are reduced. Therefore, with regulatory compliance, risk of health concerns associated with presence of *Coccidioides immitis* spores, would reduce the potential for Valley fever and fugitive dust impacts during construction activities. However, due to the undeveloped nature of much of the land area that may be disturbed as a result of Project construction and decommissioning activities, there is a potential, albeit very limited, for exposure to fugitive dust and Valley Fever that can be further reduced with implementation of mitigation.

Naturally Occurring Asbestos

Areas of rock formations that contain naturally occurring asbestos could release asbestos into the air and pose a health hazard. A review of the United States Geological Survey (USGS) *Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California*, which includes a map containing areas more likely to have rock formations containing naturally occurring asbestos in California, indicates that there are areas in Santa Barbara County that likely contain naturally occurring asbestos (USGS 2011). Since construction and decommissioning activities may include earth-disturbing activities, the Project could expose sensitive receptors to naturally occurring asbestos. Project impacts to air quality related to naturally occurring asbestos would be potentially significant.

Mitigation Measures

MM AQ-1: Fugitive Dust Control. Dust control measures outlined below shall be implemented where they are applicable and feasible. The list shall not be considered all-inclusive, and any other measures to reduce fugitive dust emissions not listed shall be encouraged.

- *Land Preparation, Excavation and/or Demolition*. The following dust control measures shall be implemented:
  a) Dust generated by the development activities shall be kept to a minimum with a goal of retaining dust on the site.
  b) During clearing, grading, earth moving, excavation, or transportation of cut or fill materials, use water trucks or sprinkler systems to prevent dust from leaving the site and to create a crust after each day's activities cease.
  c) During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site.
  d) Wet down the construction area after work is completed for the day and whenever wind exceeds 15 mph.
  e) When wind exceeds 15 mph, have site watered at least once each day including weekends and/or holidays.
  f) Order increased watering as necessary to prevent transport of dust off-site.
  g) Cover soil stockpiled for more than two days or treat with soil binders to prevent dust generation. Reapply as needed.
  h) If the site is graded and left undeveloped for over four weeks, the Owner/Applicant shall immediately: (i) Seed and water to re-vegetate graded areas; and/or (ii) Spread soil binders; and/or; (iii) Employ any other method(s) deemed appropriate by P&D or APCD.
- *Site Construction*. After clearing, grading, earth moving and/or excavating is completed within any portion of the project sites, the following dust control practices shall be implemented:
  – Once initial leveling has ceased, all temporarily open and inactive soil areas within the construction site shall be (1) seeded and watered until plant growth is evident, (2) treated with a dust palliative, or (3) watered twice daily until soil has sufficiently crusted to prevent fugitive dust emissions.
  – Dependent on specific site conditions (season and wind conditions), revegetation shall occur in those areas so planned as soon as practical after installation of the solar panels. A native seed mix of grass and flowers shall also be added to the spread topsoil to enhance regrowth.

  - All active disturbed soil areas shall be sufficiently watered at least twice daily or have dust palliatives applied to prevent excessive dust.

- *Vehicular Activities*. During all phases of construction, the following vehicular control measures shall be implemented:
  - Onsite vehicle speeds on unpaved surfaces shall be limited to 15 miles per hour.
  - All areas with vehicle traffic on unpaved surfaces shall be paved, treated with dust palliatives, or watered a minimum of twice daily.
  - Streets adjacent to the project sites shall be kept clean, and project-related accumulated silt shall be removed.
  - Access to the project sites shall be by means of an apron into the project sites from adjoining surfaced roadways. The aprons shall be surfaced or treated with dust palliatives. If operating on soils that cling to the wheels of vehicles, a grizzly, wheel washer, or other such device shall be used on the road exiting the project sites, immediately prior to the pavement, in order to remove most of the soil material from vehicle tires.

MM AQ-2: Valley Fever. During heavy grading where the top 12 inches of soil would be disturbed, and in locations with potential Valley Fever fungal spores (i.e., disturbance of the top soil of undeveloped land to a depth of about 12 inches; dry, alkaline, sandy soils; virgin, undisturbed, non-urban areas; windy areas; and archaeological resources probable or known to exist in the area (Native American midden sites), construction contractors will comply with the following measures to reduce potential Valley Fever impacts:

- Require crews to use respirators during project clearing, grading, and excavation operations in accordance with California Division of Occupational Safety and Health regulations.
- Require that the cabs of grading and construction equipment be air-conditioned or enclosed with sufficient ventilation and particulate matter filtration systems.
- Require crews to work upwind from excavation sites where possible.
- Where acceptable to the fire department, control weed growth by mowing instead of disking, thereby leaving the ground undisturbed and with a mulch covering.
- During rough grading and construction, ensure that the access way into the project site from adjoining paved roadways is paved or treated with environmentally safe dust control agents.

Residual Impacts

With implementation of MM AQ-1 and MM AQ-2, impacts would be insignificant.

Threshold 4: The Project would result in a significant impact if the Project would generate other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Impact AQ-4: Implementation of the Project would not result in other emissions, such as odors, adversely affecting a substantial number of people.

During Project construction, diesel trucks and off-road construction equipment may emit odors such as that of diesel exhaust which would be temporary and intermittent in nature. Such odors would be a

temporary source of nuisance to adjacent uses but would not affect a substantial number of people. Through mandatory compliance with SBCAPCD Rules, specifically Rule 303, no construction activities or materials are expected to create objectionable odors affecting a substantial number of people. Therefore, construction activities for the Project would result in insignificant impacts with respect to other emissions, including those leading to odors.

Land uses typically producing objectionable odors include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The Project would not contain any active manufacturing activities and would not convert current agricultural land to residential land uses. In addition, the Project would not result in the creation of smoke or ash, or excessive dust generation (once mitigation measures are applied). Furthermore, the Project would comply with SBCAPCD Rule 303 – Nuisance. Therefore, operational activities for the Project would result in insignificant impacts with respect to other emissions, including those leading to odors.

At the end of the operational life of the solar systems, the process of decommissioning would occur. This process involves several steps that may include site assessment, system disconnection, removal of panels and associated equipment (inverters, wiring, racking), transportation of materials, and proper recycling or disposal. Decommissioning may also include land restoration for ground-mounted systems that may involve on-site heavy-duty equipment and off-site vehicle trips like those assumed under Project construction. No decommissioning activities or materials are expected to create objectionable odors affecting a substantial number of people. Therefore, decommission activities for the Project would result in insignificant impacts with respect to other emissions, including those leading to odors.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be insignificant.

3.3.5 Cumulative Impacts Analysis

As discussed above, the Project would not conflict with or interfere with the 2022 Plan or the SBCAPCD's ability to meet the CAAQS. All past, present, and reasonably future projects would also comply with CARB and/or the USEPA mandated mobile source emissions regulations related to on-road vehicle emissions standards, off-road equipment fleet standards, and fuel sulfur standards. They would also comply with SBCAPCD's rules and measures to reduce PM10 during any earthmoving activities. Thus, the Project along with past, present, and reasonably probable future projects would not interfere with the ability of the SBCAPCD's ability to meet the CAAQS for ozone. The cumulative impact would be insignificant.

As discussed above, the Project emissions would not exceed the SBCAPCD's suggested annual construction significance thresholds for ROC and NO_X. Due to the Project's limited maintenance operations, the Project would not surpass the daily operational significance thresholds. All past, present, and reasonably future projects would also be required to meet the SBCAPCD's significance thresholds or provide feasible mitigation measures to reduce emissions. Thus, the Project along with past, present, and reasonably

probable future projects would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. The cumulative impact would be insignificant.

As discussed above, the Project could expose sensitive receptors to substantial pollutant concentrations. All past, present, and reasonably future projects would also be required to analyze if sensitive receptor would be exposed to substantial pollutant concentrations and mitigate impacts, if required. Cumulative projects would also comply with applicable construction fugitive dust rules, such as SBCAPCD Rule 345, reduce fugitive dust-related impacts including potential Valley Fever and naturally occurring asbestos impacts, and require mitigation measures if potentially significant impacts are identified. Additionally, the Project along with past, present, and reasonably probable future projects would not expose sensitive receptors to substantial pollutant concentrations of TACs or CO hotspots. While no project-level information is known at this time, future projects would be required to do TAC and CO Hotspot analysis compliant of CEQA guidance and thresholds. Future projects would also be required to implement mitigation measures MM AQ-1 and MM AQ-2 to reduce the potential for excessive dust generation and potential Valley Fever impacts. All past, present, and reasonably foreseeable future projects would also be required to control fugitive dust emissions per SBAPCD Rule 345. Cumulative impacts would be potentially significant or mitigated to insignificant.

As discussed above, the Project is not expected to result in other emissions, such as odors, adversely affecting a substantial number of people. All past, present, and reasonably foreseeable future projects would also be required to comply with SBCAPCD Rules, specifically Rules 302, 303, and 345, which would prohibit nuisance emissions, such as odors. Thus, the Project along with past, present, and reasonably foreseeable future projects would not result in other emissions, such as odors, adversely affecting a substantial number of people. The cumulative impact would be insignificant.

3.4 Biological Resources

3.4.1 Introduction

This section discusses the existing biological resources within the unincorporated areas of Santa Barbara County and evaluates the impacts to biological resources that could result from implementation of the Project. The information and analysis presented are based in part on the biological resources data presented in Appendix C.

The County received a comment pertaining to biological resources during the public scoping period. The Gaviota Coast Conservancy indicated that the Gaviota Coast Plan provides for community-scale solar energy projects and not utility-scale solar energy projects. The letter stated that, while Tier 1-3 projects may be compatible with the Gaviota Coast Plan, utility-scale solar energy facilities (Tier 4 projects) should not be considered for a biodiversity hotspot like the Gaviota Coast. The Gaviota Coast contains biological resource constraints, particularly in areas west of Gaviota Pass that are less accessible to the public (and where sensitive resources are already being impacted by the Strauss Wind Energy Project west of Lompoc, and by the dramatic increase in rocket launch activity from Vandenberg Space Force Base).

3.4.2 Environmental Setting

The Project would allow for development of community-scale and utility-scale solar energy facilities within the Inland and Coastal Zone areas of unincorporated Santa Barbara County (County). Tier 1 or 2 solar energy systems could occur on all unincorporated County lands (regardless of the zoning designation). Tier 3 and 4 solar energy facilities could occur on lands zoned for agriculture, public utilities, light or general industry, and professional or institutional uses. The Project would not affect lands under the jurisdiction of the federal government (Los Padres National Forest and Vandenberg Space Force Base), the University of California or other State lands, and tribal governments. The setting information presented herein was compiled from available database searches and scientific literature. Specific sources used to analyze the distribution of biological resources and assess impacts of the future solar facilities within the Project area include the following:

- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) (CDFW 2025a);
- California Native Plant Society (CNPS) Rare Plant Inventory (RPI) (CNPS 2025);
- CDFW Special Animals List (CDFW 2025b);
- CDFW State and Federally Listed Endangered, Threatened, and Rare Plants of California List (CDFW 2025c);
- CDFW California's Wildlife: Life History and Range Maps (CDFW 2025d);
- U.S. Fish and Wildlife Service (USFWS) Critical Habitat Mapper web application (USFWS 2025a);
- United States Department of Agriculture (USDA) and United States Forest Service (USFS) CALVEG Vegetation Classification & Mapping (CALVEG) database (USDA & USFS 2018);
- USFWS National Wetlands Inventory Mapper (NWI) Wetlands Mapper web application (USFWS 2025b);

- Missing Linkages: Restoring Connectivity to the California Landscape (Penrod et al. 2001);
- CDFW Habitat Connectivity Mapper web application (CDFW 2025e);
- CDFW California Natural Community List (CDFW 2025f); and
- Santa Barbara County Land Use Designation and Zoning Map Environmentally Sensitive Habitat (ESH) and Riparian Corridor (RC) Overlays (Santa Barbara County 2025a).

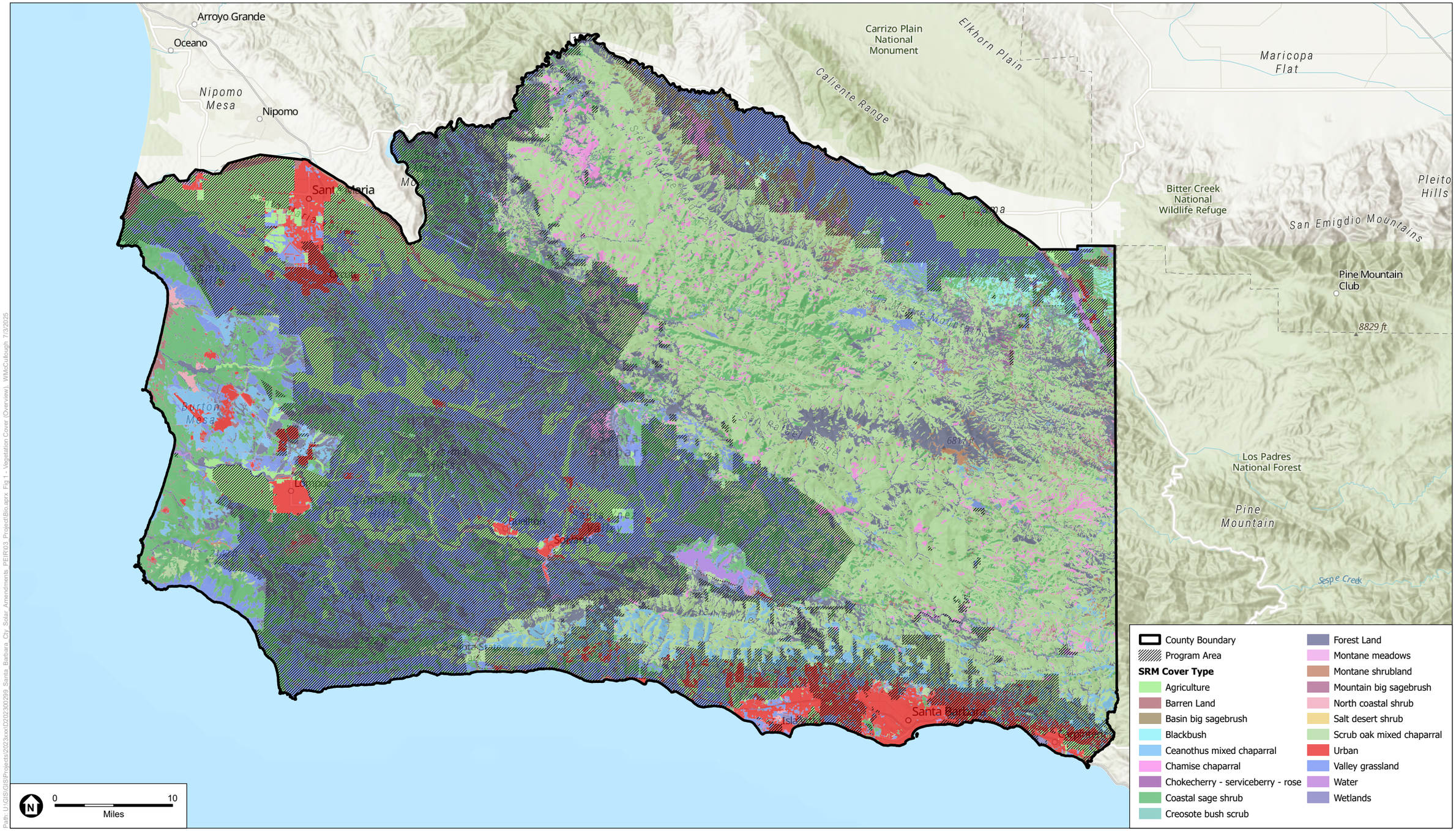
Vegetation Types

The Project area contains a wide variety of vegetation types. Twenty vegetation types have been mapped within the Project area using the USDA and USFS CALVEG database (USDA & USFS 2018), as shown in **Figure 3.4-1**, *Vegetation Cover*. It should be noted that the classification system mapped habitats from a broad perspective and that site-specific variation may be present (e.g., site-specific vegetation communities may be identified on a more detailed level based on the dominant species present). Additionally, the data was mapped in 2004, so there may be variations due to changes in vegetation types over time (e.g., due to development, disturbance, introduction of exotic plant species, restoration of native habitat). **Table 3.4-1**, *CALVEG Vegetation Types*, provides a summary of the acreages of each vegetation type within the Project area.

TABLE 3.4-1
CALVEG VEGETATION TYPES

Vegetation Type	Acreage within Project Area
Agriculture	117,000
Barren Land	27,513
Basin big sagebrush	14,914
Blackbush	10,040
Ceanothus mixed chaparral	46,485
Chamise chaparral	35,238
Chokecherry – serviceberry – rose	7,695
Coastal sage shrub	315,405
Creosote bush scrub	16
Forest land	284,450
Montane meadows	26,268
Montane shrubland	5,485
Mountain big sagebrush	4,643
North coastal shrub	1,542
Salt desert shrub	401
Scrub oak mixed chaparral	464,525
Urban	66,463
Valley grassland	321,787
Water	6,563
Wetlands	874
Total	**1,757,307**

NOTE: Acreages are rounded.
SOURCE: ESA 2025, CALVEG 2018.



Path: U:\GIS\GIS\Projects\2023xxx\D2023002990 Santa Barbara City Solar Amendments PEIR\03_Project\Bio.aprx Fig 1 - Vegetation Cover (Overview) WMcCullough 7/3/2025

SOURCE: ESA, 2025; CalVeg, 2024

Santa Barbara County Utility-Scale Solar Amendments

Figure 3.4-1
Vegetation Cover

ESA

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Descriptions of each of the habitats are adapted from the Society for Range Management's Rangeland Cover Types of the United States; USDA's South Coast and Montane Ecological Province Vegetation Descriptions; and USDA's Existing Vegetation Classification, Mapping, and Inventory Technical Guide Version 2.0. Appendices are presented below (Society for Range Management 1994, USDA 2009, and USDA & USFS 2015). Habitats that occur within populated areas can also show variation because of a greater exposure to anthropogenic influences such as the introduction of exotic plant species.

Agriculture

Agricultural land is used primarily for the production of food and fiber and includes orchards, vineyards, and field crops. Land used exclusively for livestock pasture may be mapped as Annual Grassland in those cases in which land uses are not recognizable (USDA 2009).

Barren Land

Barren land includes landscapes that are generally devoid of vegetation, such as exposed bedrock, cliffs, interior sandy or gypsum areas. It may include quarries and mine sites (USDA 2009).

Basin Big Sagebrush

Basin big sagebrush is characterized by an overstory of mainly basin big sagebrush and an understory of perennial grasses and perennial forbs. Basin big sagebrush (*Artemisia tridentata* ssp. *tridentata*) is the principal shrub with smaller amounts of rubber and green rabbitbrush (*Chrysothamnus nauseosus* and *C. viscidiflorus*). Antelope bitterbrush (*Purshia tridentata*) and gray horsebrush (*Tetradymia canescens*) also occur. The major grasses are bluebunch wheatgrass (*Agropyron spicatum*), Sandberg bluegrass (*Poa secunda*) and Idaho fescue (*Festuca idahoensis*). Other perennial grasses may include bottlebrush squirreltail (*Sitanion hystrix*), needle-and-thread (*Stipa comata*), rhizomatic wheatgrasses (*Agropyron dasystachyum*) and related species. Cheatgrass (*Bromus tectorum*) also occurs on most sites. The forb cover may contain yarrow (*Achillea millefolium* var. *lanulosa*), pale agoseris (*Agoseris glauca*), pussytoes (*Antennaria dimorpha* and spp.), tapertip onion (*Allium acuminatum*), milkvetch (*Astragalus*spp.), arrowleaf balsamroot (*Balsamorhiza sagittata*), hawksbeard (*Crepis acuminata* and spp.), fleabane (*Erigeron pumilis* and spp.), biscuit root (*Lomatium macrocarpum* and *L. triternatum*), Lupine (*Lupinus* spp.), and longleaf phlox (*Phlox longifolia*) (Society for Range Management 1994).

Blackbush

Blackbush (*Coleogyne ramosissima*) occurs in stands where it may comprise 95 percent of the vegetation. Plants from the creosote bush (*Larrea tridentata*), pinyon (*Pinus* spp.), and juniper (*Juniperus* spp.) types are common associates, including spiny hopsage (*Grayia spinosa*), mormon-tea (*Ephedra* spp.), rabbitbrush (*Chrysothamnus* spp.), desert thorn (*Lycium andersonii*), desert bitterbrush (*Purshia glandulosa*), antelope bitterbrush, big sagebrush (*Artemisia tridentata*), California buckwheat (*Eriogonum fasciculatum*), and goldenbush (*Haplopappus cooperii*). Red brome (*Bromus rubens*), filaree (*Erodium cicutarium*), desert needlegrass (*Stipa speciosa*), and black grama (*Bouteloua uripoa*) may be in the understory (Society for Range Management 1994).

Ceanothus Mixed Chaparral

Mixed chaparral is made up of a variety of several plant communities dominated by ceanothus species including hoaryleaf ceanothus (*Ceanothus crassifolius*), buckbrush (*C. cuneatus*), cupleaf ceanothus

(*C. greggii*), hairy ceanothus (*C. oliganthus*) and woolyleaf ceanothus (*C. tomentosus*) (Society for Range Management 1994).

Chamise Chaparral

Chamise chaparral associated species include California buckwheat, black sage (*Salvia mellifera*), scrub oak (*Quercus dumosa*), manzanita (*Arctostaphylos* spp.), ceanothus (*Ceanothus* spp.), mountain mahogany (*Cercocarpus betuloides*), laural sumac (*Malosma laurina*), sugarbush (*Rhus ovata*), silktassel (*Garrya* spp.), coyote bush (*Baccharis pilularis*), chaparral ryegrass (*Elymus* spp.), and chaparral yucca (*Yucca whipplei*) (Society for Range Management 1994).

Chokecherry – Serviceberry – Rose

This vegetation type is dominated by one or more of the following species: chokecherry (*Prunus virginiana*), serviceberry (*Amelanchier alnifolia*), wild rose (*Rosa* spp.) and snowberry (*Symphoricarpos* spp.) (Society for Range Management 1994).

Coastal Sage Shrub

Coastal sage shrub is dominated by facultatively drought-deciduous subshrubs less than 4.5 feet (1.5m) tall. The principal species are black sage, purple sage (*Salvia leucophylla*), white sage (*Salvia apiana*), California sagebrush (*Artemisia californica*), California buckwheat, California encelia (*Encelia californica*), and lemonade berry (*Rhus integrifolia*). Commonly associated species include perennial bunch grasses, perennial forbs, stemless rosette plants, succulents, and additional evergreen and drought-deciduous shrubs (Society for Range Management 1994).

Creosote Bush Scrub

Creosote bush is the dominant species, while codominant species include burro weed (*Franseria dumosa*) galleta grass (*Hilaria rigida*), jumping cholla (*Opuntia bigelovii*), cheese bush (*Hymenoclea salsola*), and brittle bush (*Encelia farinosa*, *E. frutescens*). Other species occurring in this type are Ephedra sp., blackbush, hedgehog cactus (*Echinocactus* sp.), yucca (*Yucca* sp.), Joshua tree (*Yucca brevifolia*), ocotillo (*Fouquieria splendens*), indigo bush (*Dalea*), boxthorn (*Lycium*), globemallow (*Sphaeralcea ambigua*), cactus (*Echinocereus engelmanii*, *E. mojavensis*), golden cholla (*Opuntia echinocarpa*), beaver tail cactus (*O. basilaris*), mesquite (*Prosopis juliflora*), screwbean mesquite (*P. pubescens*) and various perennial and annual grasses and forbs. Baccharis (*Baccharis brachyphylla, B. sergiloides*), desert ironwood (*Olneya tesota*), arrowweed (*Pluchea sericea*) and desert willow (*Chilopsis linearis*) may occur along water courses (Society for Range Management 1994).

Forest Land

Forest Land contains a tree-crown aerial density of 10 percent or more. These areas are stocked with trees capable of producing timber or other wood products (USDA & USFS 2015).

Montane Meadows

Montane meadows are habitats occupied by grass (*Poaceae* family) and grasslike species. The primary environmental characteristic of meadow vegetation is an associated high water table, during all or part of the year (Society for Range Management 1994).

Montane Shrubland

The cover type is characterized by evergreen species but deciduous or partially deciduous species may also be present. The following species usually characterize montane shrubland communities: whitethorn ceanothus (*Ceanothus cordulatus*), snowbrush ceanothus (*C. velutinus*), greenleaf manzanita (*Artostaphylos patula*), pinemat manzanita (*A. nevadensis*), Hoary manzanita (*A. canescens*), bitter cherry (*Prunus emarginata*), huckleberry oak (*Quercus vaccinifolia*), Sierra chinquapin (*Castanopsis sempervirens*), juneberry (*Amelanchier pallida*), fremont silktassel (*Garrya fremontii*), Greene goldenweed (*Haplopappus greenei*), mountain mahogany, toyon (*Heteromeles arbutifolia*), sumac (*Rhus* sp.), and California coffeeberry (*Rhamnus californica*). In addition, conifer and oak trees may occur in sparse stands or as scattered individuals (Society for Range Management 1994).

Mountain Big Sagebrush

Mountain big sagebrush is dominated by mountain big sagebrush (*Artemisia tridentata* ssp. *vaseyana*) with an understory of perennial grasses and forbs. Mountain big sagebrush is the most abundant shrub accompanied by antelope bitterbrush, green rabbitbrush (*Chrysothamnus ciscidiflorus*), gray horsebrush, and Mountain snowberry (*Sumphoricarpos oreophilus*). The understory consists of perennial grasses and forbs including Idaho fescue and bluebunch wheatgrass, Sandberg bluegrass, mountain brome (*Bromus carinatus* and related spp.), slender wheatgrass (*Agropyron caninum*), junegrass (*Koeleria pyramidata*), onion grass (*Melica* spp.), western needlegrass (*Stipa occidentalis*) and sedges (*Carex geyeri* and spp.). Common forms include yarrow, milkvetches (*Astragalus miser* and spp.), arrowleaf balsamroot, tapertip, hawksbeard (*Crepis acuminata*), Wyeth and sulphur buckwheat (*Eriogonum heraleoides* and *E. umbellatum*), Aven (*Geum triflorum*), biscuitroot (*Lomatium triternatum* and spp.), Lupine, longleaf phlox and groundsel (*Senecio interrimus*) (Society for Range Management 1994).

North Coastal Shrub

North coastal shrub includes coyote bush (*Baccharis pilularis* spp. *consanguinea*), blueblossom ceanothus (*Ceanothus thrysiflorus*), California coffeeberry, California wax myrtle (*Myrica californica*), bush lupine (*Lupinus arboreus*), salal (*Gaultheria shallon*), cowparsnip (*Heracleum lanatum*), blue wildrye (*Elymus glaucus*), and giant horsetail (*Equisetum telemateia*) in the overstory. Beneath the overstory is a mixture of bush monkeyflower (*Diplacus aurantiacus*), coastal buckwheat (*Eriogonum latifolium*), goldenweed (*Haplo-pappus ericoides*), golden yarrow (*Eriophyllum staechadifolium*), Suksdorfs sagebrush (*Artemisia suksdorfii*), yerba santa (*Eriodictylon californicum*), California blackberry (*Rubus vitifolius*), Nootka rose (*Rosa nutkana*), poison oak (*Toxicodendron diversilobum*), salmonberry (*Rubus spectabilis*), thimbleberry (*Rubus parviflorus*), trailing blackberry (*Rubus ursinus*), red fescue (*Festuca rubra*), slough sedge (*Carex obnupta*), sweet vernalgrass (*Anthoxanthum odoratum*), sweet velvetgrass (*Holcus lanatus*), Canada goldenrod (*Solidago canadensis*), paintbrush (*Castilleja latifolia*), pearly everlasting (*Anaphalis margaritacea*), western yarrow (*Achillea millefolium*), brackenfern (*Pteridium aquilinum var. lanuginosum*), and sword fern (*Polystichum munitum*). Gorse (*Ulex europaeus*) and Scotch broom (*Cytisus scoparius*) are sometimes major components (Society for Range Management 1994).

Salt Desert Shrub

Salt desert shrub occurs in low elevation landscapes in the temperate deserts of the Great Basin and surrounding areas in the western United States (U.S.). Vegetation cover is low and is dominated by one or more species of low-growing chenopod shrubs. Dominant species include shadscale (*Atriplex confertifolia*),

black greaseweed (*Sarcobatus vermiculatus*), and winterfat (*Ceratoides lanata*). Other species may include four-wing saltbush (*Atriplex canescens*), Bailey's greasewood (*Sarcobatus baileyii*), bud sagebrush (*Artemisia spinescens*), salt rabbitbrush, black sagebrush (*Artemisia nova*), Nuttall's saltbush (*Atriplex nuttallii*), Indian rice grass (*Oryzapsis hymenoides*), Saltgrass (*Distichlis spicatum*), Galleta (*Hilaria jamesii*), Squirreltail, alkali sacaton (*Sporobolus airoides*), bluejoint (*Elymus triticoides*), and great basin wildrye (*Elymus cinereus*) (Society for Range Management 1994).

Scrub Oak Mixed Chaparral

Scrub Oak Mixed Chaparral is dominated by scrub oak or interior live oak (*Quercus wislizenii* var. *frutescents*) with a wide variety of associated shrubs. Common associates include mountain mahogany, toyon, hollyleaf cherry (*Prunus ilicifolia*), silktassel (*Garrya flavescens*, *G. veatchii*), California coffeeberry, redberry (*Rhamnus ilicifolia*), foothill ash (*Fraxinus dipetala*), and elderberry (*Sambucus mexicana*), honeysuckle (*Lonicera subspicata*), wild cucumber (*Marah macrocarpus*), chaparral virgin's bower (*Clematis lasiantha*), and poison oak. Seral communities (10-60 years old) are characterized by a relatively high cover of ceanothus species including chaparral whitehorn (*Ceanothus leucodermis*), hairy ceanothus, woollyleaf ceanothus, hoaryleaf ceanothus (*C. crassifolius*), cupleaf ceanothus, buckbrush and blue-blossom ceanothus (*C. thyrsiflorus*) (Society for Range Management 1994).

Urban

This category applies to landscapes that are dominated by urban structures, residential units, or other developed land use elements such as highways, parks, cemeteries and the like. In those cases where the managed landscapes may have a considerable vegetation component, other land use categories may be more appropriate, such as Ornamental Conifer and Hardwood mixtures within parks (USDA 2009).

Valley Grassland

Valley grassland is characterized by herbaceous annual plants including common genera like Erodium, Trifolium, Madia, Amsinckia, and Brassica, mixed with species from the grass genera (Avena, Bromus, Festuca, and Hordeum) (Society for Range Management 1994).

Water

Water is labeled in CALVEG mapping in those cases in which permanent sources of surface water are identified within a landscape unit of sufficient size to be mapped. The category includes lakes, streams, canals of various sizes, bays, estuaries, and similar water bodies. These areas are considered to have a minimum of vegetation components, except along the edges, which may be mapped as types such as Wet Meadows, Tule-Cattail freshwater marshes, or Pickleweed-Cordgrass saline or mixed marshes. Islands of sufficient size within water bodies are mapped according to their terrestrial dominant vegetation types (USDA 2009).

Wetlands

Wetlands can be divided into two major types: fresh emergent wetlands and saline emergent wetlands. Fresh emergent wetlands are characterized by frequent flooding, upright, perennial hydrophytes and roots that are adapted to anaerobic conditions, with species such as big leaf sedge (*Carex amplifolia*), balticrush (*Juncus balticus*), redroot nutgrass (*Cyperus erythrorhizas*), saltgrass (*Distichlis spicata*), tule bulrush (*Scirpus validus*), river bulrush (*Scirpus fluviatilis*), and arrowhead (*Sagitarria* spp.). Saline emergent

wetlands are characterized by salt or brackish water and are dominated by species such as cordgrass (*Spartina* spp.), pickleweed (*Salicornia* spp.), saltgrass (*Distichlis spicata* var. *stricta*), and marsh dodder (*Cuscuta* spp.) (Society for Range Management 1994).

Special-Status Species

The term special-status species refers to plant and wildlife species that are considered sufficiently rare that they require special consideration and/or protection and should be, or currently are, listed as rare, threatened, or endangered by the federal and/or state governments. Such species are legally protected under the federal Endangered Species Act (FESA) and/or state Endangered Species Act (CESA) or other regulations, or are species that are considered sufficiently rare by the regulatory and scientific community to qualify for protection. The term special-status species includes the following:

- Species listed or proposed for listing as threatened or endangered under the FESA (Code of Federal Regulations Title 50, Section 17.12 [listed plants] and Section 17.11 [listed animals] and various notices in the Federal Register [FR] [proposed species]);
- Species that are candidates for possible future listing as threatened or endangered under the FESA (61 FR 40, February 28, 1996);
- Species listed or proposed for listing by the State of California as threatened or endangered under the CESA (California Code of Regulations Title 14, Section 670.5);
- Plants listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code [CFGC] Section 1900 et seq.);
- Species designated by CDFW as California Species of Special Concern (SSC);
- Animals fully protected under the CFGC (Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]);
- Species that meet the definitions of rare and endangered under CEQA. CEQA Section 15380 provides that a plant or animal species may be treated as "rare or endangered" even if not on one of the official lists (CEQA Guidelines Section 15380); and
- Plants considered by CDFW and CNPS to be "rare, threatened or endangered in California" (California Rare Plant Rank 1A, 1B, and 2).

A comprehensive list of special-status plant and wildlife species that could occur within the Project area was compiled based on a database search and literature review to assess the likelihood of species occurrence and potential impacts to these species from future solar energy facilities that could occur within the County as a result of the Project. Occurrences of special-status species within the Project area that have been recorded in the CNDDB are shown in **Figure 3.4-2**, *CNDDB Occurrences*.

Plants

A total of 78 special-status plant species were evaluated for their potential to occur within the Project area. Of these, it was determined that 15 have a high potential to occur (e.g., La Graciosa thistle, Gaviota tarplant, Vandenberg monkeyflower, Lompoc yerba santa), 15 have a moderate to high potential to occur, 18 have a moderate potential to occur, 13 have a low to moderate potential to occur, 16 have a low potential to occur, and one is not expected to occur. A detailed discussion of each special-status plant species, their preferred habitat, and potential to occur within the Project area is included in Appendix C.

Wildlife

A total of 65 special-status wildlife species were evaluated for their potential to occur within the Project area. It was determined that 27 have a high potential to occur (e.g., vernal pool fairy shrimp, tidewater goby, California tiger salamander, California red-legged frog, western snowy plover), 8 have a moderate to high potential to occur, 23 have a moderate potential to occur, one has a low to moderate potential to occur, and 6 have a low potential to occur. A detailed discussion of each special-status wildlife species, their preferred habitat, and potential to occur within the Project area is included in Appendix C.

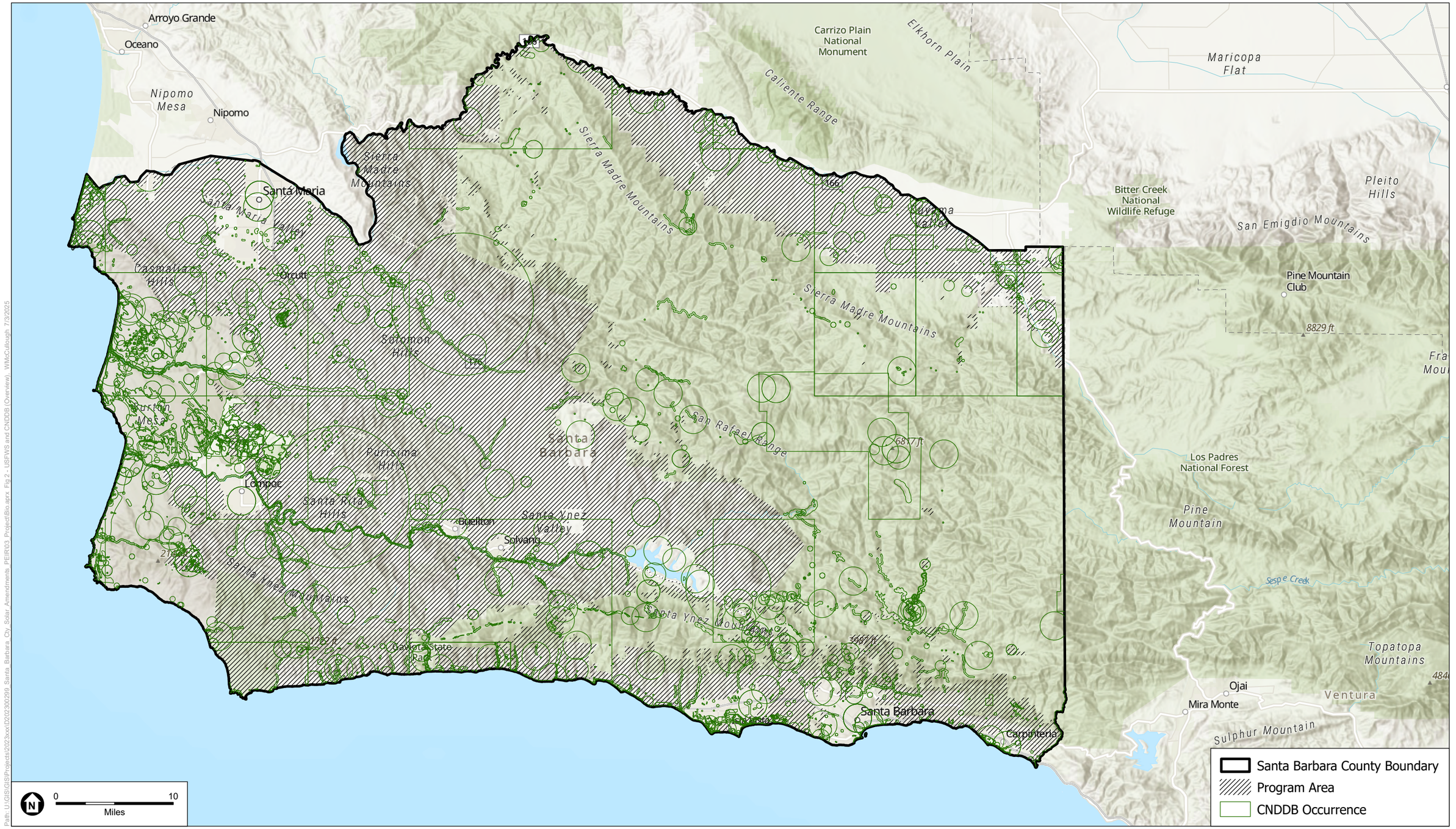
Critical Habitat

The USFWS designates critical habitat for species that have been listed as threatened or endangered. Critical habitat is defined in FESA Section 3(5)(A) as those lands (or waters) within a species' current range that contains the physical or biological features that are considered essential to its conservation. Agencies that propose, fund, or issue a permit for a project that may affect a federally listed species or critical habitat must prepare a Habitat Conservation Plan as part of an application for a permit from the USFWS. As shown in **Figure 3.4-3**, *Critical Habitat,* the Project area contains critical habitat for the following 14 species(USFWS 2025a):

- Gaviota tarplant (*Deinandra increscens* ssp. *villosa*)
- La Graciosa thistle (*Cirsium scariosum* var. *loncholepis*)
- Lompoc yerba santa (*Eriodictyon capitatum*)
- Vandenberg monkeyflower (*Diplacus vandenbergensis*)
- Ventura marsh milk-vetch (*Astragalus pycnostachyus* var. *lanosissimus*)
- Vernal pool fairy shrimp (*Branchinecta lynchi*)
- California tiger salamander (*Ambystoma californiense* pop. 2)
- Arroyo toad (*Anaxyrus californicus*)
- California red-legged frog (*Rana draytonii*)
- Tidewater goby (*Eucyclogobius newberryi*)
- California condor (*Gymnogyps californianus*)
- Least Bell's vireo (*Vireo bellii pusillus*)
- Southwestern willow flycatcher (*Empidonax traillii extimus*)
- Western snowy plover (*Anarhynchus nivosus nivosus*)

Aquatic Resources

Four primary watersheds occur within the Project area including Santa Maria, which includes the Cuyama and Sisquoc watersheds; San Antonio Creek; Santa Ynez; and South Coast, which is composed of approximately 50 short, steep watersheds. The headwaters of the principal waters are generally undeveloped, and the middle and lower sections are often developed with urban or agricultural uses.



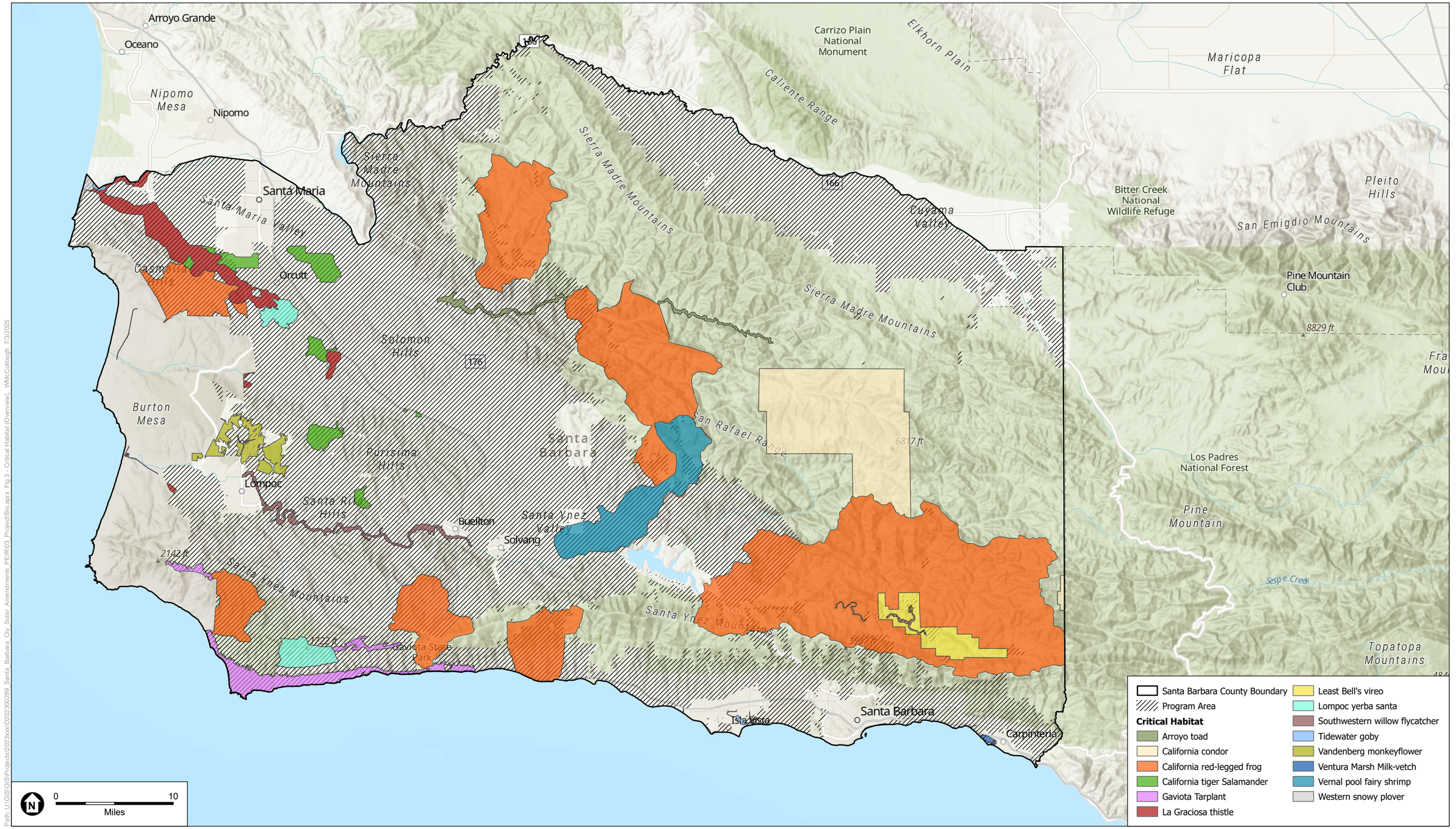
Path: U:\GIS\GIS\Projects\2023xxx\D202300299_Santa_Barbara_Cty_Solar_Amendments_PEIR\03_Project\Bio.aprx Fig 2 - USFWS and CNDDB (Overview), WMcCullough 7/3/2025

SOURCE: ESA, 2025; USFWS, 2025; CDFW, 2025

Santa Barbara County Utility-Scale Solar Amendments

Figure 3.4-2
CNDDB Occurrences

ESA



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SOURCE: ESA, 2025; USFWS, 2025

Santa Barbara County Utility-Scale Solar Amendments

Figure 3.4-3
Critical Habitat

ESA

The four major rivers draining these watersheds are the Santa Maria, Sisquoc, Cuyama, and Santa Ynez. Several creeks are associated with each one of these watersheds. The drainages within these watersheds are of biological importance as they provide valuable foraging habitat, breeding habitat, and movement habitat for a variety of animal species including sensitive species such as steelhead – Southern California distinct population segment (DPS) 10 (*Oncorhynchus mykiss*), California red-legged frog, and southwestern willow flycatcher.

Wetlands are regarded as important biological resources both because of their rarity in southern California and because they serve a variety of functional values (e.g., habitat for plants and wildlife, water storage, flood control, water quality improvement). Several types of wetlands exist in the County including coastal salt marshes, vernal pools, and riparian habitats. The USFWS NWI is a nationwide database showing the distribution and types of U.S. wetlands to aid in conservation efforts. Due to the broad County-wide scale of this assessment, an aquatic resources delineation was not conducted as part of this analysis; however, this analysis considers riparian and wetland areas identified by the NWI within the Project area (USFWS 2025b). These resources are shown in **Figure 3.4-4**, *Aquatic Resources*.

Aquatic resources within the Project area may be subject to the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), CDFW, and California Coastal Commission (CCC) jurisdiction and regulatory authority. The limits of potential USACE waters of the U.S. and RWQCB waters of the State are based on the presence of "ordinary high water mark" (OHWM) indicators, such as a clear, natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; and/or the presence of litter and debris. Wetlands, including seasonal wetlands, seeps, marshes, and similar areas, are defined by the USACE as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3[b]; 40 CFR 230.3[t]). Indicators of three wetland parameters (i.e., hydric soils, hydrophytic vegetation, and wetlands hydrology), as determined by field investigation, must be present for a site to be classified as a wetland by USACE. The CCC requires only one wetland parameter to classify an area as a wetland. Areas within CDFW jurisdiction typically refer to streambeds and associated wetland or riparian vegetation. The boundaries of the streams and associated vegetation are delineated based on a break in slope at the top of bank for aquatic features or to the outer edge of the overhanging riparian or wetland vegetation. In addition, wetlands that have not been included in the NWI may be present within the County and could also be subject to USACE, RWQCB, CDFW, and/or CCC jurisdiction and regulatory authority.

Wildlife Movement Corridors

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

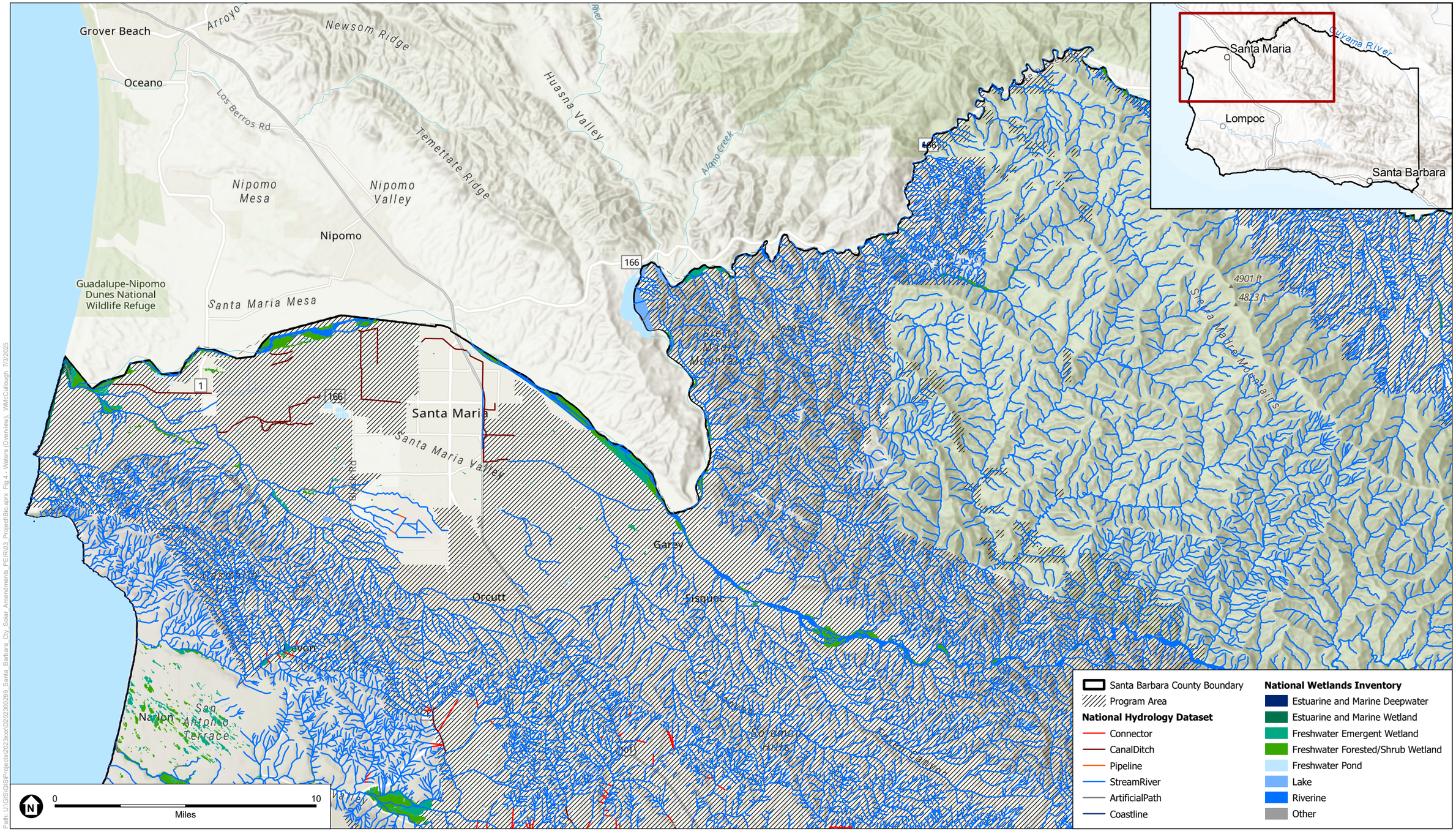
The habitats within the linkage or corridor do not necessarily need to be the same as the habitats that are being linked. Rather, the link merely needs to contain sufficient cover and forage to allow temporary inhabitation by ground-dwelling species. Typically, habitat linkages are contiguous strips of natural areas, though dense plantings of non-native landscape vegetation can be used by certain disturbance-tolerant species.

Depending upon the species using a corridor, specific physical resources (such as rock outcroppings, vernal pools, or oak trees) may need to be located within the habitat link at certain intervals to allow slower-moving species to traverse the link. For highly mobile or aerial species, habitat linkages may be discontinuous patches of suitable resources spaced sufficiently close together to permit travel along a route in a short period of time.

The mountainous regions of the Project area may support wildlife movement on a regional scale while riparian corridors may provide regional or more local scale opportunities for wildlife movement throughout the Project area. The CDFW Terrestrial Habitat Connectivity Mapper identifies two essential connectivity areas within the Project area (CDFW 2025e). One is located near the coastline in the western portion of the County from south of Guadalupe to south of Lompoc. The other is located over a large area of the mountainous regions in the southern portion of the County. Three important movement corridors are also identified in the report titled Missing Linkages: Restoring Connectivity to the California Landscape (Penrod et al. 2001). All three are located in the western part of the County and are associated with the Santa Ynez River, San Antonio Creek/Purissima Hills, and along the south coast near Gaviota. These areas are identified as important movement corridors for species such as steelhead, mountain lion, riparian birds, and other small carnivores. In addition, CDFW's Restoring California's Wildlife Connectivity Report identifies barriers to wildlife movement that are high priority for remediation. One of the identified barriers is located within the County, Gaviota Pass, which is a 6.3-mile segment of US Highway 101 in the southern portion of the County (CDFW 2022). Caltrans conducted a study of wildlife movement, roadkill, and habitat connectivity along US Highway 101 corridor at Gaviota Pass, from approximately Nojoqui Summit to Mariposa Reina. The study analyzed the spatial and temporal patterns of wildlife movements and roadkill along with assessments of existing infrastructure and surrounding land use to identify opportunities to improve wildlife connectivity and reduce wildlife vehicle collisions (CalTrans 2025). Wildlife movement corridors within the Project area and the County are shown in **Figure 3.4-5**, *Wildlife Movement Corridors*, below. In addition, wildlife movement corridors that have not been included in the CDFW Terrestrial Habitat Connectivity Mapper and Missing Linkages report may be present within the County, which should be assessed on a site-specific level by a qualified biologist.

Nesting Birds and Native Wildlife Nursery Sites

Nursery sites within the County include trees, shrubs, forblands, and grasslands within the Project area may provide habitat for nesting birds (e.g., individual nests or rookeries) or that are important nursery areas for other wildlife species (e.g., bat maternity colonies). Even the disturbed and developed areas within the Project area may provide suitable habitat for ground-nesting species such as killdeer. The nesting bird season is generally considered to be from February 1 through August 31.



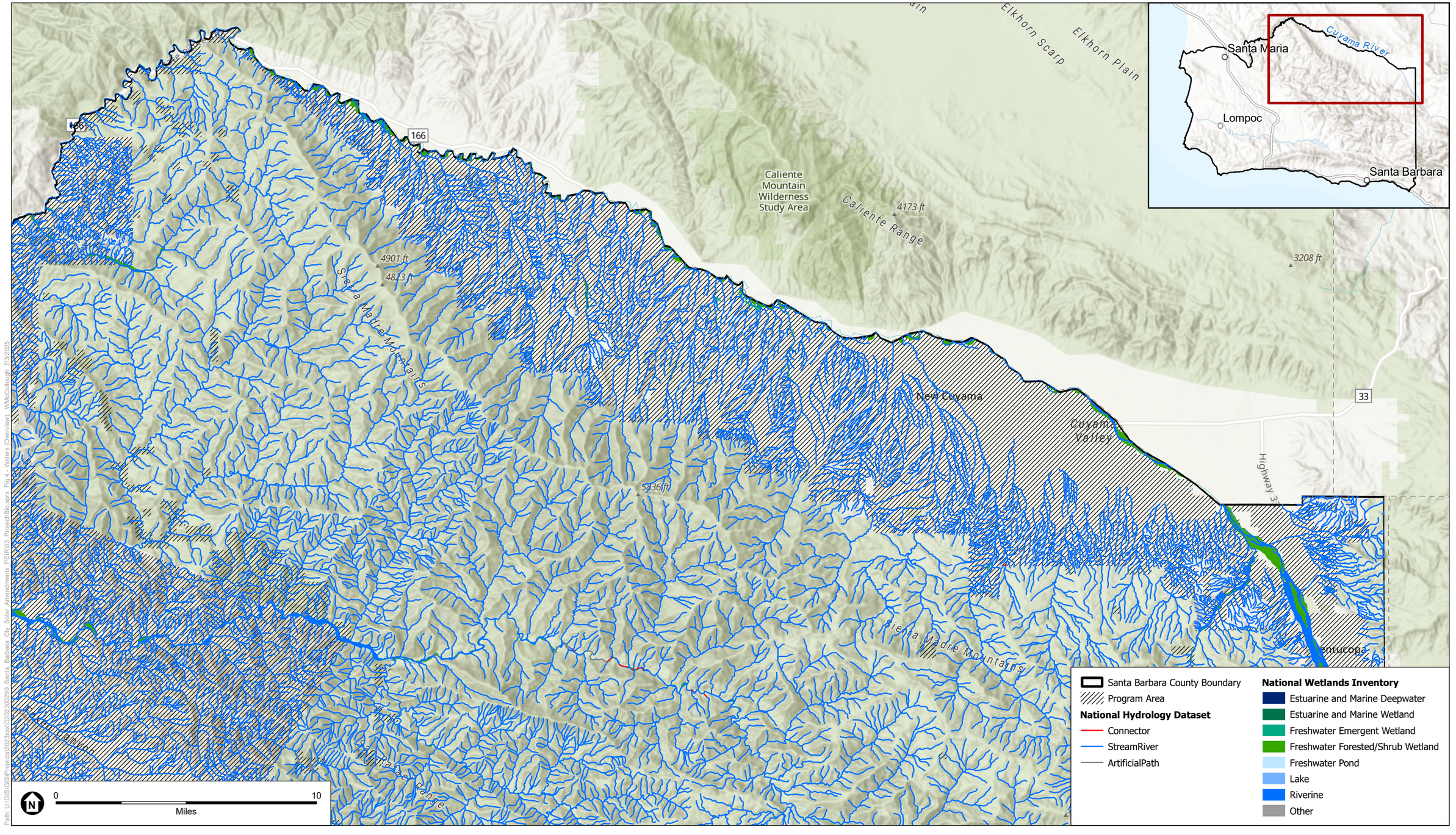
Path: U:\GIS\GISProjects\2023xxx\D202300299_Santa_Barbara_Cty_Solar_Amendments_PEIR\03_Project\Bio.aprx Fig 4 - Waters (Overview). WMcCullough 7/3/2025

SOURCE: ESA, 2025; NHD, 2025; NWI, 2025

Santa Barbara County Utility-Scale Solar Amendments

Figure 3.4-4
Aquatic Resources

ESA



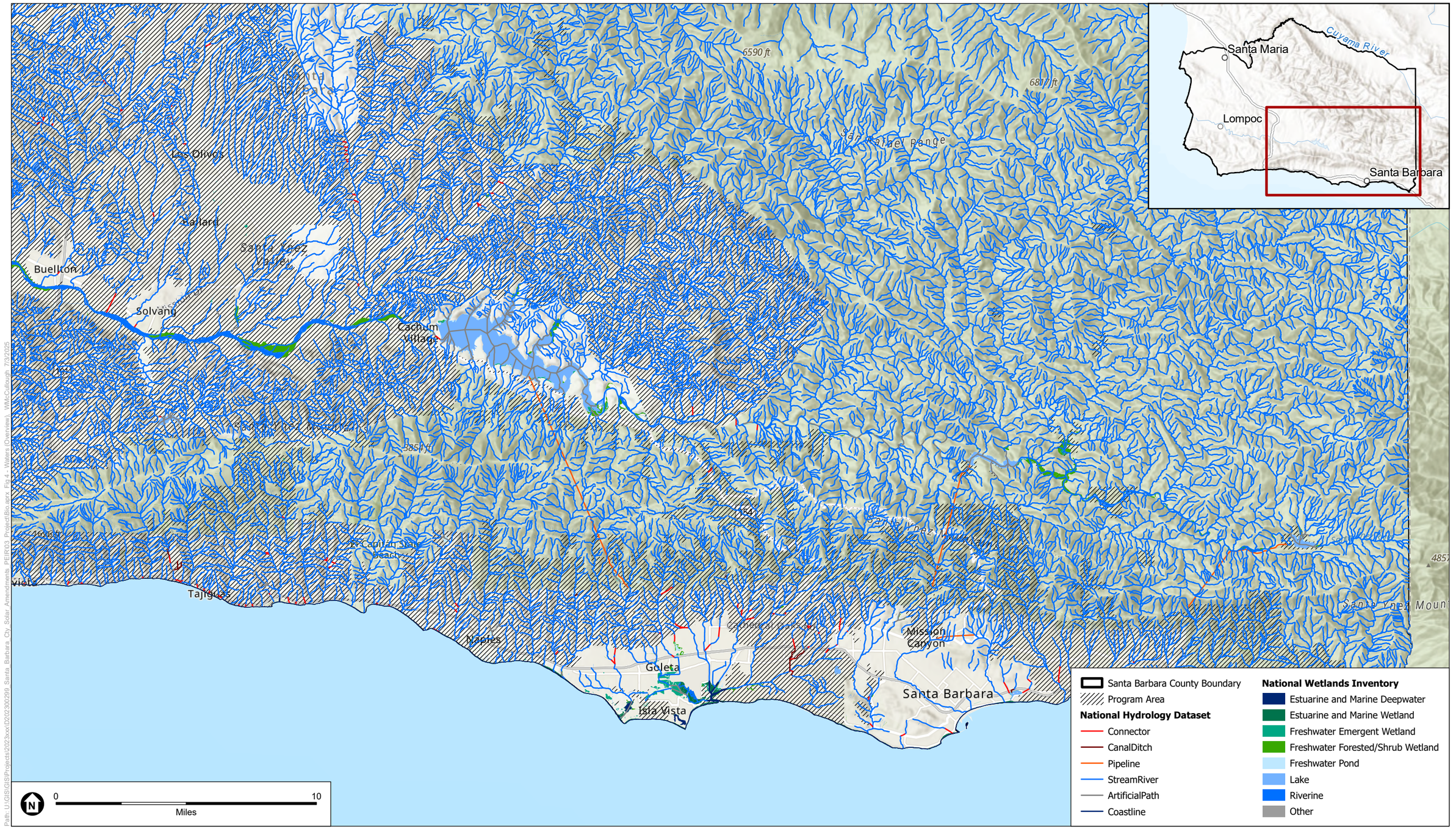
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SOURCE: ESA, 2025; NHD, 2025; NWI, 2025

Santa Barbara County Utility-Scale Solar Amendments

Figure 3.4-4
Aquatic Resources

ESA

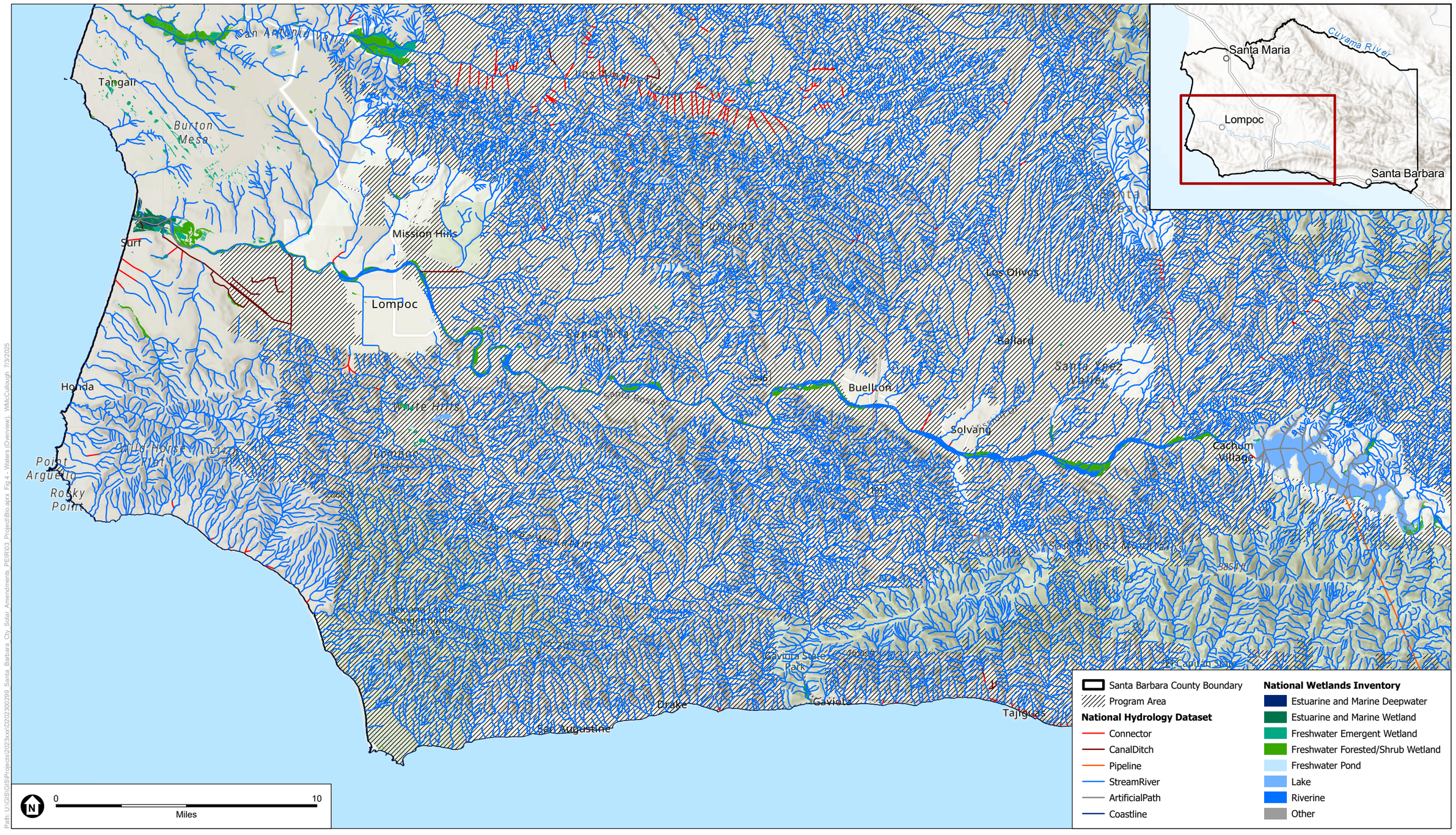


SOURCE: ESA, 2025; NHD, 2025; NWI, 2025

Santa Barbara County Utility-Scale Solar Amendments

Figure 3.4-4
Aquatic Resources

ESA



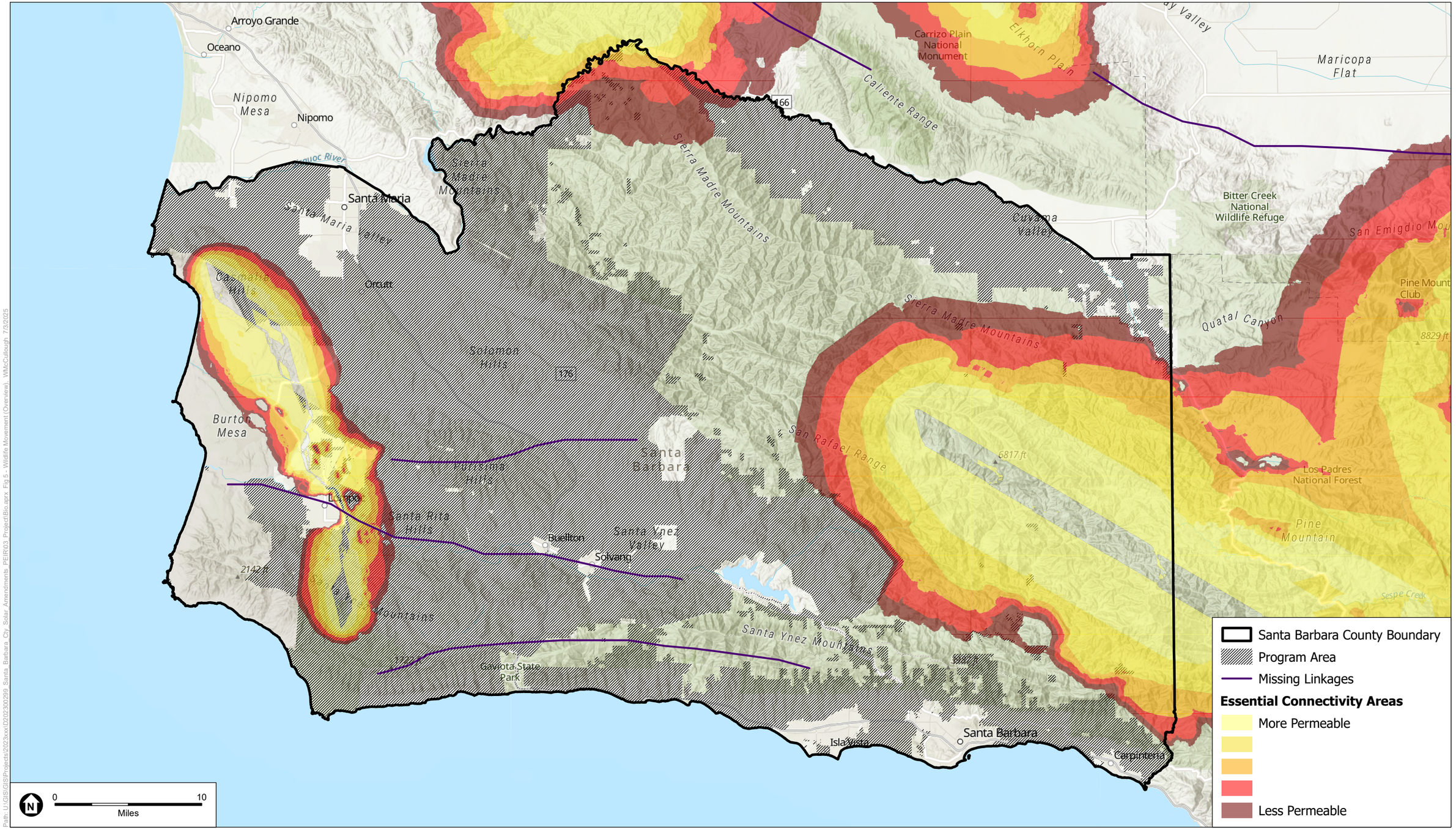
SOURCE: ESA, 2025; NHD, 2025; NWI, 2025

Santa Barbara County Utility-Scale Solar Amendments

Figure 3.4-4
Aquatic Resources

ESA

Path: U:\GIS\GIS\Projects\2023xxx\D202300299_Santa_Barbara_Cty_Solar_Amendments_PEIR\03_Project\Bio.aprx Fig 4 - Waters (Overview), WMcCullough, 7/3/2025



SOURCE: ESA, 2025; CDFW, 2025

Santa Barbara County Utility-Scale Solar Amendments

Figure 3.4-5
Wildlife Movement Corridors

ESA

Path: U:\GIS\GIS\Projects\2023xxx\D202300299_Santa_Barbara_Cty_Solar_Amendments_PEIR\03_Project\Bio.aprx Fig 5 - Wildlife Movement (Overview), WMcCullough 7/3/2025

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3.4.3 Regulatory Framework

This section describes the federal, state, and local laws, policies, and regulations that would apply to the Project.

Federal

Federal Endangered Species Act

The USFWS and National Marine Fisheries Service (NMFS) are the designated federal agencies responsible for administering the FESA. The FESA defines species as "endangered" and "threatened" and provides regulatory protection for any species thus designated. FESA Section 9 prohibits the "take" of species listed by the USFWS as threatened or endangered. As defined in the FESA, taking means "… to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in such conduct." Recognizing that take cannot always be avoided, FESA Section 10(a) includes provisions for takings that are incidental to, but not the purpose of, otherwise lawful activities.

FESA Section 7(a)(2) requires all federal agencies, including USFWS, to evaluate projects authorized, funded, or carried out by federal agencies with respect to any species proposed for listing or already listed as endangered or threatened and the species' critical habitat, if any is proposed or designated. Federal agencies must undertake programs for the conservation of endangered and threatened species and are prohibited from authorizing, funding, or carrying out any action that would jeopardize a listed species or destroy or modify its "critical habitat."

As defined in the FESA, "individuals, organizations, states, local governments, and other non-federal entities are affected by the designation of critical habitat only if their actions occur on federal lands, require a federal permit, license, or other authorization, or involve federal funding."

FESA Section 4(a)(3) and (b)(2) requires the designation of critical habitat to the maximum extent possible and prudent based on the best available scientific data and after considering the economic impacts of any designations. Critical habitat is defined in FESA Section 3(5)(A): (1) areas within the geographic range of a species that are occupied by individuals of that species and contain the primary constituent elements (PCEs) (physical and biological features) essential to the conservation of the species, thus warranting special management consideration or protection; and (2) areas outside of the geographic range of a species at the time of listing but that are considered essential to the conservation of the species.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC 703 et seq.) domestically implements a series of international treaties that provide for international migratory bird protection. The MBTA authorizes the Secretary of the Interior to regulate the taking of migratory birds; the act provides that it shall be unlawful, except as permitted by regulations, "to pursue, take, or kill any migratory bird, or any part, nest or egg of any such bird" (16 USC 703).

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 USC 668) protects bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) by prohibiting the taking, possession, and commerce of these species, and establishes civil penalties for violation of this act.

Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the U.S. and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the law was significantly reorganized and expanded in 1972. "Clean Water Act" became the law's common name with amendments in 1972.

Section 404 of the CWA establishes a program to regulate the discharge of dredged or fill material into waters of the U.S., including wetlands. Activities in waters of the U.S. regulated under this program include fill for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports), and mining projects. Section 404 requires that a permit be issued before dredged or fill material may be discharged into waters of the U.S., unless the activity is exempt from regulation under Section 404 (e.g., certain farming and forestry activities).

Wetlands are defined by USACE as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas" (33 CFR 328.3[c][1]; 40 CFR 120.2[c][1]). Indicators of three wetland parameters (hydric soils, hydrophytic vegetation, and wetlands hydrology), as determined by site investigation, must be present at a site for USACE to classify the site as a wetland (Environmental Laboratory 1987).

Section 401 of the CWA gives the state authority to grant, deny, or waive certification of proposed federally licensed or permitted activities resulting in discharge to waters of the U.S. The State Water Resources Control Board (State Water Board) directly regulates multi-regional projects and supports the Section 401 certification and wetlands program statewide. The RWQCB regulates activities pursuant to Section 401(a)(1) of the federal CWA, which specifies that certification from the state is required for any applicant requesting a federal license or permit to conduct any activity including but not limited to the construction or operation of facilities that may result in any discharge into navigable waters. The certification shall originate from the state or appropriate interstate water pollution control agency where the discharge originates or will originate. Any such discharge will comply with the applicable provisions of CWA Sections 301, 302, 303, 306, and 307.

Rivers and Harbors Act, Section 10

Section 10 of the Rivers and Harbors Act of 1899 requires authorization from the USACE for the construction of any structure in or over any navigable water of the U.S. Structures or work outside the limits defined for navigable waters of the U.S. require a Section 10 permit if the structure or work affects the course, location, or condition of the water body. The law applies to any dredging or disposal of dredged materials, excavation, filling, re-channelization, or any other modification of a navigable water of the U.S. and applies to all structures and work. It further includes, without limitation, any wharf, dolphin,

weir, boom breakwater, jetty, groin, bank protection (e.g., riprap, revetment, bulkhead), mooring structures such as pilings, aerial or subaqueous power transmission lines, intake or outfall pipes, permanently moored floating vessel, tunnel, artificial canal, boat ramp, aids to navigation, and any other permanent, or semi-permanent obstacle or obstruction. It is important to note that Section 10 applies only to navigable waters (i.e., waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce [USACE 2025]) and thus does not apply to work in non-navigable wetlands or tributaries. In some cases, Section 10 authorization is issued by the USACE concurrently with CWA Section 404 authorization, such as when certain Nationwide Permits are used.

State

CEQA Guidelines Section 15380

Although Threatened and Endangered species are protected by specific federal and State statues, CEQA Guidelines Section 15380(b) provides that a species not listed by FESA or the CESA may be considered rare or endangered if it can be shown to meet certain criteria for rarity. These criteria have been modeled after the definition of FESA and the section of CFGC discussing rare or endangered plants or animals. This section was included in the CEQA Guidelines primarily for situations in which a public agency is reviewing a project that may have a significant effect on a species that meets the CEQA criteria but has not been listed by CDFW or USFWS. CEQA provides the ability to protect species from potential project impacts until the respective agencies have the opportunity to designate the species protection.

CEQA Guidelines also identify other locally or regionally significant resources, including natural communities or habitats, as sensitive resources. CEQA requires an assessment of such communities and potential project impacts. Natural communities identified by CDFW as sensitive are considered to be significant resources and fall under the CEQA Guidelines for addressing impacts. Local planning documents such as general and area plans often identify natural communities, but not typically at a site-specific scale.

California Endangered Species Act

The CESA (CFGC Section 2050 et seq.) establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The CESA mandates that state agencies should not approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. There are no state agency consultation procedures under the CESA. For projects that would affect a listed species under both the CESA and the FESA, compliance with the FESA would satisfy the CESA if CDFW determines that the federal incidental take authorization is "consistent" with the CESA under CFGC Section 2080.1. For projects that would result in take of a species listed under the CESA only, an incidental take permit is required under Section 2081(b).

Porter-Cologne Water Quality Control Act

The State Water Board regulates the protection of waters of the state through Section 13050[e] of the California Water Code. Waters of the state are broadly defined by the Porter-Cologne Water Quality Control Act to mean any surface water or groundwater, including saline waters within the boundaries of the state. Under this definition, isolated wetlands that may not be subject to regulations under federal law

are considered waters of the state and regulated accordingly. The California Water Boards are in the process of updating the state Wetland Area Protection Policy, which includes a proposed wetland definition.

Under the Porter-Cologne Water Quality Control Act, waters of the state (California's surface waters and groundwater, including wetlands) fall under the jurisdiction of the appropriate RWQCB. Under the act, the RWQCB must prepare and periodically update water quality control basin plans. Each basin plan sets forth water quality standards for surface water and groundwater, as well as actions to control nonpoint and point sources of pollution to achieve and maintain these standards. Projects that affect waters of the state must obtain a Waste Discharge Requirement from the RWQCB in the absence of federal waters. The majority of the County falls under the jurisdiction of the Central Coast RWQCB, though a small portion of the County (along its eastern boundary) is within the jurisdiction of the Los Angeles RWQCB.

California Fish and Game Code

Sections 1600–1616

Under these sections of the CFGC, a project proponent is required to notify CDFW prior to any project that would divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Pursuant to the code, a "stream" is defined as a body of water that flows at least periodically, or intermittently, through a bed or channel having banks and supporting fish or other aquatic life. Based on this definition, a watercourse with surface or subsurface flows that supports or has supported riparian vegetation is a stream and is subject to CDFW jurisdiction. Altered or artificial watercourses valuable to fish and wildlife are subject to CDFW jurisdiction. CDFW also has jurisdiction over dry washes that carry water during storm events. Preliminary notification and project review generally occur during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resource. These modifications are formalized in a Streambed Alteration Agreement.

Sections 3503, 3503.5, 3513, and 3800

Under these sections of the CFGC, a project proponent is not allowed to conduct activities that would result in the taking, possessing, or destroying of any birds of prey or their nests or eggs; the taking or possessing of any migratory nongame bird as designated in the MBTA; the taking, possessing, or needlessly destroying of the nest or eggs of any bird; or the taking of any nongame bird pursuant to CFGC Section 3800.

Sections 3511, 4700, 5050, and 5515

These sections of the CFGC prohibit take or possession of fully protected species. CDFW does not have the authority to permit incidental take of fully protected species when activities are proposed in areas inhabited by those species.

Native Plant Protection Act

California's Native Plant Protection Act (NPPA) requires all state agencies to use their authority to carry out programs to conserve endangered and rare native plants. Provisions of the NPPA prohibit the taking of listed plants from the wild and require notification of CDFW at least ten days in advance of any change in land use. This allows CDFW to salvage listed plant species that otherwise would be destroyed. Landowners are required to conduct botanical inventories and consult with CDFW during project planning to comply with the provisions of this act and sections of CEQA that apply to rare or endangered plants.

Local

County of Santa Barbara

County of Santa Barbara Comprehensive Plan

The County has prepared the Santa Barbara County Comprehensive Plan (Comprehensive Plan), which is a long-term plan that is meant to guide future development within the County. The Comprehensive Plan includes a Land Use Element, which lays out the general patterns of development throughout the County, as well as a Conservation Element, which includes policies that address the conservation, development, and use of natural resources including water, forests, soils, rivers, and mineral deposits in the County (Santa Barbara County 1979a; Santa Barbara County 1980). The Comprehensive Plan also includes an Open Space Element that identifies areas within the County where natural resources such as wetlands, rare and endangered species, and shorelines and dunes occur (Santa Barbara County 1979b), as well as an Environmental Resources Management Element which summarizes the environmental factors that are analyzed in the Seismic Safety and Safety, Conservation, and Open Space Elements of the General Plan and relates these policies to proposals regarding preservation of open space.

The Land Use Element and Conservation Element policies related to biological resources that would be applicable to the Project include the following (Santa Barbara County 1979a; Santa Barbara County 1980):

Land Use Element

Hillside and Watershed Protection Policies

1. Plans for development shall minimize cut and fill operations. Plans requiring excessive cutting and filling may be denied if it is determined that the development could be carried out with less alteration of the natural terrain.
2. All developments shall be designed to fit the site topography, soils, geology, hydrology, and any other existing conditions and be oriented so that grading and other site preparation is kept to an absolute minimum. Natural features, landforms, and native vegetation, such as trees, shall be preserved to the maximum extent feasible. Areas of the site which are not suited to development because of known soil, geologic, flood, erosion, or other hazards shall remain in open space.
3. For necessary grading operations on hillsides, the smallest practical area of land shall be exposed at any one time during development and the length of exposure shall be kept to the shortest practicable amount of time. The clearing of land should be avoided during the winter rainy season and all measures for removing sediments and stabilizing slopes should be in place before the beginning of the rainy season.
4. Sediment basins (including debris basins, desilting basins, or silt traps) shall be installed on the project site in conjunction with the initial grading operations and maintained through the development process to remove sediment from runoff waters. All sediment shall be retained on site unless removed to an appropriate dumping location.
5. Provisions shall be made to conduct surface water to storm drains or suitable watercourses to prevent erosion. Drainage devices shall be designed to accommodate increased runoff resulting from modified soil and surface conditions as a result of development. Water runoff shall be retained onsite whenever possible to facilitate groundwater recharge.
6. Degradation of the water quality of groundwater basins, nearby streams, or wetlands shall not result from development of the site. Pollutants, such as chemicals, fuels, lubricants, raw

sewage, and other harmful waste, shall not be discharged into or alongside coastal streams or wetlands either during or after construction.

Streams and Creeks Policies

1. All permitted construction and grading within stream corridors shall be carried out in such a manner as to minimize impacts from increased runoff, sedimentation, biochemical degradation, or thermal pollution.

Conservation Element

- Naples Reef and inshore area should be maintained primarily as a scientific research and educational area. The Local Coastal Program, in consultation with the state Department of Fish and Game, recommends that continued recreational use of this area be permitted and monitored to prevent depletion of marine resources.
- Coastal dunes should be protected from all but scientific and educational uses, except portions of the Guadalupe Dunes already scarred by ORV's. Wherever possible, dune areas should be placed in a "preserve" status. Ocean Beach County Park should not be expanded.
- In Goleta, Devereux, and Carpinteria sloughs, scientific and educational research and recreational activities should be limited, traffic should be minimized, and the present size of the sloughs should be maintained. The Mosquito Abatement District should be encouraged to reduce control activities to the minimum level needed to avoid severe nuisance problems and to carry out studies to achieve this goal.
- Native grasslands should be subjected only to regulated scientific study wherever they occur.
- On the More Mesa grasslands, only very light recreation restricted to trails should be permitted, in order to protect the White-tailed Kite.
- In the Santa Maria Grassland where the Spadefoot Toad lives, moderate intensity recreation can be tolerated as long as soil disturbance is minimized.
- In the Santa Ynez Valley canyon communities, unregulated and haphazard development should be prohibited, roads should be kept narrow, and cattle grazing closely controlled.
- In the Southern Oak Woodland along Rincon Creek, urban development and all but very light recreation should not be allowed.
- In the Foothill Woodland between Santa Cruz Guard Station and Wheat Peak, development should be stopped, and further road construction should be prevented. Moderate recreational use would be acceptable.
- In the Mixed Evergreen Forest Habitat, disturbance should be minimized by keeping roads as they are and curtailing development.
- In the Jualachichi Summit area, Jalama Road should not be widened, and cattle grazing should not be permitted near the summit.
- The Purisima Hills should be preserved by limiting road widening and restricting the number of trails.
- In the Coulter Pine Forest on the ridge of the Santa Ynez Mountains, the practice of spraying herbicide should be curtailed. The U.S. Forest Service has banned ORV's in order to minimize disturbance of the habitat.
- In the Miranda Pine Mountain and associated upland area, light recreation activities could be allowed, but road building and development should be stopped.

- Around trees serving as traditional roosting sites for butterflies and Turkey Vultures, a 100 foot wide buffer zone should be established for protection of these species.
- The nine streams in the County deserving special protection are Rattlesnake, Mission, San Roque, San Jose, Dos Pueblos, Tajiguas, Arroyo Hondo, Refugio, and Jalama Creeks. Only scientific study and light recreation activities should be permitted in or near these streams, and buffer strips at least 100 feet wide should be established. Pesticides should not be used in these buffer zones.
- Development of the Santa Ynez River should be halted, the river water should not be depleted further, and no pollutants should be discharged into the river.
- The eastern end of Lake Cachuma should remain undisturbed to protect the bird habitat, and the lake's north shore also should remain closed to the public.
- The County should evaluate each of these recommendations in preparing environmental impact reports, in order to ensure that adequate consideration is given to preserving ecological communities.

Santa Barbara County Coastal Land Use Plan

Santa Barbara County has prepared a Local Coastal Program (LCP) in accordance with the California Coastal Act, for the unincorporated county areas within the Coastal Zone. The LCP is required to include a Land Use Plan, which serves as the local coastal element of the County's general plan. The Santa Barbara County Coastal Land Use Plan (CLUP) is a guide for the general patterns of development throughout the coastal areas of the County. Its purpose is to protect coastal resources while accommodating land use development within the Coastal Zone. The CLUP includes policies related to major topics that reflect the principal coastal resource protection and development issues in the County. These policies are meant to bring the County into conformity with the Coastal Act, and all new development within the County's coastal zone will have to meet the standards set forth in these policies. CLUP policies related to biological resources that may be applicable to the future solar energy facilities that could be developed under the Project include the following (Santa Barbara County 1982):

- **9-1:** Prior to the issuance of a development permit, all projects on parcels shown on the land use plan and/or resource maps with a Habitat Area overlay designation or within 250 feet of such designation or projects affecting an environmentally sensitive habitat area shall be found to be in conformity with the applicable habitat protection policies of the land use plan. All development plans, grading plans, etc., show the precise location of the habitat(s) potentially affected by the proposed project. Projects which could adversely impact an environmentally sensitive habitat area may be subject to a site inspection by a qualified biologist to be selected jointly by the County and the applicant.

Habitat Type: Dunes

- **9-2:** Because of their State-wide significance, coastal dune habitats shall be preserved and protected from all but resource dependent, scientific, educational, and light recreational uses. Sand mining and oil well drilling may be permitted if it can be shown that no alternative location is feasible and such development is sited and designed to minimize impacts on dune vegetation and animal species. Disturbance or destruction of any dune vegetation shall be prohibited, unless no feasible alternative exists, and then only if re-vegetation is made a condition of project approval. Such re-vegetation shall be with native California plants propagated from the disturbed sites or from the same species at adjacent sites.

- **9-5:** For all permitted uses, including recreation, foot traffic on vegetated dunes shall be minimized. Where access through dunes is necessary, well-defined footpaths shall be developed and used.

Habitat Type: Wetlands

- **9-9:** A buffer strip, a minimum of 100 feet in width, shall be maintained in natural condition along the periphery of all wetlands. No permanent structures shall be permitted within the wetland or buffer area except structures of a minor nature, i.e., fences, or structures necessary to support the uses in Policy 9-10.

  The upland limit of a wetland shall be defined as: 1) the boundary between land with predominantly hydrophytic cover and land with predominantly mesophytic or xerophytic cover; or 2) the boundary between soil that is predominantly hydric and soil that is predominantly nonhydric; or 3) in the case of wetlands without vegetation or soils, the boundary between land that is flooded or saturated at some time during years of normal precipitation and land that is not.

  Where feasible, the outer boundary of the wetland buffer zone should be established at prominent and essentially permanent topographic or manmade features (such as bluffs, roads, etc.). In no case, however, shall such a boundary be closer than 100 feet from the upland extent of the wetland area, nor provide for a lesser degree of environmental protection than that otherwise required by the plan. The boundary definition shall not be construed to prohibit public trails within 100 feet of a wetland.

  For the Highway 101: Carpinteria to Santa Barbara project and the projects identified in Policy 7-31 and Policy 7-32, new development in wetlands or within the 100-foot wetland buffer strip may be permitted in accordance with the provisions of the Transportation Corridor Wetland Overlay District (TCWO), in Chapter 35-102H of the Coastal Zoning Ordinance.

- **9-14:** New development adjacent to or in close proximity to wetlands shall be compatible with the continuance of the habitat area and shall not result in a reduction in the biological productivity or water quality of the wetland due to runoff (carrying additional sediment or contaminants), noise, thermal pollution, or other disturbances.

Habitat Type: Native Grasslands

- **9-18:** Development shall be sited and designed to protect native grassland areas.

Habitat Type: Vernal Pools

- **9-21:** Development shall be sited and designed to avoid vernal pool sites as depicted on the resource maps.

Habitat Type: Butterfly Trees

- **9-22:** Butterfly trees shall not be removed except where they pose a serious threat to life or property, and shall not be pruned during roosting and nesting season.

- **9-23:** Adjacent development shall be set back a minimum of 50 feet from the trees.

Habitat Type: Marine Mammal Rookeries and Hauling Grounds

- **9-25:** Marine mammal rookeries shall not be altered or disturbed by recreational, industrial, or any other uses during the times of the year when such areas are in use for reproductive activities, i.e., mating, pupping, and pup care.

Habitat Type: White-Tailed Kite

- **9-26:** There shall be no development including agricultural development, i.e., structures, roads, within the area used for roosting and nesting.
- **9-28:** Any development around the nesting and roosting area shall be set back sufficiently far as to minimize impacts on the habitat area.
- **9-29:** In addition to preserving the ravine plant communities on More Mesa for nesting and roosting sites, the maximum feasible area shall be retained in grassland to provide feeding area for the kites.

Habitat Type: Native Plant Communities

- **9-35:** Oak trees, because they are particularly sensitive to environmental conditions, shall be protected. All land use activities, including cultivated agriculture and grazing, should be carried out in such a manner as to avoid damage to native oak trees. Regeneration of oak trees on grazing lands should be encouraged.
- **9-36:** When sites are graded or developed, areas with significant amounts of native vegetation shall be preserved. All development shall be sited, designed, and constructed to minimize impacts of grading, paving, construction of roads or structures, runoff, and erosion on native vegetation. In particular, grading and paving shall not adversely affect root zone aeration and stability of native trees.

Habitat Type: Streams

- **9-37:** The minimum buffer strip for major streams in rural areas, as defined by the land use plan, shall be presumptively 100 feet, and for streams in urban areas, 50 feet. These minimum buffers may be adjusted upward or downward on a case-by-case basis. The buffer shall be established based on an investigation of the following factors and after consultation with the Department of Fish and Game and Regional Water Quality Control Board in order to protect the biological productivity and water quality of streams:

  1) soil type and stability of stream corridors;
  2) how surface water filters into the ground;
  3) slope of the land on either side of the stream; and
  4) location of the 100-year flood plain boundary.

  Riparian vegetation shall be protected and shall be included in the buffer. Where riparian vegetation has previously been removed, except for channelization, the buffer shall allow for the reestablishment of riparian vegetation to its prior extent to the greatest degree possible.

- **9-38:** No structures shall be located within the stream corridor except: public trails, dams for necessary water supply projects, flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development; and other development where the primary function is for the improvement of fish and wildlife habitat. Culverts, fences, pipelines, and bridges (when support structures are located outside the critical habitat) may be permitted when no alternative route/location is feasible. All development shall incorporate the best mitigation measures feasible.
- **9-40:** All development, including dredging, filling, and grading within stream corridors, shall be limited to activities necessary for the construction of uses specified in Policy 9-38. When such

activities require removal of riparian plant species, revegetation with local native plants shall be required except where undesirable for flood control purposes. Minor clearing of vegetation for hiking, biking, and equestrian trails shall be permitted.

- **9-41:** All permitted construction and grading within stream corridors shall be carried out in such a manner as to minimize impacts from increased runoff, sedimentation, biochemical degradation, or thermal pollution.

Santa Barbara County Code

The Santa Barbara County Code (County Code) includes the ordinances that regulate development in the unincorporated County. Relevant code sections are discussed below.

Chapter 9A – Brush Removal, Southeasterly Coastal Area and Coastal Zone

Chapter A of the County Code regulates the removal of native brush, shrubs, trees and roots within the southeasterly coastal area of the unincorporated County to reduce erosion damage, flood hazards, and soil loss. This regulation requires that written approval from the building and safety division of the department of planning and development be obtained prior to removing, destroying, or causing the removal or destruction of natural vegetation within the southeasterly coastal areas of the County covered by this regulation.

Chapter 14 Appendix A – Grading Ordinance Guidelines for Native Oak Tree Removal

The purpose of this regulation is to protect native oak trees and govern deciduous and live oak removals. It proposes a tiered system based on lot size and the number of trees removed to determine the applicable permits required. Tier 1 covers exempt tree removals, Tier 2 requires replanting, Tier 3 requires a management plan, and Tier 4 requires discretionary permit review from the County. The County Grading Ordinance applies to all private land outside of the Coastal Zone and urban boundaries.

Chapter 35 – Santa Barbara County Land Use and Development Code

The County's Land Use and Development Code (LUDC), Chapter 35 of the County Code, includes development standards that are meant to protect biological resources within the Inland portion of the County, outside the Montecito Community Plan area (Santa Barbara County 2025b).

Section 35.28.100 Environmentally Sensitive Habitat Overlay. Section 35.28.100 of the Land Use and Development Code provides restrictions on development in areas with unique natural resources including sensitive plant and wildlife species and/or their habitats. The overlay is intended to:

- Protect and preserve specified areas in which plant or wildlife species or their habitats are either rare or especially valuable because of their role in the ecosystem, and that could be easily disturbed or degraded by human activities and developments; and
- Ensure that each project permitted in the overlay zone is designed and carried out in a manner that will provide the maximum feasible protection to sensitive habitat areas.

If proposed development is in an environmentally sensitive habitat area, conditions may be applied to permits that would protect the environmentally sensitive habitat area to the maximum extent feasible. The conditions may limit the size, kind, or character of the proposed work, require replacement of vegetation, establish required monitoring procedures and maintenance activity, stage the work over time, or require

the alteration of the design of the project to ensure protection of the habitat. The conditions may also include deed restrictions and conservation and resource easements.

Sections 35.28.100(B) and (C) describe the applicability of the overlay (e.g., description of how a determination of the ESH boundary is made during permit application review) and permit and processing requirements, respectively.

Section 35.28.170 Riparian Corridor – Goleta (RC-GOL) Overlay Zone. Section 35.28.170 of the LUDC identifies the Goleta (RC-GOL) overlay zone is applied within rural areas designated agriculture on the Comprehensive Plan maps for the Eastern Goleta Valley Community Plan area and Goleta Community Plan area to protect and preserve mapped Riparian Corridors that could be easily disturbed or degraded by development and other human activities. The overlay is also intended to maintain a continuous canopy of trees along each Riparian Corridor and protect the overall ecological integrity of the mapped stream system. Sections 35.28.170(B) and (C) describe the applicability of the overlay and permit and processing requirements, respectively.

Figure 3.4-6, *ESH and Riparian Corridor Overlay Areas*, displays the mapped ESH areas and Riparian Corridors within the Project area. The figure shows these overlay areas within all three County zoning ordinances.

Chapter 35 – Zoning, Article IX – Deciduous Oak Tree Protection and Regeneration

The County Deciduous Oak Tree Protection and Regeneration Ordinance implements the goals and policies of the Santa Barbara County Comprehensive Plan that promote the protection of deciduous oak trees (Santa Barbara County 2003). Article IX identifies requirements for oak tree replacement if an oak tree removal permit is issued, including requiring preparation of an Oak Tree Management Plan, replacing oak trees removed at a compensation ratio of 15 to 1, replacing trees with native nursery stock, planting saplings in suitable locations, and maintaining and protecting planted saplings. These regulations address deciduous oak tree removal in the inland rural areas of the county if such removal is not associated with development that requires a permit under Articles III or IV of Chapter 35 of the County Code. For the urban and coastal areas, community plans and the CLUP determine tree protection policies.

In addition to the standards above, LUDC Section 35.59 includes current solar energy regulations applicable to Cuyama Valley, within the Utility-Scale Solar Photovoltaic Overlay area, including a requirement to protect sensitive biological resources by avoiding known sensitive natural communities, rare and special-status plant species, special-status wildlife species and their habitats, critical habitat corridors, and nesting birds, as well as avoiding the removal of any native specimen trees. The ordinance also requires that utility-scale solar projects in the overlay area minimize the potential for raptor electrocution. The proposed amendments incorporate these requirements for community-scale and utility-scale solar energy facilities.

Chapter 35 – Montecito Land Use and Development Code

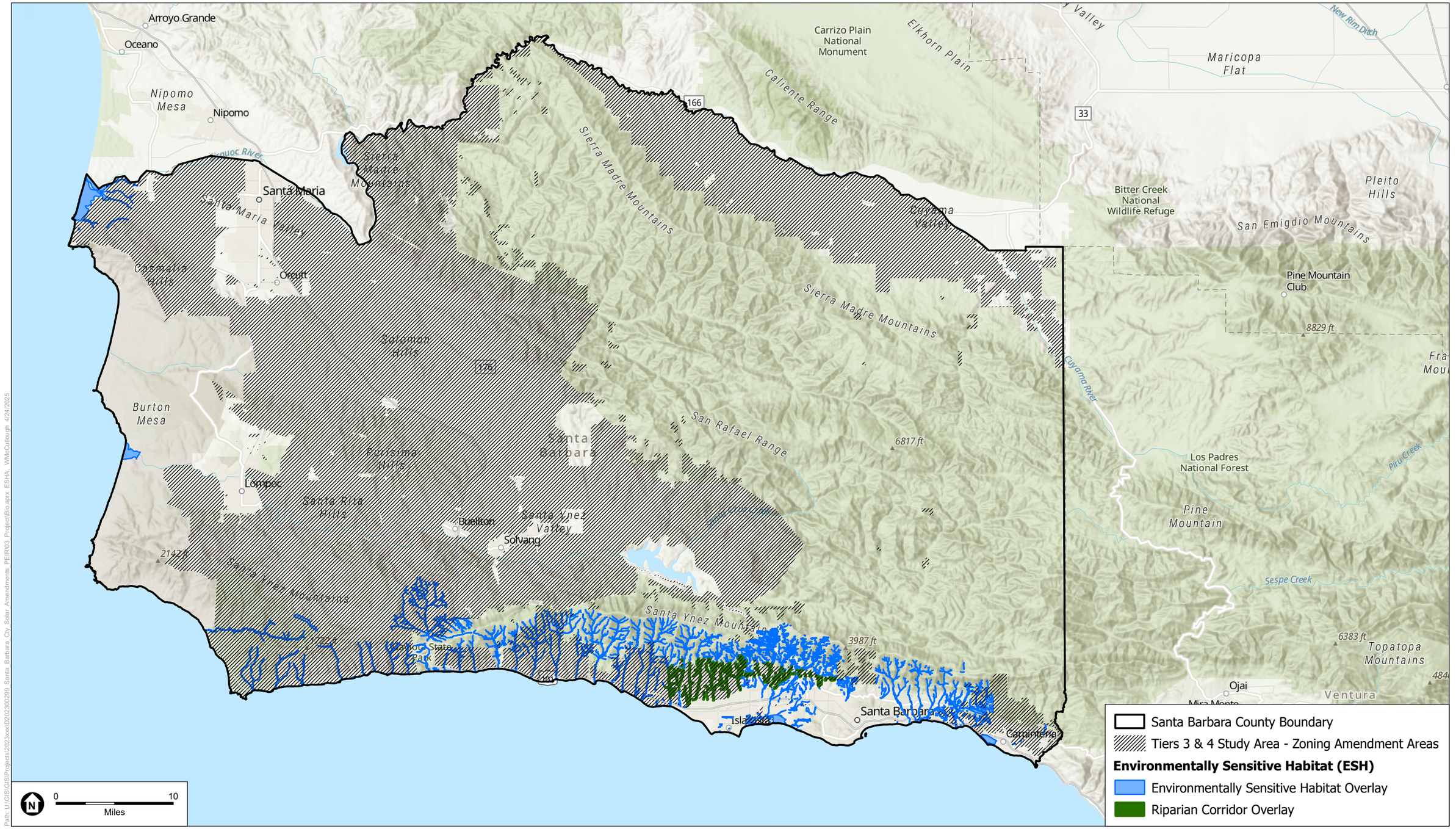
The Santa Barbara County Montecito Land Use and Development Code (MLUDC), which constitutes a portion of Chapter 35 of the Santa Barbara County Code, classifies and regulates the uses of land and structures within the Montecito Community Plan area, consistent with the Comprehensive Plan and the Local Coastal Program. The MLUDC provide standards and guidelines for the continuing growth and

development of the Montecito community that will protect the character and social and economic stability; conserve and protect Montecito's natural setting, including waterways, hills and trees, scenic vistas, and historic and environmental resources; create a comprehensive and stable pattern of land uses upon which to plan transportation, water supply, sewerage, energy, and other public facilities and utilities; encourage the most appropriate uses of land in order to prevent overcrowding of land and avoid undue concentration of population, and maintain and protect the value of property; and ensure compatibility between different types of development and land use (Santa Barbara County 2008).

Section 35.428.040 – Environmentally Sensitive Habitat (ESH) Overlay. The Environmentally Sensitive Habitat Area (ESH) overlay is applied to areas with unique natural resources and/or endangered animal or plant species, where existing and potential development and other activities may despoil or eliminate the resources. This overlay zone is intended to: protect and preserve specified areas in which plant or animal life or their habitats are either rare or especially valuable because of their role in the ecosystem, and that could be easily disturbed or degraded by human activities and developments; and ensure that development permitted in the overlay zone is designed and carried out in a manner that will provide maximum protection to sensitive habitat areas. For proposed developments located in or within 100 feet of an environmentally sensitive habitat area, conditions may be applied to the permit that will protect the environmentally sensitive habitat area to the maximum extent feasible, consistent with the applicable development standards (e.g., adjacent development shall be set back a minimum of 50 feet from the trees supporting monarch butterfly habitat in the coastal zone, development shall be sited and designed to protect native grassland areas, the minimum buffer strip for development near streams and creeks in Rural Areas as designated on the Comprehensive Plan maps shall be 100 feet from the top of bank and 50 feet for streams in Urban Areas as designated on the Comprehensive Plan maps).

Santa Barbara County Coastal Zoning Ordinance

The County prepared and adopted the County Coastal Zoning Ordinance (Article II of Chapter 35, Zoning, of the County Code) which implements the certified Land Use Plan by classifying and regulating the uses of land, buildings, and structures within the County's Coastal Zone. The Coastal Zoning Ordinance applies to any development within the Coastal Zone of the unincorporated area of the County (Santa Barbara County 2008). A Coastal Development Permit may be issued subject to compliance with conditions set forth in the permit which are necessary to ensure protection of the habitat area(s). Such conditions may, among other matters, limit the size, kind, or character of the proposed work, require replacement of vegetation, establish required monitoring procedures and maintenance activity, stage the work over time, or require the alteration of the design of the development to ensure protection of the habitat. The conditions may also include deed restrictions and conservation and resource easements. Any regulation, except the permitted or conditionally permitted uses, of the base zone district may be altered in furtherance of the purpose of this overlay district by express condition in the permit. Prior to issuance of a Coastal Development Permit for any development within the ESH Overlay District, a finding shall be made that the proposed development meets all applicable development standards in Sections 35-97.8 through 35-97.19 (e.g., development shall be sited and designed to avoid vernal pools, protect native grassland areas; adjacent development shall be set back a minimum of 50 feet from the trees supporting butterfly habitat; new development adjacent to or in close proximity to wetlands shall be compatible with the continuance of the habitat area and shall not result in a reduction in the biological productivity or water quality of the wetland due to runoff [carrying additional sediment or contaminants], noise, thermal pollution, or other disturbances).



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SOURCE: ESA, 2025; Santa Barbara County, 2025

Santa Barbara County Utility-Scale Solar Amendments

Figure 3.4-6
ESH and Riparian Corridor Overlay Areas

ESA

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Community and Area Plans

Goleta Valley Planning Area

Goleta Valley is an unincorporated area of the South Coast of Santa Barbara County and contains two area plans. The Eastern Goleta Valley Community Plan Area is located between the Pacific Ocean and the Santa Ynez Mountain Range (i.e. between the cities of Santa Barbara and Goleta). The Eastern Goleta Valley Community Plan was adopted by the County in 2015 before being certified by the California Coastal Commission in 2017. The western portion of the Goleta Valley Planning Area is northwest of the City of Goleta and continues northwest to the Santa Ynez Mountains, ending near the intersection of Los Carneros Road and Cathedral Oaks Road. The western area continues to be referred to as the Goleta Community Plan area, and the 1993 Goleta Community Plan remains unchanged and in effect for the western area and the unincorporated community of Isla Vista.

Goleta Community Plan

The Goleta Community Plan designates general type and locations of land uses and provides policies for development, including standards for the conservation, development, use of natural resources, and open space. The policies related to biological resources are listed below:

> ***Policy BIO-GV-1*:** The County shall designate and provide protection to important or sensitive environmental resources and habitats in the Goleta Planning Area.
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> ***Policy BIO-GV-2*:** Environmentally Sensitive Habitat (ESH) areas and Riparian Corridors within the Goleta Planning Area shall be protected and, where feasible and appropriate, enhanced.
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> ***Policy BIO-GV-3*:** Development within areas designated as ESH or Riparian Corridor shall comply with the applicable habitat protection policies.
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> ***Policy BIO-GV-4*:** The Goleta Environmentally Sensitive Habitat/Riparian Corridor map and Biological Resources maps shall be consulted as a reference along with other relevant information during review of development applications in order to identify areas containing potentially significant biological resources. The Goleta ESH/Riparian Corridor and Biological Resources Map shall be amended periodically to incorporate new information as it becomes available.
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> ***Policy BIO-GV-5*:** Native woodlands designated as environmentally sensitive habitats shall be preserved and protected.
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> ***Policy BIO-GV-6*:** Monarch Butterfly roosting habitats shall be preserved and protected.
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> ***Policy BIO-GV-7*:** Riparian vegetation shall be protected and shall not be removed except where clearing is necessary for the maintenance of free flowing channel conditions, the provision of essential public services or where protection would preclude the reasonable use of a parcel. Degraded riparian areas shall be restored.
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> ***Policy BIO-GV-8*:** The minimum buffer strip and setbacks from streams and creeks for new development and actions within the ESH overlay that are regulated by the County Zoning Ordinances shall be as follows, except on parcels designated for agriculture in inner rural areas where Policy BIO·GV·9 shall apply:
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> a. ESH areas within urban, inner rural and existing developed rural neighborhoods: a setback of 50 feet from either side of top.of.bank of creeks or existing edge of riparian vegetation, whichever is further, minimizing all ground disturbance and vegetation removal, shall be indicated on all grading plans;

b. ESH areas within the Mountainous-GOL zone district: a buffer of 200 feet from the edge of existing riparian vegetation. Grading and vegetation removal within these buffers shall be limited consistent with the purpose and intent of the ESH overlay district, while not precluding reasonable use of a parcel.

***Policy BIO-GV-9*:** The minimum butTer strip and setback from streams and creeks for new development and activity within the Riparian Corridor Overlay that are regulated by the County Zoning Ordinances shall be as follows:

a. For new or expanded areas of cultivated agriculture, vineyard, or orchard use which is documented to show evidence of historic legal conforming or legal non-conforming agricultural use within the previous ten year historic period, a setback of 25 feet from the top of the bank or the edge of existing riparian vegetation, whichever is further, minimizing all ground disturbance and vegetation removal consistent with the County's grading ordinance, and precluding development of new buildings within 50 feet of the top of bank;
b. For new or expanded areas of cultivated agriculture, vineyard, or orchard use, without documented evidence showing that it is a legal conforming or legal non-conforming agricultural use within the previous ten year historic period, a setback of a minimum of 25 feet from the edge of existing riparian vegetation or the top of bank, whichever is further, minimizing all ground disturbance and vegetation removal consistent with the purpose and intent of the district, and precluding development of new buildings within 50 feet of the top of bank.

***Policy BIO-GV-11*:** Wetland areas and surrounding habitats that have been damaged by pollution and artificial stream channelization shall be restored to their natural condition to the maximum extent feasible.

***Policy BIO-GV-12*:** All development, including dredging, filling and grading within stream corridors, shall be limited to activities necessary for the construction of uses specified in DevStd. BIO-GV-IO.1.

***Policy BIO-GV-13*:** Areas of one or more acres of coastal sage scrub shall be preserved to the maximum extent feasible, consistent with reasonable use of a parcel.

***Policy BIO-GV-14*:** To the maximum extent feasible, areas of native grasslands shall be preserved.

***Policy BIO-GV-15*:** Significant biological communities shall not be fragmented into small non-viable pocket areas by development.

***Policy BIO-GV-16*:** To the maximum extent feasible, "protected trees" shall be preserved. Protected trees are defined for· the purposes of this policy as mature native trees that are healthy and structurally sound and have grown into the natural stature particular to the species.

***Policy BIO-GV-17*:** Oak trees shall be protected to the maximum extent feasible. All land use development applications shall be processed in such a manner as to avoid damage to native oak trees. Regeneration of oak trees shall be encouraged.

***Policy BIO-GV-18*:** Trees serving as known raptor nesting or key raptor roosting sites shall be preserved to the maximum extent feasible.

***Policy BIO-GV-19*:** Pollution of streams, sloughs, drainage channels, underground water basins, estuaries, the ocean and areas adjacent to such waters shall be minimized.

***Policy BIO-GV-20*:** Where appropriate, voluntary open space and conservation easements should be considered by project applicants and supported by the County as a method to preserve important biological habitats.

***Policy BIO-GV-21*:** The use of locally occurring native plants propagated from plants in close proximity to the sites to be revegetated in landscaping shall be encouraged, especially in parks, buffers adjacent to native habitats and in designated open space.

***Policy BIO-GV-22*:** Where. sensitive plant species and sensitive animal species are found pursuant to the review of a discretionary project, efforts shall be made to preserve the habitat in which they are located to the maximum extent feasible. For the purposes of this policy, sensitive plant species are those species which appear on a list in the County's list of locally rare, rare or endangered plants and the California Native Plant Society's Inventory of Endangered Vascular Plants of California. Sensitive animal species are defined as those animal species identified by the California Department of Fish and Game, the U.S. Fish and Wildlife Service and/or are listed in Tate's The Audubon Blue List (birds).

The Plan also includes numerous development standards, including location-specific development standards.

Eastern Goleta Valley Community Plan

The Eastern Goleta Valley Community Plan balances urbanization, agriculture, and open lands by establishing land zoning and land use goals. Development is directed away from environmentally sensitive areas, while considering the impact to watersheds. Areas that are zoned as mountainous areas or rural neighborhoods have limits to removal of chaparral vegetation, which is considered Environmentally Sensitive Habitat (ESH). The policies related to biological resources are listed below:

***Policy ECO-EGV-1.1*:** The County shall designate and provide protection to important or sensitive environmental resources and habitats in Eastern Goleta Valley.

***Policy ECO-EGV-1.2*:** The County shall adhere to and incorporate the following priorities for the protection of ecological and biological resources:

- Preservation and/or enhancement of existing natural resources.
- Maintenance of habitat continuity and wildlife corridors.
- Establishment, enlargement, and restoration of ecological preserves and wildlife corridors.
- Long-term protection of regional ecosystems.
- Protection and/or enhancement of critical habitats for endangered, threatened, and sensitive biota.
- Enhancement or restoration of degraded habitats, including active removal and management of invasive non-native species.
- Active management of preserves, open space and/or conservation easements.
- Active management of natural areas to diminish fire hazard while sustaining natural resources and values, such as habitat areas and hydrologic function, through management of fuel loads or other appropriate measures.
- Land use and development patterns that minimize or alleviate the impact to the natural environment and improve Eastern Goleta Valley’s urban ecology.

***Policy ECO-EGV-2.1*:** Open space and conservation easements should be considered effective methods to preserve important biological resources and habitats.

***Policy ECO-EGV-2.2*:** The use of native, drought-tolerant, and/or fire-resistant plants shall be strongly encouraged in landscaping and restoration projects, especially in parks, buffers adjacent to native habitats and in designated open space.

***Policy ECO-EGV-2.3*:** Where sensitive plant species and sensitive animal species are found pursuant to the review of a discretionary project, the habitat in which the sensitive species is located shall be preserved to the maximum extent feasible. For the purposes of this policy, sensitive plant species are those species that appear on the County's list of locally rare, generally rare, or endangered plants, and the California Native Plant Society's Inventory of Endangered Vascular Plants of California. Sensitive animal species are defined as those animal species identified by the California Department of Fish and Wildlife, the U.S. Fish and Wildlife Service and/or are listed in Tate's The Audubon Blue List (birds).

Policy ECO-EGV-2.4*: *(INLAND) Where sites proposed for development contain sensitive or important habitats and areas to be preserved over the long-term, degradation of these habitats shall be avoided to the maximum extent feasible, and demonstrated unavoidable impacts minimized as a component of a project, including, but not limited to, one or more of the following conditions:

- Dedication of onsite open space easements covering habitat areas.
- Onsite habitat restoration programs utilizing appropriate native, drought-tolerant, and/or fire-resistant species.
- Monetary contributions toward habitat acquisition and management.
- Offsite easement and/or restoration of comparable habitat/area when onsite preservation is infeasible.

Policy ECO-EGV-2.4*: *(COASTAL) Where sites proposed for development contain sensitive habitats and impacts to these habitats are unavoidable consistent with Policy ECO-EGV-5.8, degradation of these habitats shall be avoided to the maximum extent feasible, and demonstrated unavoidable impacts minimized as a component of a project, including but not limited to, one or more of the following conditions:

- Dedication of onsite open space easements covering habitat areas.
- Onsite habitat restoration programs utilizing appropriate native, drought-tolerant, and, where appropriate, fire resistant species propagated from plants in close proximity to the site.
- Offsite restoration and open space conservation (through an easement or other means) of comparable habitat/area when onsite restoration is infeasible.

Policy ECO-EGV-2.5*: *(INLAND) Restoration. In cases where adverse impacts to biological resources cannot be avoided after impacts have been minimized, restoration shall be required. A minimum replacement ratio of 2:1 shall be required to compensate for the destruction of native habitat areas or biological resources. The area or units to be restored, acquired, or dedicated for a permanent protective easement shall be twice the biological value of that which is destroyed. Restoration may also be required for parcels on which development is proposed and on which disturbance has previously occurred if the currently proposed development would exacerbate the existing impact. Where onsite restoration is infeasible or not beneficial with regard to long-term preservation of habitat, an offsite easement and/or restoration which provides adequate quality and quantity of habitat and will ensure long-term preservation shall be required.

Policy ECO-EGV-2.5*: *(COASTAL) Restoration. In cases where adverse impacts to biological resources as a result of new development cannot be avoided and impacts have been minimized, restoration shall be required. A minimum replacement ratio of 3:1 shall be required to compensate for adverse impacts to native habitat areas and biological resources, except that mitigation for impacts to wetlands shall be a minimum 4:1 ratio. Where onsite restoration is infeasible with regard to long-term preservation of habitat, offsite restoration shall be required.

***Policy ECO-EGV-2.6*:** The County shall ensure the following requirements for any restoration efforts are considered and incorporated into the restoration plan:

- Restoration shall include the appropriate diversity and density of plants native to the locality and shall be propagated from local genetic stock (preferably collected from the site's watershed if feasible, or between Gaviota and Carpinteria, or as determined satisfactory by a qualified biologist).
- Restoration shall incorporate maintenance and monitoring measures to ensure that the remedial action is mitigating permanent remedy of the impact of development.
- When restoration is required, on-site rather than off-site restoration shall be preferred.

***Policy ECO-EGV-3.1*:** Habitats that shall be preserved and enhanced include, but are not limited to:

- Creeks, streams, and waterways, and fish passage.
- Wetlands and vernal pools.
- Riparian vegetation.
- Wildlife corridors between habitat areas.
- Roosting, nesting, and foraging habitat for bird species.
- Nesting and foraging habitat for subterranean species.

Policy ECO-EGV-3.2: Ecological communities and habitats shall not be fragmented into small non-viable pocket areas by development.

Policy ECO-EGV-3.3: In rural areas and where major wildlife corridors are present in urban areas, development shall not interrupt major wildlife travel corridors within Eastern Goleta Valley. Typical wildlife corridors are provided by drainage courses and similar undeveloped natural areas.

***Policy ECO-EGV-3.4*: *Atascadero Creek Greenway*.** Atascadero Creek shall be considered as a 'greenway' and wildlife corridor from its headwaters in the San Marcos Foothills to its outlet at Goleta Slough and Goleta Beach. The greenway is defined generally as a 100-foot buffer from the centerline of the creek, but may be adjusted where appropriate to include biological/hydrological resources consistent with this Plan. Within the buffer, the greenway shall conceptually and functionally protect and enhance the creek corridor's habitat, hydrologic, and recreational value to the community, including, but not limited to, the installation of passive hiking trails, bike paths, wildlife passage, and pocket parks. (See also, Section III.D: Parks, Recreation, Trails, and Open Space.) Protection, restoration, and enhancement of the greenway shall be encouraged for all development proposed within or adjacent to the greenway consistent with this Plan (EGVCP Figure 23).

***Policy ECO-EGV-4.1*: *(INLAND) Protecting Existing Trees*.** Existing trees in Eastern Goleta Valley shall be preserved to the maximum extent feasible, prioritizing "protected trees." Protected

trees are defined for the purposes of this policy as mature native, naturalized, or roosting/nesting trees that are healthy, structurally sound, and have grown into the natural stature particular to the species. Protected trees include, but are not limited to:

- Oaks (Quercus agrifolia).
- Sycamores (Platanus racemosa).
- Willow (Salix sp.).
- Redwoods (Sequoia sempervirens).
- Maples (Acer macrophyllum).
- California Bay Laurels (Umbellularia californica).
- Cottonwood (Populus fremontii & Populus balsamifera).
- White Alder (Alnus rhombifolia).
- California Walnut (Juglans californica).
- Any trees serving as known raptor nesting or key raptor roosting sites.
- Any trees serving as Monarch Butterfly aggregation sites.

Policy ECO-EGV-4.1*: *(COASTAL) Protecting Existing Trees. Existing trees in Eastern Goleta Valley shall be preserved to the maximum extent feasible, prioritizing "protected trees." Protected trees are defined for the purpose of this policy as mature native, naturalized, or roosting/nesting trees that do not pose a threat to health and safety. Protected trees include, but are not limited to:

- Oaks (Quercus agrifolia).
- Sycamores (Platanus racemosa).
- Willow (Salix sp.).
- Redwoods (Sequoia sempervirens).
- Maples (Acer macrophyllum).
- California Bay Laurels (Umbellularia californica).
- Cottonwood (Populus fremontii & Populus balsamifera).
- White Alder (Alnus rhombifolia).
- California Walnut (Juglans californica).
- Any tree serving as known or discovered raptor nesting and/or raptor roosting sites.
- Any trees serving as Monarch butterfly habitat, including aggregation sites.

Policy ECO-EGV-4.2*: *(INLAND) All existing "protected trees" shall be protected from damage or removal, except in cases where preservation of trees would preclude reasonable use of a parcel, or threaten life and/or property.

Policy ECO-EGV-4.2*: *(COASTAL) All existing "protected trees" shall be protected from damage or removal to the maximum extent feasible, except in cases where preservation of trees would preclude reasonable use of a parcel, or threaten life and/or property. Where the removal of protected trees cannot be avoided through the implementation of project alternatives, or where development encroachments into the protected zone of protected trees result in the loss or worsened health of the trees, mitigation measures shall include, at a minimum, the planting of replacement trees on-site, if suitable area exists on the project site, at a ratio of 10 replacement

trees for every one tree removed. Where on-site mitigation is not feasible, off-site mitigation shall be required.

Policy ECO-EGV-4.3*: *Trees on County-owned Property in the Urban Forest. The County shall integrate the planting and cultivation of native trees as green infrastructure into capital improvement programming to reforest County-owned lands in Eastern Goleta Valley.

Policy ECO-EGV-4.4*: *Trees on Non County-owned Property in the Urban Forest. Planting and cultivation of native trees to reforest privately-owned lands shall be encouraged. Landscaping plans for development shall be encouraged to include planting and cultivation of native trees in the Urban Area.

***Policy ECO-EGV-5.1*:** Environmentally Sensitive Habitat (ESH) areas and Riparian Corridors (RC) within Eastern Goleta Valley shall be protected and, where feasible and appropriate, enhanced.

Policy ECO-EGV-5.2*: *(INLAND) The following general criteria are utilized to determine which resources and habitats in Eastern Goleta Valley are identified as ESH. Significant habitat resources within urban, EDRN and Mountainous Areas that meet one or more of these criteria shall have coverage of the ESH overlay.

1. Unique, rare, or fragile communities which should be preserved to ensure their survival into perpetuity.
2. Habitats of rare and endangered species that are also protected by State and Federal laws.
3. Plant communities that are of significant interest because of extensions of ranges, or unusual hybrid, disjunctive, or relict species.
4. Specialized wildlife habitats which are vital to species survival, e.g., White-tailed kite habitat, butterfly trees.
5. Outstanding representative natural communities that have values ranging from a particularly rich flora and fauna to an unusual diversity of species.
6. Areas which are important because of their high biological productivity and ecological function such as wetlands and vernal pools.
7. Areas which are structurally important in protecting watershed ecology and species, e.g., riparian corridors that protect stream banks from erosion and provide shade.

Policy ECO-EGV-5.2: (COASTAL) Environmentally sensitive habitat (ESH) means any area in which plant or animal life or their habitats are either (1) rare or (2) especially valuable because of their special nature or role in an ecosystem. The presence and extent of ESH shall be identified on a case-by-case basis based upon site-specific evidence provided by a biological report prepared by a qualified biologist.

1. *Rare Species or Habitats*. Areas with plant or animal life or their habitats included in the following lists and categories are considered "rare" for the purposes of this policy:
    - Federal and State listed Rare, Threatened, and Endangered Species.
    - Plants, Animals, and Natural Communities ranked as Global or State G1 or S1 (critically imperiled), G2 or S2 (imperiled), or G3 or S3 (vulnerable to extirpation or extinction). California Fully Protected Species, California Species of Special Concern, and their habitats.

- California Rare Plant Ranking System plant species designated 1B (rare, threatened, or endangered in California and elsewhere) and 2B (rare, threatened, or endangered in California but more common elsewhere).
- Federal and State Plants, Animals, and Natural Communities that are candidates for listing.

2. *Especially Valuable Species or Habitats*. Areas with plant or animal life or their habitats may be especially valuable because of their "special nature," such as being an unusually pristine example of a habitat type, containing an unusual mix of species, supporting species at the edge of their range, or containing species with extreme variation. Areas may be especially valuable because of their special "role in the ecosystem," such as providing habitat for endangered species, protecting water quality, providing essential corridors linking one sensitive habitat to another, or providing critical ecological linkages such as the provision of pollinators or crucial trophic connections.

***Policy ECO-EGV-5.3*:** To protect the viability of agricultural operations in the Rural Area consistent with the Comprehensive Plan and the Agricultural Element, the ESH Overlay shall not be applied to lands designated Agriculture in the Rural Area. Instead, riparian corridors in rural agricultural areas shall have coverage of the Riparian Corridor (RC) Overlay, which provides unique requirements for riparian habitat areas located on land with rural agricultural land use designations.

Policy ECO-EGV-5.4*: *(INLAND) ESH and RC Habitat Types. Specific biological resources and habitats shall be considered environmentally sensitive and designated on the Eastern Goleta Valley Community Plan ESH/Riparian Corridor map (EGVCP Figure 22 or where determined to exist during a site survey) based on the criteria of Policy ECO-EGV-5.2.

Policy ECO-EGV-5.4*: *(COASTAL) ESH Habitat Types. Specific biological resources and habitats shall be considered environmentally sensitive and designated on the Eastern Goleta Valley Community Plan ESH/Riparian Corridor map (EGVCP Figure 22 or where determined to exist during a site survey) based on the criteria of Policy ECO-EGV-5.2.

Policy ECO-EGV-5.5*: *(INLAND) Minimum Buffer Areas for ESH. The minimum buffer strip and setbacks from streams and creeks for development and activities within the ESH overlay that are regulated by the County Zoning Ordinances shall be as follows, except on parcels designated for agriculture in rural areas where Policy ECO-EGV5.6 shall apply:

- ESH areas within the Urban Area and EDRNs: a minimum setback of 50 feet from either side of top-of-bank of creeks or existing edge of riparian vegetation, whichever is further, shall be indicated on all site plans. Plans shall minimize ground disturbance and vegetation removal.
- ESH areas within the Mountainous-GOL zone district: a minimum buffer of 200 feet from the edge of existing riparian vegetation. Grading and vegetation removal within these buffers shall be restricted while not precluding reasonable use of a parcel.

Policy ECO-EGV-5.5*: *(COASTAL) Minimum Buffer Areas for Streams and Creeks. The minimum buffer strip and setbacks from streams and creeks for development and activities within the ESH overlay that are regulated by the County Coastal Zoning Ordinance shall be as follows:

- ESH areas within the Urban Area: a minimum setback of 50 feet from either top-of-bank of streams and creeks or existing edge of riparian vegetation, whichever is the furthest distance from the stream or creek. The setback shall be indicated on all site plans.

***Policy ECO-EGV-5.6*:** Minimum Buffer Areas for RC: The minimum buffer strip and setback from streams and creeks for development and activity within the RC Overlay that are regulated by the County Zoning Ordinances shall be as follows:

- For new or expanded areas of cultivated agriculture, vineyard, or orchard use with documented evidence of historic legal agricultural use within the previous ten year period: a minimum setback of 25 feet from the top of the bank or the edge of existing riparian vegetation, whichever is further, minimizing ground disturbance and vegetation removal, and prohibiting development of buildings within 50 feet of the top of bank or the edge of existing riparian vegetation.
- For new or expanded areas of cultivated agriculture, vineyard, or orchard use without documented evidence showing that it is a legal agricultural use within the previous ten-year period: a setback adequate to preserve riparian habitat, but no less than 25 feet from the edge of existing riparian vegetation or the top of bank, whichever is further, minimizing all ground disturbance and vegetation removal, and prohibiting development of buildings within 50 feet of the top of bank or the edge of existing riparian vegetation.

Policy ECO-EGV-5.7*: *(COASTAL) Minimum Buffer Areas for ESH. A minimum setback of 50 feet from the outer edge of all ESH habitats shall be required unless otherwise specified in the Local Coastal Program.

Policy ECO-EGV-5.8*: *(COASTAL) Resource dependent uses may be allowed in ESH where sited and designed to avoid significant disruption of habitat values. A resource dependent use is a use that is dependent on the ESH resource to function (e.g., nature study, habitat restoration, and public trails). Non-resource dependent development, including fuel modification, shall be sited and designed to avoid ESH and ESH buffer areas. If avoidance is infeasible and would preclude reasonable use of a parcel, then the alternative that would result in the fewest or least significant impacts shall be selected.

***Policy ECO-EGV-6.1*:** Native woodlands, native grasslands, and coastal sage scrub shall be preserved and protected as viable and contiguous habitat areas.

***Policy ECO-EGV-6.2*:** Monarch butterfly roosting habitats shall be preserved and protected.

***Policy ECO-EGV-6.3*:** Riparian vegetation shall be protected and shall not be removed except where clearing is necessary for the maintenance of free flowing channel conditions, the removal of invasive exotic species, the provision of essential public services, or where protection would preclude the reasonable use of a parcel. Degraded riparian areas shall be restored.

***Policy ECO-EGV-6.4*:** Native woodlands, native grasslands, and coastal sage scrub shall be preserved and protected as viable and contiguous habitat areas.

***Policy ECO-EGV-6.5*:** For wetland areas and surrounding habitats that have been damaged by pollution and artificial stream channelization, the County shall seek opportunities for restoration to their natural condition.

***Policy ECO-EGV-6.1*:** Native woodlands, native grasslands, and coastal sage scrub shall be preserved and protected as viable and contiguous habitat areas.

The Plan also includes numerous development standards, including location-specific development standards.

Gaviota Coast Plan

The Gaviota Coast Plan Area is approximately 158 square miles and spans between the Goleta Community Plan, Vandenburg Air Force Base, the Santa Ynez Mountain ridgeline and Pacific Ocean. The plan was adopted in 2016 by the County before being approved by the California Coastal Commission in 2018. The Gaviota Coast Plan identifies ESH by vegetative alliances and wildlife habitats and a 100-feet development setback buffer away from ESH areas. Relevant natural resources stewardship policies include:

> ***Policy NS-1*: *Watershed Planning.*** Development will consider local watersheds and their health.
>
> ***Policy NS-2*: *Natural Resources Protection.*** ESH areas will be protected to the maximum extent feasible.
>
> ***Policy NS-4*: *ESH Criteria and Habitat Types.*** Outlines ESH criteria for inland and coastal areas.
>
> ***Policy NS-6*: *Wildlife Corridors.*** Development will avoid disruption of wildlife corridors to the maximum extent feasible.
>
> ***Policy NS-7*: *Riparian Vegetation.*** Development will protect riparian vegetation to the maximum extent feasible.
>
> ***Policy NS-9*: *Natural Stream Channels.*** Natural stream channels will be avoided to the maximum extent feasible to protect against erosion and enhance wildlife movement through the preservation of natural greenbelts.
>
> ***Policy NS-11*: *Restoration.*** Impacts to biological resources should be avoided to the maximum extent feasible. A minimum replacement ratio is required to compensate for impacts to native habitat areas or biological resources.
>
> ***Policy NS-12*: *Protected Trees.*** Existing trees native trees within the Coastal Area should be preserved to the maximum extent feasible. These trees include: coast live oak (*Quercus agrifolia*), California sycamore (*Platanus racemosa*), willows (*Salix* spp.), maple (*Acer macrophyllum*), California Bay Laurel (*Umbellularia californica*), cottonwoods (*Populus* spp.), white alder (*Alnus rhombifolia*), California Walnut (*Juglans californica*), trees serving as raptor roosting or nesting sites, or monarch butterfly habitat.

Other policies include those pertaining to agricultural development and trails.

Lompoc Planning Area

The Lompoc Planning Area is composed of three communities: Vandenburg Village, Mission Hills, and Mesa Oaks. In 1999, Lompoc Area Interpretive Guidelines were adopted to address urbanization associated with Vandenburg Air Force Base by setting various goals for development. Goals associated with biological resources include:

- Preservation of unique ecological areas, agricultural lands, grazing lands, and natural amenities
- Minimization of impacts to natural topography, vegetation and natural habitats
- Preservation of scenic areas and lands adjacent to these spaces
- Encouraging of wildlife sanctuaries by avoiding habitat fragmentation, removal of oaks and other significant native vegetation, chaparral, and impacting wildlife corridors

Los Alamos Community Plan

The Los Alamos Community Plan regulates the land use in the unincorporated community of Los Alamos, located northeast of Lompoc and along the U.S. Interstate 101. The plan area is approximately one square mile and the plan was approved in 2011. The plan outlines goals to maintain the quality of aquatic resources, protect significant habitat, preserve/restore riparian habitat, protect trees that raptors use as nesting and/or roosting sites, and utilize native vegetation in landscaping, protecting native trees with at least 6 inches diameter at breast height (DBH), and preserving annual and native grasslands.

Mission Canyon Community Plan

The Mission Canyon Community Plan was approved by the County in 2014 and covers approximately 1,122 acres between the City of Santa Barbara and Los Padres National Forest. The policies related to biological resources include defining ESH, associated ESH buffer areas, specifications for landscape plans, protection of native trees at least 6-inches DBH, protection of riparian vegetation and aquatic resources, protection of potential/existing critical habitat for southern California steelhead, preservation of sensitive species habitat and wildlife corridors, protections associated with the MBTA, and specifications for compensatory mitigation plans.

Montecito Community Plan

The Montecito Community Plan Area generally lies between the Pacific Ocean and the foothills of the Santa Ynez Mountains, with the City of Santa Barbara to the west and the unincorporated community of Summerland to the east. The southern portion lies within the state coastal zone. The Montecito Community Plan provides a statement of the community's goals, objectives and policies regarding future growth and is intended to serve as a guideline for decision makers, County staff, and members of the public when evaluating plans for new development. The goals, objectives and policies were created to ensure that new development is sensitive to community desires and to conditions within the community. The policies related to biological resources are listed below; the actions and development standards related to biological resources to implement each policy are detailed in the plan.

> ***Policy BIO-M-1.1*:** Designate and provide protection to important or sensitive environmental resources and habitats in the inland portion of the Montecito Planning Area.
>
> ***Policy BIO-M-l.2*:** The following biological resources and habitats shall be identified as environmfmtal1y sensitive and shall be protected and preserved to the extent feasible through the Environmentally Sensitive Habitat (ESH) overlay:
>
> - Riparian woodland corridors
> - Monarch butterfly roosts
> - Sensitive native flora
> - Coastal sage scrub
>
> ***Policy BIO-M-l.3*:** Environmentally Sensitive Habitat (ESH) areas within the Montecito Planning Area shall be protected, and where appropriate, enhanced.
>
> ***Policy BIO-M-l.4*:** Monarch Butterfly roosting habitats shall be preserved and protected.
>
> ***Policy BIO-M-l.5*:** Trimming or clearing of vegetation within 50' of a known Monarch Butterfly Habitat or along riparian habitats shall not occur without the review and the approval of the Resource Management Department.

***Policy BIO-M-l.6*:** Riparian vegetation shall be protected as part of a stream or creek buffer. Where riparian vegetation has previously been removed, (except for channel cleaning necessary for free-flowing conditions as determined by the County Flood Control District) the buffer shall allow the reestablishment of riparian vegetation to its prior extent to the greatest degree possible. Restoration of degraded riparian areas to their former state shall be encouraged.

***Policy BIO-M-l.7*:** No structures shall be located within a riparian corridor except: public trails that would not adversely affect existing habitat; dams necessary for water supply projects; flood control projects where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety, other development where the primary function is for the improvement of fish and wildlife habitat and where this policy would preclude reasonable development of a parcel. Culverts, fences, pipelines, and bridges (when support structures are located outside the critical habitat) may be permitted when no alternative route/location is feasible. All development shall incorporate the best mitigation measures feasible to minimize the impact to the greatest extent.

***Policy BIO-M-l.8*:** The minimum buffer strip for development near streams and creeks in Rural Areas shall be presumptively 100 feet from top of bank and for streams in Urban Areas, 50 feet. These minimum buffers may be adjusted upward or downward on a case-by-case basis but shall not preclude reasonable development of a parcel. The buffer shall be established based on an investigation of the following factors and after consultation with the Department of Fish and Game and Regional Water Quality Board in order to protect the biological productivity and water quality of streams:

1. soil type and stability of stream corridors;
2. how surface water filters into the ground;
3. slope of the land on either side of the stream;
4. location of the 100 year flood plain boundary; and
5. consistency with adopted plans, particularly Biology/Habitat policies.

The buffer area shall be indicated on all grading plans. All ground disturbance and vegetation removal shall be prohibited in the buffer area.

***Policy BIO-M-l.9*:** Wetland areas and surrounding habitats that have been damaged by pollution and artificial stream channelization shall be restored to their natural condition whenever feasible.

***Policy BIO-M-l.10*:** All development, including dredging, filling and grading within stream corridors, shall be limited to activities necessary for the construction of uses specified in Policy B-1.7. When such activities would require removal of riparian plant species, revegetation with local native plants shall be required on both banks and extending outward 25 feet from each top of bank, except where it would preclude reasonable development of a parcel.

***Policy BIO-M-l.11*:** Areas of one or more acres of coastal sage scrub shall be preserved to the maximum extent feasible.

***Policy BIO-M-l.12*:** The Montecito Biological Resources map shall be consulted as a reference along with other relevant information during review of development applications in order to identify areas containing potentially [significant biological resources. The Montecito Biological Resources Map shall be updated periodically to incorporate new information as it becomes available.

***Policy BIO-M-l.13*:** The habitat located on the hillside area north of Mountain Drive and Bella Vista Road and reaching the northern boundary of the Planning Area shall be recognized as particularly valuable because of the presence of chaparral, sensitive native flora and riparian resources to be protected and/or preserved. Any development proposal in this area shall be designed to avoid areas which contain these habitats and/or identified sensitive species.

***Policy BIO-M-l.14*:** Significant biological communities shall not be fragmented into small non-viable pocket areas by development.

***Policy BIO-M-l.15*:** To the maximum extent feasible, specimen trees shall be preserved. Specimen trees are defined for the purposes of this policy as mature trees that are healthy and structurally sound and have grown into the natural stature particular to the species. Native or non-native trees that have unusual scenic or aesthetic quality, have important historic value, or are unique due to species type or location shall be preserved to the maximum extent feasible.

***Policy BIO-M-l.16*:** All existing native trees regardless of size that have biological value shall be preserved to the maximum extent feasible.

***Policy BIO-M-l.17*:** Oak trees, because they are particularly sensitive to environmental conditions, shall be protected to the maximum extent feasible. All land use activities, including agriculture shall be carried out in such a manner as to avoid damage to native oak trees. Regeneration of oak trees shall be encouraged.

***Policy BIO-M-l.18*:** Trees serving as known raptor nesting or key raptor roosting sites shall be preserved to the maximum extent feasible.

***Policy BIO-M-l.19*:** Oak Woodlands shall be protected as habitat rather than as individual trees. Emphasis shall be placed on preservation and enhancement of oak woodlands as they provide habitat for numerous plant and animal species. Oak Woodlands are defined for the purposes of this policy as stands dominated by Coast Live Oak (*Quercus agrifolia*) and other trees native to oak woodlands (including vegetation transition zones) which form a closed canopy of a minimum of 1 acre and are not surrounded by or heavily influenced by urban development such as structures or roads and where the understory has not been permanently disturbed (e.g., by structures or roads). A general description of the characteristics of oak woodlands and a list of typical understory vegetation for oak woodlands in Montecito is provided in Appendix D (Excerpted from California vegetation, 4th Edition by V.L. Holland pg 172-176; 1990).

***Policy BIO-M-l.20*:** Pollution of streams, sloughs, drainage channels, underground water basins, estuaries, the ocean and areas adjacent to such waters shall be minimized.

***Policy BIO-M-l.21*:** Where appropriate, voluntary open space and conservation easements should be' considered by project applicants and supported by the County as a method to preserve important biological habitats.

***Policy BIO-M-l.22*:** The use of native landscaping shall be encouraged, especially in parks and designated open space.

***Policy BIO-M-l.23*:** Where sensitive plant species and sensitive animal species are found pursuant to the review of a discretionary project, efforts shall be mad~ to preserve the habitat in which they are located to the maximum extent feasible. For the purposes of this policy sensitive plant species are those species which appear on a list in the California Native Plant Society's Inventory of Endangered Vascular Plants of California. Sensitive animal species are defined as those animal species identified by the California Department of Fish and Game, the U.S. Fish and Wildlife Service and/or are listed in Tate's The Audubon Blue List (birds).

Orcutt Community Plan

The Orcutt Community Plan Area is located immediately south of the City of Santa Maria and contains both the unincorporated urban areas of the community of Orcutt and adjacent rural unincorporated areas which either have some potential for urbanization during the next 20 years (e.g., west Orcutt), or are related to the urban area from a resource perspective (e.g., Solomon Hills). The plan outlines goals and objectives to provide the foundation for the policies, recommendations and land use proposals. The policies related to biological resources are listed below; the actions and development standards related to biological resources to implement each policy are detailed in the plan.

> ***Policy BIO-O-1*:** Important natural resources in Orcutt, including sandhill chaparral, central dune scrub, wetlands, oak trees and woodland, Bishop pine forest, specimen trees, and central sage scrub shall be protected, consistent with the Open Space Plan and the standards below, unless this would prevent reasonable development of a property.
>
> ***Policy BIO-O-2*:** Consistent with necessary flood control practices, natural stream channels and riparian vegetation in Orcutt shall be maintained in an undisturbed state in order to protect banks from erosion, enhance wildlife passageways, and provide natural greenbelts, unless this would prevent reasonable development of a property.
>
> ***Policy BIO-O-3*:** Established native trees in designated open space areas shall be protected. Established native trees in developable areas shall be incorporated into the site landscaping plan to the greatest degree feasible except where it would interfere with reasonable development of a property. Native trees shall be considered established if they are six feet in height.
>
> ***Policy BIO-O-4*:** Non-native trees (e.g., eucalyptus groves and windrows) that provide known raptor nesting or key roosting sites shall be protected; nonnative specimen trees shall be protected to the greatest degree feasible except where it would interfere with reasonable development of a property. Non-native trees of less than 25 inches in diameter at breast height do not qualify as specimens for this Policy.
>
> ***Policy BIO-O-5*:** New facilities in Orcutt, including roads, bikepaths/trails, sewer lines and retention basins, shall to the maximum extent feasible be sited and designed to avoid disruption of significant natural resources within designated natural undeveloped open space areas, minimize removal of significant native vegetation and trees and provide for reasonable levels of habitat restoration for significant habitats disrupted by construction.

Santa Ynez Valley Planning Area

The Santa Ynez Valley Community Plan Area encompasses approximately 72 square miles and includes the unincorporated townships Santa Ynez, Ballard, and Los Olivos. The Santa Ynez Valley Community Plan provides the general public, landowners and decision makers with a framework for planning future development in the region. The Santa Ynez Valley Community Plan identifies specific policies and strategies to protect biological resources. The policies are listed below; the actions required to implement each policy are detailed in the plan.

> ***Policy BIO-SYV-1*:** Environmentally sensitive biological resources and habitat areas shall be protected and, where appropriate, enhanced.
>
> ***Policy BIO-SYV-2*:** The County shall encourage the dedication of conservation or open space easements to preserve important biological habitats. Where appropriate and legally feasible, the County shall require such easements.

***Policy BIO-SYV-3*:** Significant biological communities shall not be fragmented by development into small, non-viable areas.

***Policy BIO-SYV-4*:** Sensitive habitats shall be protected to the maximum extent possible, and compensatory mitigation shall be prescribed when impacts to or loss of these areas cannot be avoided.

***Policy BIO-SYV-5*:** Pollution of the Santa Ynez River, streams and drainage channels, underground water basins and areas adjacent to such waters shall be minimized.

***Policy BIO-SYV-6*:** "Hardbank" channelization (e.g., use of concrete, riprap, gabion baskets) of stream channels shall be prohibited, except where needed to protect existing structures. Where hardbank channelization is required, the material and design used shall be the least environmentally damaging alternative and site restoration on or adjacent to the stream channel shall be required, subject to a restoration plan.

***Policy BIO-SYV-7*:** Southern California steelhead trout is a federally listed endangered species that shall be protected.

***Policy BIO-SYV-8*:** Native protected trees and non-native specimen trees shall be preserved to the maximum extent feasible.

***Policy BIO-SYV-9*:** Trees serving as known raptor nesting sites or key raptor roosting sites shall be preserved to the maximum extent feasible.

***Policy BIO-SYV-10*:** Areas of one or more acres of central coastal scrub shall be preserved to the maximum extent feasible.

***Policy BIO-SYV-11*:** Areas of chaparral shall be protected from development to the maximum extent feasible.

***Policy BIO-SYV-12*:** Areas of native grasslands shall be preserved to the maximum extent feasible.

***Policy BIO-SYV-13*:** The use of native landscaping shall be encouraged, especially in parks, buffers adjacent to native habitats, and designated open space.

***Policy BIO-SYV-14*:** Where sensitive plant species and sensitive animal species are found pursuant to the review of a discretionary project, efforts shall be made to preserve the habitat in which they are located to the maximum extent feasible.

***Policy BIO-SYV-15*:** The County shall support and encourage public education of the importance of protecting, enhancing and restoring Santa Ynez Valley's natural resources and habitats.

Summerland Community Plan

The 907-acre Summerland Plan Area encompasses the unincorporated area Summerland and is located between Santa Barbara and Carpinteria, is situated within the Coastal Zone with the exception of a residential enclave along Ortega Ridge Road located in the inland area. The purpose of the plan is to provide general types and locations of land uses, policies for development, actions that will implement development policies, the location of and standards for public service facilities, standards for the conservation, development, and use of natural resources, and provisions for implementing open space. The Summerland Community Plan identifies specific policies and strategies to preserve and enhance the

biological resources within the community. The policies are listed below; the actions required to implement each policy are detailed in the plan.

> ***Policy BIO-S-1*:** Environmentally Sensitive Habitat areas within the Community Plan Study Area shall be protected, and where appropriate, enhanced.
>
> ***Policy BIO-S-2*:** Significant biological communities shall not be fragmented into small non-viable pocket areas by development.
>
> ***Policy BIO-S-3*:** Monarch Butterfly roosting habitats shall be preserved and protected.
>
> ***Policy BIO-S-4*:** Trimming or clearing of vegetation within 50' of the Monarch Butterfly Habitat located adjacent to Via Real and Lambert Road or along riparian habitats shall not occur without the review and the approval of the Resource Management Department.
>
> ***Policy BIO-S-5*:** The use of drought-tolerant and native landscaping shall be encouraged, especially in parks and designated open space.
>
> ***Policy BIO-S-6*:** To the maximum extent feasible, specimen trees shall be preserved and the planting of new trees shall be required. For the purposes of this policy, specimen trees are defined as those having unusual scenic or aesthetic quality, serving as known raptor nesting or key roosting sites, having important historical value, are unique due to species type or location or have been defined as a significant biological resource in a certified environmental document. Typically, non-native trees of less than 25 inches in diameter at breast height may not qualify as specimens.
>
> ***Policy BIO-S-7*:** Riparian habitat areas shall be protected from all new development and degraded riparian habitats shall be restored where appropriate.

Toro Canyon Planning Area

The Toro Canyon Planning Area is located in southeastern Santa Barbara County, in the western portion of the Carpinteria Valley between the Santa Ynez Mountains and the Santa Barbara Channel. Toro Canyon is bordered by the Summerland and Montecito Community Plan areas to the west, the Pacific Ocean to the south, the Los Padres National Forest to the north, and Rancho Monte Allegre and the Carpinteria City limits to the east. The southern portion of Toro Canyon lies within the state Coastal Zone. The Toro Canyon Plan identifies specific policies and strategies to protect biological resources. The policies are listed below; the actions and development standards related to biological resources to implement each policy are detailed in the plan. Policies related to biological resources include:

> ***Policy BIO-TC-1*:** Environmentally Sensitive Habitat (ESH) areas shall be protected and, where appropriate, enhanced.
>
> ***Policy BIO-TC-2*: *(INLAND)*** Landscaping for development shall use appropriate plant species to ensure compatibility with and preservation of ESH.
>
> ***Policy BIO-TC-2*: *(COASTAL)*** Landscaping for development shall use appropriate plant species to ensure compatibility with and preservation of ESH. All landscaping shall utilize only non-invasive plants.
>
> ***Policy BIO-TC-3*:** The County shall encourage the dedication of conservation or open space easements to preserve important biological habitats. Where appropriate and legally feasible, the County shall require such easements.

Policy BIO-TC-4*: *(COASTAL) Development within the Coastal Zone boundary shall be consistent with the Resource Protection and Development Policies of the County Local Coastal Program.

Policy BIO-TC-5*: *(COASTAL) Due to the existing land subdivision and built environment in the Rural Neighborhoods of Torito Road, Serena Park, La Mirada Drive and Ocean Oaks Road, where existing structures and related landscaped areas are within the ESH buffer, structural additions to the existing primary residence may be allowed if it can be shown, pursuant to the required site-specific biological study, that such development shall not adversely impact the adjacent riparian species and meets all other provisions of this Plan and the LCP including development standards for native and non-native protected tree species. Additions shall also comply with development standards in DevStd BIO-TC-5.1 through DevStd-TC-5.4.

Policy BIO-TC-6*: *(COASTAL) All residential structures deemed nonconforming shall be allowed to be reconstructed pursuant to the nonconforming regulations contained in the zoning ordinance, Article II (Section 35-162) and the TCP Overlay District (Sec. 35-194).

Policy BIO-TC-7*: *(INLAND) Development shall avoid ESH and ESH buffer areas to the maximum extent feasible.

Policy BIO-TC-8*: *(INLAND) New or expanded cultivated agricultural uses shall be prohibited within ESH areas and avoided to the maximum extent feasible in ESH buffer areas, except on agriculturally zoned parcels (i.e., AG-I or AG-II) subject to Policy BIO-TC-9.

Policy BIO-TC-9*: *(INLAND) On agriculturally zoned parcels containing Southern Coast Live Oak Riparian Forest ESH, new or expanded cultivated agriculture may encroach up to 25 feet from the ESH as measured from the top of bank or, if the habitat extends beyond the top of bank, as measured from the edge of riparian vegetation. Agricultural uses in the ESH buffer shall be designed to reduce and direct runoff away from the ESH habitat and minimize the use of pesticides and herbicides to the maximum extent feasible.

Policy BIO-TC-10*: *(INLAND) All residential structures deemed nonconforming shall be allowed to be reconstructed pursuant to the nonconforming regulations contained in the zoning ordinance, Article III (Section 35-307) and the TCP Overlay District (Sec. 35-355).

Policy BIO-TC-11*: *(INLAND) Natural stream channels shall be maintained in an undisturbed state to the maximum extent feasible in order to protect banks from erosion, enhance wildlife passageways, and provide natural greenbelts. “Hardbank” channelization (e.g., use of concrete, riprap, gabion baskets) of stream channels shall be prohibited, except where needed to protect existing structures. Where hardbank channelization is required, the material and design used shall be the least environmentally damaging alternative and site restoration on or adjacent to the stream channel shall be required, subject to a Restoration Plan.

Policy BIO-TC-11*: *(COASTAL) Except for routine Flood Control District maintenance as allowed under DevStd FLD-TC-1.6, or for habitat enhancement projects approved by all federal and state agencies having jurisdiction, natural stream channels shall be maintained in an undisturbed state in order to protect banks from erosion, enhance wildlife passageways, and provide natural greenbelts as allowed under DevStd FLD-TC-1.6.

***Policy BIO-TC-12*:** Significant biological communities not designated ESH should not be fragmented by development into small, non-viable areas.

***Policy BIO-TC-13*:** Native protected trees and non-native protected trees shall be preserved to the maximum extent feasible.

***Policy BIO-TC-14*:** Non-native trees and forests (e.g., eucalyptus groves and windrows) that provide known raptor nesting or major and recurrent roosting sites shall be protected.

***Policy BIO-TC-15*:** Southern California steelhead trout is a federally listed endangered species which, if identified in the Plan area, shall be protected.

Policy BIO-TC-16*: *(COASTAL) The conversion of vacant land in ESH, ESH buffer, or on slopes over 30 percent to new crop, orchard, vineyard, or other agricultural use shall not be permitted. Existing, legally established agricultural uses shall be allowed to continue.

3.4.4 Project Impact Analysis

Thresholds of Significance

CEQA Guidelines

Pursuant to Appendix G of the CEQA Guidelines, potentially significant impacts to biological resources would result if the Project would:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

County of Santa Barbara Environmental Thresholds

The County prepared its Environmental Thresholds and Guidelines Manual (Thresholds Manual) to assist the public, applicants, environmental consulting firms, and County decision makers in understanding the use and application of various environmental impacts from proposed Projects (Santa Barbara County 2024). The manual includes thresholds of significance that are intended to supplement provisions of the State CEQA Guidelines for a variety of environmental resources, including biological resources. The Thresholds Manual contains criteria for determining the significance of an impact to biological resources. Disturbance to habitats or species may be significant, based on substantial evidence in the record, if they substantially impact significant resources for either the short- or the long-term in the following ways:

- Substantially reduce or eliminate species diversity or abundance.

- Substantially reduce or eliminate quantity or quality of nesting areas.
- Substantially limit reproductive capacity through losses of individuals or habitat.
- Substantially fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources.
- Substantially limit or fragment range and movement (geographic distribution or animals and/or seed dispersal routes).
- Substantially interfere with natural processes, such as fire or flooding, upon which the habitat depends.

The Thresholds Manual states that environmental impact analysis and mitigation needs to include federal and State biological resource regulations (i.e., the federal and State Endangered Species Acts, National Environmental Policy Act, Clean Water Act Section 404, Bald Eagle Protection Act, Migratory Bird Treaty Act, Executive Order 11990 [wetlands protection], Rivers and Harbors Act Section 10, Marine Protection, Sanctuary and Research Act, Marine Mammal Protection Act, and Section 1601 and 1603 Stream Alteration Agreements). In addition, requirements for the protection of biological resources listed in the Comprehensive Plan Conservation Element, Comprehensive Plan Environmental Resource Management Element, Comprehensive Plan Land Use Element, Community Plans, and Local Coastal Plans should also be included for projects in the unincorporated area of Santa Barbara County.

Chapter 6, Section D of the Thresholds Manual includes habitat-specific impact assessment guidelines, which provide additional impact assessment guidelines specific to several biological communities. The following summarizes the thresholds applied to different habitat types and resources throughout the county.

Wetlands. Based on the County guidelines, the following types of project-created impacts may be considered significant:

- Projects that result in a net loss of important wetland area or wetland habitat value, either through direct or indirect impacts to wetland vegetation, degradation of water quality, or would threaten the continuity of wetland-dependent animal or plant species are considered to have a potentially significant effect on the environment.
- Wildlife access, use, and dispersal in wetland habitats are key components of their ecosystem value. Projects that substantially interrupt wildlife access, use and dispersal in wetland areas, would typically be considered to have potentially significant impacts.
- The hydrology of wetlands systems must be maintained if their function and values are to be preserved. Therefore, maintenance of hydrological conditions, such as the quantity and quality of runoff, must be assessed in project review.

Coastal Salt Marsh. Based on the County guidelines, the following types of project-related impacts may be considered significant:

- Substantial alteration of tidal circulation or decrease of tidal prism;
- Adverse hydrological changes, substantial increase in sedimentation, introduction of toxic elements or alteration of ambient water temperature;
- Creation of indirect impacts such as noise and turbidity that affects sensitive animal species, especially during critical periods such as breeding and nesting;
- Disruption of wildlife dispersal corridors; and

- Disturbance or removal of substantial amounts of marsh habitats.

Vernal Pools. Based on the County guidelines, the following types of project-related impacts may be considered significant:

- Direct removal of a vernal pool or vernal pool complex;
- Direct or indirect adverse hydrologic changes such as altered freshwater input, changes in the watershed area or runoff quantity and/or quality, substantial increase in sedimentation, introduction of toxic elements or alteration of ambient water temperature;
- Disruption of a larger plant community (e.g., grassland) within which a vernal pool(s) occur;
- Isolation or fragmentation of contiguous habitat which would disrupt animal movement patterns or seed dispersal routes;
- Activities that would increase the chance of exotic plant invasion;
- Activities that would increase the vulnerability of species to local extirpation.

Riparian Habitats. Based on the County guidelines, the following types of project-related impacts may be considered significant:

- Direct removal of riparian vegetation;
- Disruption of riparian wildlife habitat, particularly animal dispersal corridors and/or understory vegetation;
- Intrusion within the upland edge of the riparian canopy (generally within 50 feet in urban areas, within 100 feet in rural areas, and within 200 feet of major rivers), leading to potential disruption of animal migration, breeding, etc. through increased noise, light and glare, and human or domestic animal intrusion;
- Disruption of a substantial amount of adjacent upland vegetation where such vegetation plays a critical role in supporting riparian-dependent wildlife species (e.g., amphibians), or where such vegetation aids in stabilizing steep slopes adjacent to the riparian corridor, which reduces erosion and sedimentation potential; and
- Construction activity that disrupts critical time periods (nesting, breeding) for fish and other wildlife species.

Native Grasslands. Native grasslands are defined as an area where native grassland species comprise 10% or more of the total relative cover. Based on the County guidelines, the following types of project-related impacts may be considered significant:

- Removal or severe disturbance to a patch or patches of native grasses greater than ¼ acre; or
- Removal or severe disturbance to native grassland patches that are part of a larger significant native grassland.

Oak Woodlands and Forests. Based on the County guidelines, project-created impacts on oak woodlands and forests may be considered significant due to changes in habitat value and species composition such as the following:

- Habitat fragmentation;

- Removal of understory;
- Alteration to drainage patterns;
- Disruption of the canopy; or
- Removal of a significant number of trees that would cause a break in the canopy or disruption in animal movement in and through the woodland.

Individual Native Trees. Based on the County guidelines, the following types of project- related impacts may be considered significant:

- Impacts to native specimen trees, regardless of size. Specimen trees are defined as mature trees that are healthy and structurally sound and have grown into the natural stature particular to the species;
- Impacts to rare native trees, which are very low in number or isolated in distribution; or
- The loss of 10% or more of the trees of biological value on a project site.

Methodology

As described in Chapter 2, *Project Description*, the County proposes to amend plans and regulations to allow for development of utility-scale solar energy facilities (and smaller scales of solar energy facilities and systems) on land in unincorporated Santa Barbara County. However, future project-level siting and design details as well as the timing of potential future solar development is unknown at this time. The magnitude of impacts to biological resources for a given solar development is unknown at this time and would depend on site and facility-specific factors such as the size of the proposed solar facility and existing resources. Therefore, the impact analysis does not evaluate potential impacts to biological resources on a development or site-specific level.

The information and analysis in this section are based on the database searches and literature review which identified sensitive biological resources that have been previously recorded within the Project area. The CDFW CNDDB and CNPS RPI were queried for special-status species with the potential to occur within the County (included in Appendix C), while the USFWS Critical Habitat Mapper was used to identify USFWS-designated critical habitat for these special-status species within the County. The CALVEG database was used to identify vegetation types within the Project area that could support sensitive natural communities as designated by various resource agencies, such as the CDFW California Natural Community List (CDFW 2025f). These sensitive natural communities are generally considered to have important functions or values for wildlife and/or are recognized as declining in extent or distribution and are considered threatened enough to warrant some level of protection. In addition, the NWI was used to identify riparian and wetland areas within the Project area, and County zoning maps and resource layers were reviewed to identify ESH and Riparian Corridor areas. The results of the database search and literature review formed the basis for the analysis of potential impacts of future solar energy facilities on sensitive biological resources within the Project area and the development of mitigation measures to avoid, reduce, and minimize impacts on those resources.

The impact analysis assumes that all existing policies and development standards intended to protect biological resources would continue to apply to future solar energy systems and facilities. The proposed amendments provide permit exemption parameters and development standards. Requirements in the existing Utility-Scale Solar Photovoltaic Overlay regulations (LUDC Section 35.59) would continue to

apply to utility-scale solar energy facilities but would be revised or expanded as proposed to apply to Tier 3 and Tier 4 facilities. The proposed amendments would require the protection of biological resources, minimization of raptor electrocution, and the installation of ground vegetation and maintenance. These requirements are considered in the impact analysis below.

Project Impacts

This section provides an analysis of the potential impacts to biological resources that could occur as a result of future solar energy facilities. **Table 3.4-2**, *Summary of Biological Resources Impacts*, provides a summary of the Project's potential impacts related to biological resources. A detailed discussion of each of the impacts follows.

TABLE 3.4-2
SUMMARY OF BIOLOGICAL RESOURCES IMPACTS

Biological Resources Impacts	Impact Classification	Mitigation Measures	Residual Impact
Impact BIO-1: Future solar energy facilities enabled for permitting under the Project could potentially result in a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	Potentially Significant	MM BIO-1: Construction Activities and Staging Areas for Tier 2 Solar Energy Systems MM BIO-2: Nesting Birds MM BIO-3: Vegetation Mapping and Habitat Assessment MM BIO-4: Special-Status Plant Species MM BIO-5: Construction Worker Environmental Awareness Program MM BIO-6: Invasive Plant Species Control Measures MM BIO-7: General Construction Best Management Practices MM BIO-8: Qualified Biological Monitor MM BIO-9: Revegetation Plan MM BIO-10: Listed Endangered/ Threatened Wildlife Species MM BIO-11: Non-Listed Special Status Wildlife Species MM BIO-12: Bats MM BIO-13: Critical Habitat	Insignificant with Mitigation
Impact BIO-2: Future solar energy facilities enabled for permitting under the Project could potentially result in a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.	Potentially Significant	MM BIO-1: Construction Activities and Staging Areas for Tier 2 Solar Energy Systems MM BIO-3: Vegetation Mapping and Habitat Assessment MM BIO-5: Construction Worker Environmental Awareness Program MM BIO-6: Invasive Plant Species Control Measures MM BIO-7: General Construction Best Management Practices MM BIO-8: Qualified Biological Monitor MM BIO-9: Revegetation Plan MM BIO-14: Sensitive Natural Communities	Insignificant with Mitigation

TABLE 3.4-2
SUMMARY OF BIOLOGICAL RESOURCES IMPACTS

Biological Resources Impacts	Impact Classification	Mitigation Measures	Residual Impact
Impact BIO-3: Future solar energy facilities enabled for permitting under the Project could potentially result in a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means.	Potentially Significant	MM BIO-1: Construction Activities and Staging Areas for Tier 2 Solar Energy Systems MM BIO-3: Vegetation Mapping and Habitat Assessment MM BIO-5: Construction Worker Environmental Awareness Program MM BIO-6: Invasive Plant Species Control Measures MM BIO-7: General Construction Best Management Practices MM BIO-8: Qualified Biological Monitor MM BIO-9: Revegetation Plan MM BIO-15: Aquatic Resources	Insignificant with Mitigation
Impact BIO-4: Future solar energy systems and facilities enabled for permitting under the Project could interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	Potentially Significant	MM BIO-1: Construction Activities and Staging Areas for Tier 2 Solar Energy Systems MM BIO-2: Nesting Birds MM BIO-3: Vegetation Mapping and Habitat Assessment MM BIO-5: Construction Worker Environmental Awareness Program MM BIO-6: Invasive Plant Species Control Measures MM BIO-7: General Construction Best Management Practices MM BIO-8: Qualified Biological Monitor MM BIO-9: Revegetation Plan MM BIO-12: Bats MM BIO-16: Wildlife Connectivity	Insignificant with Mitigation
Impact BIO-5: Future solar energy facilities enabled for permitting under the Project could conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	Potentially Significant	MM BIO-1: Construction Activities and Staging Areas for Tier 2 Solar Energy Systems MM BIO-2: Nesting Birds MM BIO-3: Vegetation Mapping and Habitat Assessment MM BIO-4: Special-Status Plant Species MM BIO-5: Construction Worker Environmental Awareness Program MM BIO-6: Invasive Plant Species Control Measures MM BIO-7: General Construction Best Management Practices MM BIO-8: Qualified Biological Monitor MM BIO-9: Revegetation Plan MM BIO-10: Listed Endangered/ Threatened Wildlife Species	Insignificant with Mitigation

TABLE 3.4-2
SUMMARY OF BIOLOGICAL RESOURCES IMPACTS

Biological Resources Impacts	Impact Classification	Mitigation Measures	Residual Impact
		MM BIO-11: Non-Listed Special Status Wildlife Species MM BIO-12: Bats MM BIO-13: Critical Habitat MM BIO-14: Sensitive Natural Communities MM BIO-15: Aquatic Resources MM BIO-16: Wildlife Connectivity	
Impact BIO-6: Future solar energy systems and facilities enabled for permitting under the Project could conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.	No Impact	N/A	No Impact
Cumulative Impacts	Potentially Significant	MM BIO-1 through MM BIO-16	Insignificant with Mitigation

Threshold a) The Project would result in a significant impact if the Project would have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Impact BIO-1: Future solar energy facilities enabled under the Project could potentially result in a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

A total of 62 special-status plant species and 60 special-status wildlife species were determined to have a low to moderate, moderate, moderate to high, or high potential to occur within the County, as shown in **Table 3.4-3**, *Special Status Plant Species with Low to Moderate, Moderate, Moderate to High, or High Potential to Occur*, and **Table 3.4-4**, *Special Status Wildlife Species with Low to Moderate, Moderate, Moderate to High, or High Potential to Occur*. In addition, USFWS-designated critical habitat for 14 special-status species is present within the Project area. Future solar energy systems and facilities enabled for permitting under the Project in areas that support suitable habitat for these species could result in impacts to special-status plants and wildlife, as discussed below. If these species and/or critical habitat are present and impacts cannot be avoided, then impacts to special-status species and critical habitat from construction, operation, or decommissioning of future solar energy systems and facilities would be potentially significant.

TABLE 3.4-3
SPECIAL STATUS PLANT SPECIES WITH LOW TO MODERATE, MODERATE, MODERATE TO HIGH, OR HIGH POTENTIAL TO OCCUR

Common Name *Scientific Name*	**Federal Status**	**State Status**	**CRPR**	**Potential to Occur within the Project Area**
Abrams' oxytheca *Acanthoscyphus parishii* var. *abramsii*	None	None	1B.2	*Low to moderate.* Of the 4 CNDDB observations of this species in the Project area, the most recent CNDDB observation of this species was recorded in 1976.
Hoover's bent grass *Agrostis hooveri*	None	None	1B.2	*High.* There are 12 CNDDB observations of this species in the CNDDB record. The most recent observation of this species was recorded in 2013.
Mt. Pinos onion *Allium howellii* var. *clokeyi*	None	None	1B.3	*Low to moderate.* Of the 2 CNDDB observations of this species in the Project area, the most recent CNDDB observation of this species was recorded in 1996.
Santa Ynez groundstar *Ancistrocarphus keilii*	None	None	1B.1	*Low to moderate.* Of the 2 CNDDB observations of this species in the Project area, the most recent CNDDB observation of this species was recorded in 1995.
aphanisma *Aphanisma blitoides*	None	None	1B.2	*Low to moderate.* Of the 2 CNDDB occurrences of this species in the Project area, the most recent was recorded in 1998.
San Gabriel manzanita *Arctostaphylos glandulosa* ssp. *gabrielensis*	None	None	1B.2	*Low to moderate.* There are 5 known CNDDB occurrences of this species within the Project area, all of which were recorded in 1992.
La Purisima manzanita *Arctostaphylos purissima*	None	None	1B.1	*High.* There are 41 known CNDDB occurrences of this species within the Project area. Of these, the most recent was recorded in 2016.
Refugio manzanita *Arctostaphylos refugioensis*	None	None	1B.2	*High.* There are 27 known CNDDB occurrences of this species within the Project area. Of these, the most recent was recorded in 2016.
sand mesa manzanita *Arctostaphylos rudis*	None	None	1B.1	*High.* There are 24 known CNDDB occurrences of this species within the Project area. Of these, the most recent was recorded in 2013.
Coulter's saltbush *Atriplex coulteri*	None	None	1B.2	*Low to moderate.* There are 5 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2003.
Davidson's saltscale *Atriplex serenana* var. *davidsonii*	None	None	1B.2	*Moderate.* There are 4 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2009.
late-flowered mariposa-lily *Calochortus fimbriatus*	None	None	1B.3	*High.* There are 49 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2017.
Palmer's mariposa-lily *Calochortus palmeri* var. *palmeri*	None	None	1B.2	*Moderate.* There are 5 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2013.
La Panza mariposa-lily *Calochortus simulans*	None	None	1B.3	*Moderate to high.* There are 3 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2019.
Santa Barbara jewelflower *Caulanthus amplexicaulis* var. *barbarae*	None	None	1B.1	*Moderate to high.* There are 11 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2013.

TABLE 3.4-3
SPECIAL STATUS PLANT SPECIES WITH LOW TO MODERATE, MODERATE, MODERATE TO HIGH, OR HIGH POTENTIAL TO OCCUR

Common Name *Scientific Name*	Federal Status	State Status	CRPR	Potential to Occur within the Project Area
California jewelflower *Caulanthus californicus*	FE	SE	1B.1	*Moderate to high.* There are 8 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2018.
Lemmon's jewelflower *Caulanthus lemmonii*	None	None	1B.2	*Moderate to high.* There are 6 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2018.
Santa Barbara ceanothus *Ceanothus impressus* var. *impressus*	None	None	1B.2	*High.* There are 37 known CNDDB occurrences of these species within the Project area. Of these, the most recent occurrence was recorded in 2019.
southern tarplant *Centromadia parryi* ssp. *australis*	None	None	1B.1	*Moderate to high.* There are 14 known CNDDB occurrences of these species within the Project area. Of these, the most recent occurrence was recorded in 2013.
coastal goosefoot *Chenopodium littoreum*	None	None	1B.2	*Low to moderate.* There are 3 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 1996.
salt marsh bird's-beak *Chloropyron maritimum* ssp. *maritimum*	FE	SE	1B.2	*Moderate.* There are 2 known CNDDB occurrences of this species within the Project area. These occurrences were recorded in 2017 and 2018.
Blakley's spineflower *Chorizanthe blakleyi*	None	None	1B.3	*Moderate to high.* There are 11 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2014.
surf thistle *Cirsium rhothophilum*	None	ST	1B.2	*Moderate.* There are 16 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2004.
La Graciosa thistle *Cirsium scariosum* var. *loncholepis*	FE	ST	1B.1	*High.* There are 7 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2019. Critical habitat for this species also occurs within the western portion of the Project area.
California saw-grass *Cladium californicum*	None	None	2B.2	*Moderate.* There are 2 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2005.
seaside bird's-beak *Cordylanthus rigidus* ssp. *littoralis*	None	SE	1B.1	*High.* There are 25 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2010.
Gaviota tarplant *Deinandra increscens* ssp. *villosa*	FE	SE	1B.1	*High.* There are 21 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2020. Critical habitat for this species also occurs within the southwestern portion of the Project area.
dune larkspur *Delphinium parryi* ssp. *blochmaniae*	None	None	1B.2	*Moderate to high.* There are 13 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2010.
recurved larkspur *Delphinium recurvatum*	None	None	1B.2	*Low to moderate.* Only 1 known CNDDB occurrence of this species within the Project area was recorded in 2017.

TABLE 3.4-3
SPECIAL STATUS PLANT SPECIES WITH LOW TO MODERATE, MODERATE, MODERATE TO HIGH, OR HIGH POTENTIAL TO OCCUR

Common Name ***Scientific Name***	**Federal Status**	**State Status**	**CRPR**	**Potential to Occur within the Project Area**
umbrella larkspur *Delphinium umbraculorum*	None	None	1B.3	*High.* There are 43 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2019.
Vandenberg monkeyflower *Diplacus vandenbergensis*	FE	None	1B.1	*High.* There are 17 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2019. Critical habitat for this species also occurs within the western portion of the Project area.
beach spectaclepod *Dithyrea maritima*	None	ST	1B.1	*Moderate to high.* There are 8 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2016.
Blochman's dudleya *Dudleya blochmaniae* ssp. *blochmaniae*	None	None	1B.1	*Moderate.* There are 8 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2000.
Kern mallow *Eremalche parryi* ssp. *kernensis*	FE	None	1B.2	*Moderate to high.* There are 4 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2019.
Blochman's leafy daisy *Erigeron blochmaniae*	None	None	1B.2	*Moderate.* There are 12 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2011.
Lompoc yerba santa *Eriodictyon capitatum*	FE	SR	1B.2	*High.* There are 11 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2019. Critical habitat for this species also occurs within the western portion of the Project area.
Fort Tejon woolly sunflower *Eriophyllum lanatum* var. *hallii*	None	None	1B.1	*Low to moderate.* There are 2 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2003.
Ojai fritillary *Fritillaria ojaiensis*	None	None	1B.2	*Moderate to high.* There are 26 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2017.
mesa horkelia *Horkelia cuneata* var. *puberula*	None	None	1B.1	*High.* There are 26 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2013.
Kellogg's horkelia *Horkelia cuneata* var. *sericea*	None	None	1B.1	*Moderate.* There are 9 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2012.
Contra Costa goldfields *Lasthenia conjugens*	FE	None	1B.1	*Not expected.* There is only 1 known CNDDB occurrence of this species in the Project area from 1950 which has since been extirpated.
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	None	None	1B.1	*Moderate.* There are 5 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2013.
beach layia *Layia carnosa*	FT	SE	1B.1	*Moderate to high.* There are 4 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2017.

TABLE 3.4-3
SPECIAL STATUS PLANT SPECIES WITH LOW TO MODERATE, MODERATE, MODERATE TO HIGH, OR HIGH POTENTIAL TO OCCUR

Common Name *Scientific Name*	Federal Status	State Status	CRPR	Potential to Occur within the Project Area
blushing layia *Layia erubescens*	None	None	1B.2	*High.* There are 27 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2023.
pale-yellow layia *Layia heterotricha*	None	None	1B.1	*Moderate to high.* There are 14 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2016.
Santa Barbara honeysuckle *Lonicera subspicata* var. *subspicata*	None	None	1B.2	*Moderate to high.* There are 29 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2016.
Alice's lovely bushmallow *Malacothamnus eastwoodiae*	None	None	1B.1	*Moderate to high.* There are 5 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2021.
white-veined monardella *Monardella hypoleuca* ssp. *hypoleuca*	None	None	1B.3	*Moderate.* There are 19 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2006.
southern curly-leaved monardella *Monardella sinuata* ssp. *sinuata*	None	None	1B.2	*Moderate to high.* There are 26 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2012.
Point Arguello monardella *Monardella undulata* ssp. *arguelloensis*	None	None	1B.1	*Low to moderate.* There is 1 known CNDDB occurrence of this species within the Project area which was recorded in 2012.
crisp monardella *Monardella undulata* ssp. *crispa*	None	None	1B.2	*Moderate.* There are 18 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2013.
San Luis Obispo monardella *Monardella undulata* ssp. *undulata*	None	None	1B.2	*Moderate.* There are 12 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2012.
San Joaquin woollythreads *Monolopia congdonii*	FE	None	1B.2	*Moderate.* There are 3 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2016.
Gambel's water cress *Nasturtium gambelii*	FE	ST	1B.1	*Moderate.* There are 3 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2012.
Sonoran maiden fern *Pelazoneuron puberulum* var. *sonorense*	None	None	2B.2	*Moderate.* There are 12 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2015.
Mexican earthmoss *Pleuridium mexicanum*	None	None	2B.1	*Low to moderate.* There is 1 known CNDDB occurrence of this species within the Project area. This was recorded in 2006.
Nuttall's scrub oak *Quercus dumosa*	None	None	1B.1	*Moderate.* There are 17 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2015.

TABLE 3.4-3
SPECIAL STATUS PLANT SPECIES WITH LOW TO MODERATE, MODERATE, MODERATE TO HIGH, OR HIGH POTENTIAL TO OCCUR

Common Name *Scientific Name*	Federal Status	State Status	CRPR	Potential to Occur within the Project Area
black-flowered figwort *Scrophularia atrata*	None	None	1B.2	*High.* There are 51 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2016.
chaparral ragwort *Senecio aphanactis*	None	None	2B.2	*Low to moderate.* There are 4 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2006.
Parish's checkerbloom *Sidalcea hickmanii* ssp. *parishii*	None	SR	1B.2	*Moderate.* There are 10 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2018.
San Bernardino aster *Symphyotrichum defoliatum*	None	None	1B.2	*Low to moderate.* There is 1 known CNDDB occurrence of this species within the Project area. This was recorded in 1995.
Santa Ynez false lupine *Thermopsis macrophylla*	None	SR	1B.3	*Moderate.* There are 8 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2011.

NOTES:

Sensitivity Status

Federal

FE *Federally Endangered*
FT *Federally Threatened*
FC *Federal Candidate*
FPE *Federally Proposed as Endangered*
FPT *Federally Proposed as Threatened*
FPD *Federally Proposed for Delisting*

State

SE *State Listed as Endangered*
ST *State Listed as Threatened*
SCE *State Candidate for Endangered*
SCT *State Candidate for Threatened*
SR *State Rare*

Local

CRPR *California Rare Plant Ranks:*
California Rare Plant Rank 1A Plants presumed extirpated in California and either rare or extinct elsewhere
California Rare Plant Rank 1B Plants rare, threatened, or endangered in California and elsewhere
California Rare Plant Rank 2A Plants presumed extirpated in California but common elsewhere
California Rare Plant Rank 2B Plants rare, threatened, or endangered in California, but common elsewhere
California Rare Plant Rank 3 Plants about which more information is needed, a review list
California Rare Plant Rank 4 Plants of limited distribution, a watch list

Threat Code extensions and their meanings:

0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2-Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
0.3-Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Sources for Preferred Habitat:

California Native Plant Society. 2025. CNPS Rare Plant Inventory. Available online at: https://rareplants.cnps.org/. Accessed March 25, 2025.

CDFW. 2025. California Natural Diversity Database (CNDDB). RareFind, Version 5.0 (Commercial Subscription). Sacramento, California: CDFW, Biogeographic Data Branch. Available online at: https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Accessed March 25, 2025.

TABLE 3.4-4
SPECIAL STATUS WILDLIFE SPECIES WITH LOW TO MODERATE, MODERATE, MODERATE TO HIGH, OR HIGH POTENTIAL TO OCCUR

Common Name *Scientific Name*	Federal Status	State Status	CDFW	Potential to Occur within Project Area
Invertebrates				
Crotch's bumble bee *Bombus crotchii*	None	SCE	None	*High.* There are 21 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2020.
American bumble bee *Bombus pensylvanicus*	None	None	None	*Low to moderate.* There is 1 known CNDDB occurrence of this species within the Project area, which was recorded in 1991.
vernal pool fairy shrimp *Branchinecta lynchi*	FT	None	None	*High.* There are 9 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2017. Critical habitat for this species also occurs within the central portion of the Project area.
monarch - California overwintering population *Danaus plexippus plexippus* pop. *1*	FPT	None	None	*High.* There are 116 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2023.
Kern primrose sphinx moth *Euproserpinus euterpe*	FT	None	None	*Moderate.* There are 5 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2015.
Fish				
tidewater goby *Eucyclogobius newberryi*	FE	None	SSC	*High.* There are 30 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2016. Critical habitat for this species also occurs within the northwestern and southern portions of the Project area.
unarmored threespine stickleback *Gasterosteus aculeatus williamsoni*	FE	SE	FP	*Moderate.* There are 3 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2010.
arroyo chub *Gila orcuttii*	None	None	SSC	*Moderate.* There is 1 known CNDDB occurrence of this species within the Project area, which was recorded in 1996. Additional observations within the Project area are also recorded in iNaturalist.
steelhead - southern California DPS *Oncorhynchus mykiss irideus* pop. *10*	FE	SCE	None	*Moderate*. There are 6 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2014.
Amphibians				
California tiger salamander - Santa Barbara County DPS *Ambystoma californiense* pop. *2*	FE	ST	WL	*High.* There are 30 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2017. Critical habitat for this species also occurs within the western portion of the Project area.
arroyo toad *Anaxyrus californicus*	FE	None	SSC	*High.* There are 5 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2011. Species observations limited to Sisquoc and Santa Ynez rivers. Critical habitat for this species also occurs within the central portion of the Project area.

TABLE 3.4-4
SPECIAL STATUS WILDLIFE SPECIES WITH LOW TO MODERATE, MODERATE, MODERATE TO HIGH, OR HIGH POTENTIAL TO OCCUR

Common Name *Scientific Name*	Federal Status	State Status	CDFW	Potential to Occur within Project Area
foothill yellow-legged frog - south coast DPS *Rana boylii* pop. *6*	FE	SE	None	*Moderate.* There are 7 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 1980.
California red-legged frog *Rana draytonii*	FT	None	SSC	*High.* There are 131 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2022. Critical habitat for this species also occurs throughout the Project area.
western spadefoot *Spea hammondii*	FPT	None	SSC	*High.* There are 120 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2019.
Coast Range newt *Taricha torosa*	None	None	SSC	*High.* There are 17 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2015.
Reptiles				
Northern California legless lizard *Anniella pulchra*	None	None	SSC	*High.* There are 108 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2021.
California legless lizard *Anniella* spp.	None	None	SSC	*High.* There are 5 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 1983. Additional observations within the Project area are also recorded in iNaturalist.
California glossy snake *Arizona elegans occidentalis*	None	None	SSC	*High.* There are 17 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2015. All occurrences of this species have been located along Hwy 166.
coastal whiptail *Aspidoscelis tigris stejnegeri*	None	None	SSC	*Moderate.* There is 1 known CNDDB occurrence of this species within the Project area, which was recorded in 2013. Additional observations within the Project area are also recorded in iNaturalist.
southwestern pond turtle *Actinemys pallida*	FPT	None	SSC	*High.* There are 99 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2022.
blunt-nosed leopard lizard *Gambelia sila*	FE	SE	FP	*High.* There are 9 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2007.
coast horned lizard *Phrynosoma blainvillii*	None	None	SSC	*High.* There are 27 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2017.
coast patch-nosed snake *Salvadora hexalepis virgultea*	None	None	SSC	*Moderate to high.* There are 8 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2004.
two-striped gartersnake *Thamnophis hammondii*	None	None	SSC	*High.* There are 24 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2016.

TABLE 3.4-4
SPECIAL STATUS WILDLIFE SPECIES WITH LOW TO MODERATE, MODERATE, MODERATE TO HIGH, OR HIGH POTENTIAL TO OCCUR

Common Name *Scientific Name*	Federal Status	State Status	CDFW	Potential to Occur within Project Area
Birds				
Cooper's hawk *Accipiter cooperii*	None	None	WL	*High.* There are 5 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2009. Additional observations within the Project area are also recorded in eBird.
tricolored blackbird *Agelaius tricolor*	BCC	ST	SSC	*High.* There are 12 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2014. Additional observations within the Project area are also recorded in eBird.
southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	None	None	WL	*High.* There are 4 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 2013. Additional observations within the Project area are also recorded in eBird.
grasshopper sparrow *Ammodramus savannarum*	None	None	SSC	*Moderate.* There are 2 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 2008. Additional observations within the Project area are also recorded in eBird.
golden eagle *Aquila chrysaetos*	BGEPA	None	FP, WL	*Moderate.* There are 2 known CNDDB occurrences of this species within the Project area. Of these, the most recent observation was recorded in 1974. Additional observations within the Project area are also recorded in eBird.
Bell's sparrow *Artemisiospiza belli belli*	None	None	WL	*Moderate.* There is 1 known CNDDB occurrence of this species within the Project area, which was recorded in 1994. Additional observations within the Project area are also recorded in eBird.
short-eared owl *Asio flammeus*	BCC	None	SSC	*Moderate.* There is 1 known CNDDB occurrence of this species within the Project area, which was recorded in 2017. Additional observations within the Project area are also recorded in eBird.
burrowing owl *Athene cunicularia*	BCC	SCE	SSC	*Moderate to high.* There are 4 known CNDDB occurrences of this species within the Project area, the most recent of which was recorded in 2009. Additional observations within the Project area are also recorded in eBird.
ferruginous hawk *Buteo regalis*	None	None	WL	*Moderate to high.* There are 2 known CNDDB occurrences of this species within the Project area, the most recent of which was recorded in 1992. Additional observations within the Project area are also recorded in eBird.
western snowy plover *Charadrius nivosus nivosus*	FT	None	SSC	*High.* There are 10 known CNDDB occurrences of this species within the Project area, the most recent of which was recorded in 2014. Critical habitat for this species also occurs within the northwestern portion of the Project area.
white-tailed kite *Elanus leucurus*	None	None	FP	*High.* There are 4 known CNDDB occurrences of this species within the Project area, the most recent of which was recorded in 2009. Additional observations within the Project area are also recorded in eBird.

TABLE 3.4-4
SPECIAL STATUS WILDLIFE SPECIES WITH LOW TO MODERATE, MODERATE, MODERATE TO HIGH, OR HIGH POTENTIAL TO OCCUR

Common Name *Scientific Name*	Federal Status	State Status	CDFW	Potential to Occur within Project Area
southwestern willow flycatcher *Empidonax traillii extimus*	FE	SE	None	*Moderate to high.* There are 5 known CNDDB occurrences of this species within the Project area. Of these, the most recent occurrence was recorded in 1995. Critical habitat for this species also occurs within the western portion of the Project area. Additional observations within the Project area are also recorded in eBird.
California horned lark *Eremophila alpestris actia*	None	None	WL	*High.* There are 2 known CNDDB occurrences of this species within the Project area, the most recent of which was recorded in 2015. Additional observations within the Project area are also recorded in eBird.
Prairie falcon *Falco mexicanus*	None	None	WL	*Moderate to high.* There are 7 known CNDDB occurrences of this species within the Project area, the most recent of which was recorded in 1981. Additional observations within the Project area are also recorded in eBird.
American peregrine falcon *Falco peregrinus anatum*	Delisted	Delisted	None	*Moderate.* There are 5 known CNDDB occurrences of this species within the Project area, the most recent of which was recorded in 2016. Additional observations within the Project area are also recorded in eBird.
California condor *Gymnogyps californianus*	FE	SE	FP	*Moderate.* There are 3 known CNDDB occurrences of this species within the Project area, the most recent of which was recorded in 1983. Additional observations within the Project area are also recorded in eBird. Critical habitat for this species also occurs within the eastern portion of the Project area.
bald eagle *Haliaeetus leucocephalus*	BGEPA, Delisted	SE	FP	*Moderate.* There is 1 known CNDDB occurrence of this species within the Project area, which was recorded in 1996. Additional observations within the Project area are also recorded in eBird.
double-crested cormorant *Nannopterum auritum*	None	None	WL	*High.* There is 1 known CNDDB occurrence of this species within the Project area, the most recent of which was recorded in 2012. Additional observations within the Project area are also recorded in eBird.
Belding's savannah sparrow *Passerculus sandwichensis beldingi*	BCC	SE	None	*Moderate.* There are 4 known CNDDB occurrences of this species within the Project area, the most recent of which was recorded in 2016. Additional observations within the Project area are also recorded in eBird.
California brown pelican *Pelecanus occidentalis californicus*	Delisted	Delisted	None	*High.* There are 7 known CNDDB occurrences of this species within the Project area, the most recent of which was recorded in 2005. Additional observations within the Project area are also recorded in eBird.
light-footed Ridgway's rail *Rallus obsoletus levipes*	FE	SE	FP	*Moderate.* There are 2 known CNDDB occurrences of this species within the Project area, the most recent of which was recorded in 2002.
bank swallow *Riparia riparia*	None	ST	None	*Moderate.* There are 3 known CNDDB occurrences of this species within the Project area, the most recent of which was recorded in 1927. Additional observations within the Project area are also recorded in eBird.

TABLE 3.4-4
SPECIAL STATUS WILDLIFE SPECIES WITH LOW TO MODERATE, MODERATE, MODERATE TO HIGH, OR HIGH POTENTIAL TO OCCUR

Common Name *Scientific Name*	Federal Status	State Status	CDFW	Potential to Occur within Project Area
yellow warbler *Setophaga petechia*	None	None	SSC	*Moderate.* There is 1 known CNDDB occurrence of this species within the Project area, which was recorded in 1999. Additional observations within the Project area are also recorded in eBird.
California least tern *Sternula antillarum browni*	FE	SE	FP	*Moderate.* There are 6 known CNDDB occurrences of this species within the Project area, the most recent of which was recorded in 2011. Additional observations within the Project area are also recorded in eBird.
least Bell's vireo *Vireo bellii pusillus*	FE	SE	None	*Moderate to high.* There are 8 known CNDDB occurrences of this species within the Project area, the most recent of which was recorded in 2016. Critical habitat for this species also occurs within the southeastern portion of the Project area.
Mammals				
Nelson's (=San Joaquin) antelope squirrel *Ammospermophilus nelsoni*	None	ST	None	*Moderate.* There are 2 known CNDDB occurrences of this species within the Project area, the most recent of which was recorded in 1975. Additional observations within the Project area are also recorded in iNaturalist.
pallid bat *Antrozous pallidus*	None	None	SSC	*High.* There are 17 known CNDDB occurrences of this species within the Project area, the most recent of which was recorded in 2017.
Townsend's big-eared bat *Corynorhinus townsendii*	None	None	SSC	*High.* There are 29 known CNDDB occurrences of this species within the Project area, the most recent of which was recorded in 2013.
giant kangaroo rat *Dipodomys ingens*	FE	SE	None	*Moderate.* There are 4 known CNDDB occurrences of this species within the Project area, the most recent of which was recorded in 1979. Additional observations within the Project area are also recorded in iNaturalist.
western mastiff bat *Eumops perotis californicus*	None	None	SSC	*Moderate.* There are 5 known CNDDB occurrences of this species within the Project area, the most recent of which was recorded in 2008.
western red bat *Lasiurus frantzii*	None	None	SSC	*High.* There are 24 known CNDDB occurrences of this species within the Project area, the most recent of which was recorded in 2017.
San Diego desert woodrat *Neotoma lepida intermedia*	None	None	SSC	*Moderate.* There are 7 known CNDDB occurrences of this species within the Project area, the most recent of which was recorded in 2015. Additional observations within the Project area are also recorded in iNaturalist.
Tulare grasshopper mouse *Onychomys torridus tularensis*	None	None	SSC	*Moderate.* There are 3 known CNDDB occurrences of this species within the Project area, the most recent of which was recorded in 2015.
American badger *Taxidea taxus*	None	None	SSC	*Moderate to high.* There are 43 known CNDDB occurrences of this species within the Project area, the most recent of which was recorded in 2016.

TABLE 3.4-4
SPECIAL STATUS WILDLIFE SPECIES WITH LOW TO MODERATE, MODERATE, MODERATE TO HIGH, OR HIGH POTENTIAL TO OCCUR

Common Name *Scientific Name*	Federal Status	State Status	CDFW	Potential to Occur within Project Area
San Joaquin kit fox *Vulpes macrotis mutica*	FE	ST	None	*Moderate to high.* There are 13 known CNDDB occurrences of this species within the Project area, the most recent of which was recorded in 1979. Additional observations within the Project area are also recorded in iNaturalist.

NOTES:

Sensitivity Status

Federal

FE *Federally Endangered*
FT *Federally Threatened*
FC *Federal Candidate*
FPE *Federally Proposed as Endangered*
FPT *Federally Proposed as Threatened*
FPD *Federally Proposed for Delisting*

State

SE *State Listed as Endangered*
ST *State Listed as Threatened*
SCE *State Candidate for Endangered*
SCT *State Candidate for Threatened*
SR *State Rare*

BCC U.S. Fish and Wildlife Service Bird of Conservation Concern

BGEPA Bald and Golden Eagle Protection Act

CDFW Status

FP = Fully Protected. species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

SA = Special Animal tracked by CDFW or has been given special-status by a non-governmental agency.

SSC = Species of Special Concern. Species are given this designation by CDFW due to declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction.

WL = Watch List. For species that were previously SSC but no longer merit SSC status, or which do not meet SSC criteria but for which there is concern and a need for additional information to clarify its status.

SOURCES:

CDFW. 2025. California's Wildlife: Life History and Range Maps. https://wildlife.ca.gov/Data/CWHR/Life-History-and-Range. Accessed April 2, 2025.

eBird. 2025. Species Maps. https://ebird.org/map. Accessed April 2, 2025.

iNaturalist. 2025. Observations. https://www.inaturalist.org/observations. Accessed April 2, 2025.

Construction and Decommissioning

Plants

As described above, 61 special-status plants were determined to have a low to moderate, moderate, moderate to high, or high potential (e.g., La Graciosa thistle, Gaviota tarplant, Vandenberg monkeyflower, Lompoc yerba santa) to occur within the Project area.

Future Tier 1 solar energy systems are already permitted throughout the unincorporated County areas and would have negligible or no ground impacts. Rooftop solar would be installed on buildings in already developed areas. Small ground-mounted solar (under Tier 1) would be an accessory use to the primary use on-site, so would be located adjacent or next to existing structures on-site, likely in previously disturbed areas. Thus, it is not likely that construction and decommissioning activities associated with future Tier 1 solar energy systems would result in impacts to special-status plants. Therefore, impacts to special-status plants from construction and decommissioning of future Tier 1 solar energy systems would be insignificant and no mitigation is required. Future Tier 2 solar systems would only be permitted on existing developed land that would not include habitat to support special-status plants. For parcels with building envelopes defined to protect sensitive resources, implementation of standard condition DevEnv-01a would limit structural development and associated ground disturbances within the designated

envelope area. Although it is not likely that construction and decommissioning activities associated with future Tier 2 solar systems would result in impacts to special-status plants, it is possible that associated construction activities and staging could have the potential to impact special-status plants if such activities occur outside of developed land areas into adjacent natural communities with potential to support special-status species. Therefore, impacts could occur to special-status plants, if present, from construction and decommissioning of future Tier 2 solar energy systems and would therefore be considered potentially significant. In order to avoid and/or minimize construction- and decommissioning-related impacts from future Tier 2 solar energy systems to special-status plants within the Project area, MM BIO-1: Construction Activities and Staging Areas for Tier 2 Solar Energy Systems would be implemented. With implementation of this mitigation measure, construction- and decommissioning-related impacts to special-status plants from future Tier 2 solar systems would be insignificant.

Future Tier 3 and Tier 4 solar energy facilities that could be developed under the Project could be proposed in areas that support special-status plants and/or their habitats. If that were to occur, construction and decommissioning activities associated with the future Tier 3 and Tier 4 solar facilities, including equipment staging, grading, vegetation clearing and grubbing, earth moving, and vehicle and equipment use could result in direct crushing or burial of individual plants and may alter or degrade existing habitat for special-status plants. In addition, construction-related traffic and earth-moving activities may generate dust that adheres to leaves and inhibits photosynthesis, disturb soils that could contain seeds, bulbs, nutrients, and mycorrhizae that special-status plants utilize for survival, and introduce and/or create soil disturbance conducive to the spread of nonnative weed species that could result in a loss of suitable habitat for special-status plants. However, the Project would include requirements to design and locate such facilities in a manner to minimize any adverse biological impacts to rare and special-status plant species, sensitive natural communities, and Environmentally Sensitive Habitats (ESH) (proposed ordinance amendments). Even with minimization measures incorporated, impacts could occur to special-status plants, if present, from construction and decommissioning of future Tier 3 and Tier 4 solar facilities and would therefore be considered potentially significant.

In order to avoid and/or minimize construction- and decommissioning-related impacts from future Tier 3 and Tier 4 solar energy facilities to special-status plants within the Project area, MM BIO-3: Vegetation Mapping and Habitat Assessment, MM BIO-4: Special-Status Plant Species, MM BIO-5: Construction Worker Environmental Awareness Program, MM BIO-6: Invasive Plant Species Control Measures, MM BIO-7: General Construction Best Management Practices, MM BIO-8: Qualified Biological Monitor, and MM BIO-9: Revegetation Plan would be implemented. With implementation of these mitigation measures, construction- and decommissioning-related impacts to special-status plants from future Tier 3 and Tier 4 solar facilities would be insignificant.

Furthermore, future Tier 3 and Tier 4 solar energy facilities developed under the Project would be required to undergo site-specific environmental review in accordance with CEQA as part of the planning application process in order to identify and mitigate potential significant impacts to special-status plants. Future Tier 3 and Tier 4 solar projects would be required to conduct a site-specific biological resources survey (i.e., MM BIO-3: Vegetation Mapping and Habitat Assessment), which would inform any required subsequent environmental review and which could result in additional site-specific mitigation measures, as deemed necessary.

Wildlife

Special-Status Invertebrates. Five special-status invertebrates have a low to moderate, moderate, moderate to high, or high potential to occur within the Project area including Crotch's bumble bee, American bumble bee, vernal pool fairy shrimp, monarch butterfly, and Kern primrose sphinx moth.

Special-Status Fish. Four special-status fish have a low to moderate, moderate, moderate to high, or high potential to occur within the Project area including tidewater goby, unarmored threespine stickleback, arroyo chub, and steelhead.

Special-Status Amphibians. Six special-status amphibians have a low to moderate, moderate, moderate to high, or high potential to occur within the Project area including California tiger salamander, arroyo toad, foothill yellow-legged frog, California red-legged frog, western spadefoot, and coast range newt.

Special-Status Reptiles. Nine special-status reptiles have a low to moderate, moderate, moderate to high, or high potential to occur within the Project area including northern California legless lizard, California legless lizard, California glossy snake, coastal whiptail, southwestern pond turtle, blunt-nosed leopard lizard, coast horned lizard, coast patch-nosed snake, and two-striped gartersnake.

Special-Status Birds. Twenty five special-status birds have a low to moderate, moderate, moderate to high, or high potential to occur within the Project area including Cooper's hawk, tricolored blackbird, southern California rufous-crowned sparrow, grasshopper sparrow, golden eagle, Bell's sparrow, short-eared owl, burrowing owl, ferruginous hawk, western snowy plover, white-tailed kite, southwestern willow flycatcher, California horned lark, Prairie falcon, American peregrine falcon, California condor, bald eagle, double-crested cormorant, Belding's savannah sparrow, California brown pelican, light-footed Ridgway's rail, bank swallow, yellow warbler, California least tern, and least Bell's vireo.

Special-Status Mammals. Ten special-status mammals have a low to moderate, moderate, moderate to high, or high potential to occur within the Project area including Nelson's antelope squirrel, pallid bat, Townsend's big-eared bat, giant kangaroo rat, western mastiff bat, western red bat, San Diego desert woodrat, Tulare grasshopper mouse, American badger, and San Joaquin kit fox.

As discussed above, future Tier 1 solar energy systems are already allowed everywhere in the unincorporated County areas and would have no or negligible ground impacts. Therefore, impacts to special-status wildlife from construction and decommissioning of future Tier 1 solar facilities would be insignificant and no mitigation is required. Future Tier 2 solar facilities would only be permitted on existing developed land that would not include habitat to support special-status wildlife, although it is possible that associated construction activities and staging could have the potential to impact special-status wildlife, including special-status and common nesting birds, if such activities occur outside of developed land areas into adjacent natural communities with potential to support special-status species. Therefore, impacts could occur to special-status wildlife, if present, from construction and decommissioning of future Tier 2 solar facilities and would therefore be considered potentially significant. In order to avoid and/or minimize construction- and decommissioning-related impacts from future Tier 2 solar energy systems to special-status wildlife within the Project area, including special-status and common nesting birds, MM BIO-1: Construction Activities and Staging Areas for Tier 2 Solar Energy Systems and MM BIO-2: Nesting Birds would be implemented. With implementation of these mitigation measures,

construction- and decommissioning-related impacts to special-status wildlife from future Tier 2 solar systems would be insignificant.

Future Tier 3 and Tier 4 solar energy facilities that could be developed under the Project could be proposed in areas that support special-status wildlife species and/or their habitats. If that were to occur, construction and decommissioning activities associated with the future Tier 3 and Tier 4 solar energy facilities, including equipment staging, grading, vegetation clearing and grubbing, earth moving, and vehicle and equipment use may result in direct injury or mortality to special-status wildlife species, if present. In addition, increased noise, artificial light, and human presence may result in a temporary loss of suitable habitat for special-status wildlife species; while construction-related traffic and earth-moving activities could introduce nonnative weed species that may result in permanent loss of suitable habitat for special-status wildlife species. However, the Project would include requirements to design and locate such facilities in a manner to minimize any adverse biological impacts to special-status wildlife species and their habitats, sensitive natural communities, and Environmentally Sensitive Habitats (ESH) (proposed ordinance amendments). Even with minimization measures incorporated, impacts could occur to special-status wildlife species, if present, from construction and decommissioning of future Tier 3 and Tier 4 solar facilities and would therefore be considered potentially significant.

In order to avoid and/or minimize construction- and decommissioning-related impacts from future Tier 3 and Tier 4 solar facilities to special-status wildlife species within the Project area, MM BIO-2: Nesting Birds, MM BIO-3: Vegetation Mapping and Habitat Assessment, MM BIO-5: Construction Worker Environmental Awareness Program, MM BIO-6: Invasive Plant Species Control Measures, MM BIO-7: General Construction Best Management Practices, MM BIO-8: Qualified Biological Monitor, MM BIO-9: Revegetation Plan, MM BIO-10: Listed Endangered/Threatened Wildlife Species, MM BIO-11: Non-Listed Special Status Wildlife Species and MM BIO-12: Bats would be implemented. With implementation of these mitigation measures, construction- and decommissioning-related impacts to special-status wildlife species from future Tier 3 and Tier 4 solar facilities would be insignificant.

As discussed above, future Tier 3 and Tier 4 solar facilities developed under the Project would be required to undergo site-specific environmental review in accordance with CEQA as part of the planning application process in order to identify and mitigate potential significant impacts to special-status wildlife species, as deemed necessary.

Critical Habitat

As discussed in Section 3.4.2, above, USFWS-designated critical habitat for 14 species including arroyo toad, California condor, California red-legged frog, California tiger salamander, Gaviota tarplant, La Graciosa thistle, least Bell's vireo, Lompoc yerba santa, southwestern willow flycatcher, tidewater goby, Vandenberg monkeyflower, Ventura marsh milk-vetch, vernal pool fairy shrimp, and western snowy plover is present within the Project area.

As discussed above, future Tier 1 solar energy systems are already allowed everywhere in the unincorporated County areas and would have no or negligible ground impacts and Tier 2 solar systems would only be permitted on existing developed land, which would not result in the conversion of critical habitat that includes the requisite PCEs for the species that they are meant to protect. Therefore, impacts

to critical habitat from construction and decommissioning of future Tier 1 and Tier 2 solar facilities would be insignificant and no mitigation is required.

Future Tier 3 and Tier 4 solar energy facilities that could be developed under the Project could be proposed in areas that are designated as critical habitat. If that were to occur, construction and decommissioning activities associated with the future Tier 3 and Tier 4 solar facilities could result in modification or conversion of designated critical habitat. However, the Project would include requirements to design and locate such facilities in a manner to minimize any adverse biological impacts to critical habitat corridors, sensitive natural communities, and Environmentally Sensitive Habitats (ESH). Even with minimization measures incorporated, impacts could occur to critical habitat, if present, from construction and decommissioning of future Tier 3 and Tier 4 solar facilities and would therefore be considered potentially significant.

In order to avoid and/or minimize construction- and decommissioning-related impacts from future Tier 3 and Tier 4 solar facilities to designated critical habitat within the Project area, MM BIO-13: Critical Habitat, would be implemented. With implementation of this measure, construction- and decommissioning-related impacts to designated critical habitat from future Tier 3 and Tier 4 solar facilities would be insignificant.

As discussed above, future Tier 3 and Tier 4 facilities developed under the Project would be required to undergo site-specific environmental review in accordance with CEQA as part of the planning application process in order to identify and mitigate potential significant impacts to critical habitat, as deemed necessary.

Operation

Plants, Wildlife, and Critical Habitat

As described above, a total of 62 special-status plant species and 60 special-status wildlife species were determined to have a low to moderate, moderate, moderate to high, or high potential to occur within the Project area. Additionally, USFWS-designated critical habitat for 14 species is present within the Project area.

Once constructed, operational activities for any future Tier 1 and Tier 2 solar energy facilities would be limited to routine maintenance and cleaning. The future Tier 1 and Tier 2 solar energy facilities would generally operate passively, unless incidental repairs or parts replacement are required due to damage. These maintenance activities would occur within previously disturbed areas and are not expected to result in impacts to special-status plant and wildlife species or result in modification or conversion of USFWS-designated critical habitat. Therefore, impacts from operation of future Tier 1 and Tier 2 solar facilities would be insignificant and no mitigation is required.

For future Tier 3 and Tier 4 solar energy facilities, once constructed, maintenance of solar facilities would involve activities such as vegetation establishment and maintenance, panel cleaning, and occasional repairs or replacement of component parts. These maintenance activities would occur within previously disturbed areas and are not expected to result in impacts to special-status plants or wildlife or result in modification or conversion of USFWS-designated critical habitat. Therefore, impacts from operation of future Tier 3 and Tier 4 solar facilities would be insignificant and no mitigation is required.

Mitigation Measures

MM BIO-1: Construction Activities and Staging Areas for Tier 2 Solar Energy Systems. All site preparation, ground disturbances, construction activities, staging of equipment, and structural development shall be limited to areas of the site that have been previously disturbed or are developed in order to avoid potential sensitive biological resources. The construction staging and equipment laydown areas shall be designated on the site plans. The construction staging and equipment laydown areas shall be located at least 100 feet from any sensitive biological resources. No field alteration to plans shall allow construction, storage or staging outside of these designated areas.

The County shall incorporate the requirements of this mitigation measure as an objective development standard into the Utility-Scale Solar Ordinance prior to final adoption of the ordinance.

P&D building inspectors and/or compliance monitoring staff shall ensure that construction staging and equipment laydown areas are confined to the areas designated on the site plans.

MM BIO-2: Nesting Birds. For construction of all future Tier 2, Tier 3, and Tier 4 solar energy facilities, if the site provides suitable habitat for nesting birds, and construction is scheduled to commence during the avian nesting season (February 1–August 31 for songbirds, and January 15 to August 31 for raptors), then a qualified biologist(s) shall conduct two nesting bird surveys to identify any active nests within the work areas and a 500-foot buffer. The first survey shall occur within 7 days prior to initiation of construction activities, and the second survey shall occur no more than 72 hours prior to construction activities. Surveys shall be conducted at the appropriate time of day during appropriate weather conditions, as determined by a qualified biologist(s).

Surveys shall encompass all suitable areas including trees, shrubs, bare ground, burrows, cavities, and structures. Survey duration shall take into consideration the size of the work area; density and complexity of the habitat; number of survey participants; survey techniques employed; and shall be sufficient for complete and accurate data collection. Pre-construction surveys shall focus on both direct and indirect evidence of nesting including nest locations and nesting behavior (e.g., copulation, carrying of food or nest materials, nest building, removal of fecal sacks, flushing suddenly from atypically close range, agitation, aggressive interactions, feigning injury or distraction displays, or other behaviors that indicate nesting).

If a nest is suspected but not confirmed, the qualified biologist(s) shall establish a no-disturbance buffer until additional surveys can be completed or until the location can be inferred based on observations. The qualified biologist(s) shall not risk failure of the nest to determine the exact location or status of the nest and will make every effort to limit potential predation as a result of the survey/monitoring efforts (e.g., limit number of surveyors, limit time spent at/near nest, scan the work areas for potential nest predators before approaching, immediately depart nest area if indicators of stress or agitation are displayed). If a nest is observed, but thought to be inactive, the qualified biologist(s) shall monitor the nest for one hour (four hours for raptors during the non-breeding season) prior to approaching the nest to determine status. The qualified biologist(s) shall use their best professional judgement regarding the monitoring period and whether approaching the nest is appropriate.

If an active nest is detected, a suitable avoidance buffer shall be established by the qualified biologist(s) in the field. Construction activities shall not occur within the buffer until a qualified biologist(s) determines that the nest is no longer active (e.g., chicks have fledged). Appropriate buffer distances are generally 300 feet for passerine species and up to 500 feet for listed special-

species and raptors; however, these may be increased or reduced at the discretion of the qualified biologist(s) depending on site-specific factors such as the location of the nest, species tolerance to human presence, and the types of construction-related noises, vibrations, and human activities that are expected occur. The buffer shall be delineated to ensure that its location is known by all persons working within the vicinity but shall not be marked in such a manner that it attracts predators. Once the buffer is established, the qualified biologist(s) shall document baseline behavior, stage of reproduction, expected fledge date, and existing work area conditions including vertical and horizontal distances from proposed work areas, visual or acoustic barriers, and existing level of disturbance. The qualified biologist(s) shall monitor the nest daily at the onset of construction activities and at the onset of any changes in construction activities (e.g., increase in number or type of equipment, change in equipment usage, etc.) to determine the efficiency of the buffer. If the qualified biologist(s) determines that construction activities may be causing an adverse reaction, the qualified biologist(s) shall adjust the buffers accordingly.

If construction temporarily ceases for a period greater than 7 days, and activities expect to recommence during the avian nesting season, the work areas and 500-foot buffer shall be resurveyed. If nesting birds are present within 500 feet of the work areas, construction WEAP training shall be implemented by the qualified biologist(s) during construction activities to avoid or minimize potential impacts to nesting birds (see MM BIO-3: Construction Worker Environmental Awareness Program) and monitoring may be recommended for any work in the vicinity of nest avoidance buffers if determined necessary by the qualified biologist(s) (per MM BIO-8: Qualified Biological Monitor).

The applicant/owner, under the direction of the qualified biologist(s), may also take steps to discourage nesting within the work areas including moving equipment and materials daily, covering material with tarps or fabric, and securing open pipes and construction materials. The qualified biologist(s) shall ensure that none of the deterrent materials pose an entanglement risk to birds or other species.

MM BIO-3: Vegetation Mapping and Habitat Assessment. Applicants for Tier 3 or Tier 4 solar energy facilities shall have a biological resource assessment prepared as part of the permit application, which shall include, at a minimum, vegetation mapping and a habitat assessment of the work area and 500-foot buffer conducted by a qualified biologist. Vegetation mapping shall be conducted using The Manual of California Vegetation, second edition (Sawyer, Keeler-Wolf, & Evens, 2009) or the most updated version. Any suitable habitat identified to support special-status plants, invertebrates, fish, amphibians, reptiles, birds, and/or mammals shall be identified and mapped. In addition, any sensitive natural communities, aquatic resources, wildlife corridors, habitat for nesting birds, and protected native trees shall be identified and mapped. If any suitable habitat for special-status species, suitable habitat for nesting birds, sensitive natural communities, aquatic resources, wildlife corridors, or protected trees is determined to be present within work areas or a 500-foot buffer, then siting of future Tier 3 or Tier 4 solar energy facility projects should avoid sensitive biological resources to the maximum extent feasible. Based on the site-specific conditions and the project-specific design proposed, one or more of the following mitigation measures shall be implemented, as applicable.

MM BIO-4: Special-Status Plant Species. For construction of future Tier 3 or Tier 4 solar energy facilities, if suitable habitat for special-status plant species is identified to be present within work areas and/or a 500-foot buffer during the Habitat Assessment, a special-status plant survey of the work area and 500-foot buffer, focusing on the special-status plant species with a moderate to high potential to occur within the Project area (see Appendix C of the Program EIR), shall be conducted by a qualified biologist(s) prior to construction. The surveys shall take place

during the appropriate blooming period for each species in accordance with CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (2018). If any special-status plant species are observed during the focused surveys, an appropriate setback buffer of at least 50 feet shall be established and delineated by a qualified biologist(s) and these species shall be avoided by construction activities.

If avoidance of the special-status plant species is not feasible and impacts to special-status plants may be significant, a mitigation strategy for special-status plant species that may be impacted shall be developed by a qualified biologist. The mitigation strategy may include partial avoidance; preservation; and/or on-site or off-site restoration, translocation, and/or seed collection to create a similar population (e.g., based on number of individual plants, similar density over area, or both). If restoration and/or translocation is needed, a restoration/revegetation plan must be prepared and approved by CDFW. At a minimum, the plan shall specify the following:

- A summary of impacts;
- The location of the mitigation site;
- Methods for harvesting seeds or salvaging and transplanting individuals to be impacted;
- Measures for propagating plants or transferring living plants from the salvage site to the mitigation site;
- Site preparation procedures for the mitigation site;
- A schedule and action plan to maintain and monitor the mitigation site;
- Performance standards by which to measure the success of the mitigation; and
- Contingency measures, such as replanting or weeding, if mitigation efforts are not successful.

The Plan may also contain other conservation measures, such as the following: The upper four inches of topsoil during excavations shall be stockpiled separately and used to restore any disturbed areas. Actions shall be taken to ensure seedbank and topsoil remains viable for plant propagation (i.e., return to area in the same season as was removed, height of stockpiles minimized to the extent feasible, protect stockpiles from wind erosion or other damage, soil not treated with pesticides, and/or any cover, if added, would not result in soil sterilization).

If construction results in potential direct or indirect impacts to endangered/threatened plant species, the applicant/owner shall consult with USFWS and/or CDFW to ensure compliance with the Federal Endangered Species Act and/or California Endangered Species Act, which may include obtaining a "take" permit (e.g., Biological Opinion from USFWS, CESA Section 2081 Incidental Take Permit or CESA Section 2080.1 Consistency Determination from CDFW) and mitigation for permanent impacts (e.g., at a minimum mitigation-to-impact ratio of 1:1 or greater).

MM BIO-5: Construction Worker Environmental Awareness Program (WEAP). For construction of future Tier 3 or Tier 4 solar energy facilities, if any sensitive biological resources (i.e., suitable habitat for special-status species, suitable habitat for nesting birds, sensitive natural communities, aquatic resources, wildlife corridors, or protected native trees are determined to be present within future solar energy facilities sites and/or a 500-foot buffer during the Habitat Assessment, the applicant/owner shall retain a qualified biologist(s) to conduct a pre-construction WEAP training for all personnel entering the work area where sensitive species and/or their habitats may be present. The WEAP shall inform workers in recognizing special-status species, their habitat, regulated biological resources known to occur or to potentially occur within the

future solar facilities sites, avoidance buffers and measures necessary to avoid and/or minimize potential impacts to biological resources, and what to do if the species is observed.

- All personnel associated with construction shall attend the WEAP training prior to initiation of construction activities (including, but not limited to, site preparation, staging and mobilization, vegetation clearance/mowing/trimming, grading, and excavation). The training shall include information about the special-status species potentially occurring within the work areas, identification of special-status species and their habitats, a description of the regulatory status and general ecological characteristics of special-status species, and a review of the limits of construction and measures required to avoid and/or minimize impacts to biological resources within the work area. A fact sheet conveying this information and pertinent contacts shall also be prepared for distribution to all contractors, their employees, and other personnel involved with construction.
- Interpretation shall be provided for non-English speaking workers.
- All employees entering the work areas shall be required to sign a form provided by the qualified biologist(s) documenting they have attended the WEAP and understand the information presented to them. The signed form shall be provided to the applicant/owner as documentation of training completion. The crew foreman shall be responsible for ensuring crew members adhere to the guidelines and restrictions designed to avoid impacts to special status species and other regulated biological resources. If new personnel are brought onto the work area after completion of the initial WEAP training, the training shall be conducted for all new personnel before they enter the work area where sensitive species and/or their habitats may be present.

MM BIO-6: Invasive Plant Species Control Measures. For construction of future Tier 3 or Tier 4 solar energy facilities, the applicant/owner shall conduct activities in a manner that prevents the introduction, transfer, and spread of invasive plant species from one work area and/or watershed to another. Prevention best practices and guidelines for controlling the spread of invasive plants can be found on the California Invasive Plant Council's website (https://www.cal-ipc.org/).

The applicant/owner shall require construction contractors to ensure that equipment is free of invasive plant seeds, propagules, and any material which may contain them (e.g., soil). For purposes of this mitigation measure, invasive plant species shall include all species with a Cal-IPC rating of moderate or high. Prior to entering the work areas, equipment shall be inspected to confirm it is free of mud, dirt, and debris. For larger work areas that would be accessed via non-paved roads, tire track stations shall be installed at the work area entrances and exits, where appropriate. Staging areas and access routes shall avoid weed infestations, and infestations within the work area(s) shall be flagged and avoided to the maximum extent feasible. Only certified weed-free materials (e.g., fiber rolls, straw, and fill) shall be used during construction of future solar energy facilities. Compliance reporting summarizing the invasive plant species control measures implemented for the project should be submitted to the County.

MM BIO-7: General Construction Best Management Practices. For construction and decommissioning of all future Tier 3 or Tier 4 solar energy facilities, the applicant shall require construction contractors to adhere to the following general construction best management practices:

- To minimize the risk of vehicle collisions with wildlife and minimize dust, construction vehicles shall limit speed to 10 miles per hour within the unpaved limits of construction.
- All open trenches or excavations shall be fenced and/or sloped to prevent entrapment of wildlife species or have wildlife ramps available to allow for escape.

- All food-related trash items such as wrappers, cans, bottles, and food scraps generated during construction activities shall be disposed of in closed containers only and removed daily from the work area.
- No deliberate feeding of wildlife shall occur.
- No pets shall be allowed within work areas.
- No firearms shall be allowed within work areas.
- Storage and staging areas shall be located outside of sensitive habitat and sensitive biological resources areas in accordance with the County's standard condition (i.e., storage areas shall be located at least 100 feet from any storm drain, waterbody, or sensitive biological resources). All vehicle and equipment maintenance shall be performed in designated staging areas.
- Access to the construction area shall be limited to established work hours.
- Construction activities shall not be conducted at night (i.e., between dusk and dawn) within 500 feet of sensitive biological resources or wildlife corridors. Any nighttime lighting needed (e.g., security lighting) shall be shielded and directed downwards to minimize light spillover and/or glare.
- All construction equipment used within work areas shall be properly maintained to avoid leaks of oil, fuel, or residues.
- Construction contractors shall equip construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards to reduce construction equipment noise to the maximum extent possible. The construction contractor will place all stationary construction equipment so that noise emitted is directed away from sensitive biological resources, and stage equipment in areas that will create the greatest distance between construction-related noise sources and sensitive biological resources.
- Provisions shall be in place to remediate accidental spills from construction equipment or other construction activities. All vehicle maintenance/fueling/staging shall occur a minimum of 100 feet away from any riparian habitat or water body. Suitable containment procedures shall be implemented to prevent spills. A minimum of one spill kit shall be available at each work location near riparian habitat or water bodies.
- No equipment shall be permitted to enter wetted portions of any affected drainage channel unless authorized by a permit from USACE, RWQCB, and/or CDFW.
- If the construction of future solar energy facilities has the potential to degrade water quality, water sampling shall be implemented to identify the pre-construction baseline, and to monitor during construction for comparison to the baseline.
- Any worker who inadvertently injures or kills a special-status species or finds one dead, injured, or entrapped shall immediately report the incident to the construction foreman or biological monitor. The construction foreman or biological monitor shall immediately notify the applicant/owner, who then shall immediately inform CDFW.
- Upon completion of construction of the future solar energy facilities, a qualified biologist(s) shall prepare a Final Compliance report documenting compliance activities implemented during construction, including the pre-construction survey results.

MM BIO-8: Qualified Biological Monitor. For construction and/or decommissioning of future Tier 3 or Tier 4 solar energy facilities, the applicant/owner shall retain a qualified biological monitor(s) with relevant experience with the biological resources and regulations in the County if any sensitive biological resources (i.e., suitable habitat for special-status species, suitable habitat for nesting birds, sensitive natural communities, aquatic resources, or protected native trees) are determined to be present within future solar facilities sites and/or 500-foot buffer during the Habitat Assessment. The qualified biologist(s) shall be onsite during all ground-disturbing and vegetation removal activities in areas of sensitive biological resources. The qualified biologist(s) shall also monitor any implemented exclusion buffers for work occurring near sensitive biological resources weekly or as needed, and check potential, atypical, and known nests/burrows/burrow complexes/dens every two weeks while construction activities are occurring within suitable habitat for special-status species. The qualified biologist(s) shall recommend appropriate setback buffers for protection of sensitive biological resources, where necessary, and shall have the authority to temporarily stop work if any special-status species are observed that may be impacted by construction activities.

MM BIO-9: Revegetation Plan. For construction of future Tier 3 or Tier 4 solar energy facilities, for temporary impacts to natural communities to be returned to pre-work conditions, or for decommissioning, a Revegetation Plan(s) (one or more) shall be prepared by a qualified biologist(s) prior to starting construction of the future Tier 3 and Tier 4 facilities and shall be implemented by the applicant/owner following completion of construction. The Revegetation Plan shall guide and ensure successful restoration of self-sustaining habitats, and shall include, at a minimum, the following:

- A native planting palette appropriate for each vegetation type being restored and appropriate to local conditions.
- Qualitative and quantitative monitoring methods to ensure that performance standards are tracked and met for a minimum 3-year period or until pre-work conditions are restored to equivalent or better condition.

MM BIO-10: Listed Endangered/Threatened Wildlife Species. For construction of future Tier 3 or Tier 4 solar energy facilities, if suitable habitat for listed endangered/threatened wildlife species are determined to be present within work areas and/or 500-foot buffer during the Habitat Assessment (including but not limited to suitable habitat for Crotch's bumble bee, vernal pool fairy shrimp, monarch butterfly, Kern primrose sphinx moth, tidewater goby, unarmored threespine stickleback, steelhead trout, California tiger salamander, arroyo toad, foothill yellow-legged frog, California red-legged frog, western spadefoot, southwestern pond turtle, blunt-nosed leopard lizard, tricolored blackbird, burrowing owl, western snowy plover, southwestern willow flycatcher, California condor, bald eagle, Belding's savannah sparrow, light-footed Ridgway's rail, bank swallow, California least tern, least Bell's vireo, Nelson's antelope squirrel, giant kangaroo rat, and San Joaquin kit fox), then protocol surveys shall be conducted by a qualified biologist(s) in accordance with the most recent applicable USFWS and/or CDFW protocol guidelines, if applicable (see CDFW's Survey and Monitoring Protocols and Guidelines (CDFW n.d.)). For listed special-status species that do not have established protocol survey guidelines, a focused survey methodology shall be established by a qualified biologist(s) in accordance with industry best practices and in coordination with USFWS and/or CDFW. Special-status species observed will be reported to the California Natural Diversity Database (CNDDB).

If endangered/threatened wildlife species are observed during the protocol or focused surveys, an appropriate setback buffer (e.g., 500 feet or other appropriate buffer), as recommended by the qualified biologist, shall be established and the project design shall be sited to avoid direct and

indirect impacts to occupied habitat to the maximum extent feasible. In addition to avoiding direct mortality of these endangered/threatened wildlife species and direct impacts to occupied habitats, additional avoidance and minimization measures may be required, including:

- Conducting pre-construction surveys (e.g., within 7 days prior to initial ground disturbance or vegetation clearing, or multiple pre-construction surveys may be required if recommended by USFWS and/or CDFW). For endangered/threatened avian species, pre-construction surveys should at a minimum follow the County's Standard Condition Bio-23 that requires nesting bird surveys no more than one week (7days) prior to commencement of vegetation removal, grading, or other construction activities.
- Requiring construction monitoring (e.g., conducting weekly surveys within suitable habitat and a 50-foot buffer for western snowy plover, and conducting daily preconstruction surveys and/or consistent monitoring for light-footed Ridgway's rail).
- Establishing a suitable avoidance buffer around known territories (e.g., establishing a 250-foot avoidance buffer around suitable vernal pools and seasonal wetlands/swale habitat for California tiger salamander and/or western spadefoot, establishing a 700-foot avoidance buffer around tidal marsh area for the protection of light-footed Ridgway's rail, and establishing 100-foot buffers for dens and 200-foot buffers around natal dens for San Joaquin kit fox).
- Restricting construction activities within suitable habitat (e.g., limiting construction activities within 250 feet of intermittent or perennial waterways suitable for California tiger salamander and/or arroyo toad to compacted soils immediately adjacent to the roadway with no burrows, and prohibiting disturbance of substrates within California tiger salamander and/or arroyo toad suitable habitat).
- Restricting activities around certain times of year (e.g., limiting construction to May 1-Janurary 15 within suitable habitat for Kern primrose sphinx moth, limiting construction to May 1-October 31 within suitable upland and aquatic habitat for California tiger salamander and western spadefoot, limiting construction to June 1-October 15 within 250-feet of suitable vernal pool and seasonal wetland/swale habitat for California tiger salamander and western spadefoot, limiting construction to May 1-October 31 within suitable habitat for California red-legged frog, limiting construction to September 1-January 31 within suitable habitat light-footed Ridgway's rail, limiting construction to September 1-January 31 within suitable habitat for burrowing owl, limiting construction to September 1-March 1 within suitable habitat for southwestern willow flycatcher, and limiting construction to September 1-February 28 within suitable habitat for western snowy plover).
- Restricting activities during certain conditions (e.g., prohibiting construction activities in or adjacent to suitable light-footed Ridgway's rail habitat within two hours before or after high tides).

If impacts cannot be feasibly avoided and construction could result in potential direct or indirect impacts to endangered/threatened wildlife species and/or occupied habitats, the applicant shall consult with USFWS and CDFW to ensure compliance with the Federal Endangered Species Act and/or California Endangered Species Act, which may include obtaining a "take" permit (e.g., Biological Opinion from USFWS, CESA Section 2081 Incidental Take Permit or CESA Section 2080.1 Consistency Determination from CDFW) and mitigation for permanent impacts to occupied habitat (e.g., at a minimum mitigation-to-impact ratio of 2:1 or greater).

MM BIO-11: Non-Listed Special-Status Wildlife Species. For construction of future Tier 3 or Tier 4 solar energy facilities, if suitable habitat for non-listed special-status species is determined to be present within work areas and/or 500-foot buffer during the Habitat Assessment (including suitable habitat for American bumble bee, arroyo chub, Coast Range newt, northern California legless lizard, California legless lizard, California glossy snake, coastal whiptail, coast horned lizard, coast patch-nosed snake, two-striped gartersnake, Cooper's hawk, southern California rufous-crowned sparrow, grasshopper sparrow, golden eagle, Bell's sparrow, short-eared owl, ferruginous hawk, white-tailed kite, California horned lark, prairie falcon, American peregrine falcon, double-crested cormorant, California brown pelican, yellow warbler, pallid bat, Townsend's big-eared bat, western mastiff bat, western red bat, San Diego desert woodrat, Tulare grasshopper mouse, and American badger), then prior to construction within 500 feet of areas that could support non-listed special-status wildlife species, the following measures shall be applicable to the future solar energy facilities:

- Pre-construction clearance surveys shall be conducted by a qualified biologist(s) within 7 days prior to the start of construction (including staging and mobilization). The surveys shall cover the entire work area plus a minimum 200-foot buffer, if feasible, and shall identify all special-status wildlife species that may occur within work areas and/or 200-foot buffer.
- If any special-status animal species are present within or near work areas, a WEAP training shall be implemented by the qualified biologist(s) during construction activities to avoid and/or minimize potential impacts to these species (see MM BIO-3: Construction Worker Environmental Awareness Program).
- If any special-status animal species are present within or near work areas, an appropriate setback buffer, as recommended by the qualified biologist, shall be established.
- A qualified biologist(s) shall be present during all initial ground disturbing activities, including vegetation removal.
- All trenches, pipes, culverts or similar structures shall be inspected for animals prior to burying, capping, moving, or filling. At the end of each workday, excavations shall be secured with cover or a ramp to prevent wildlife entrapment.
- Any non-listed special-status species observed by the qualified biologist(s) or construction crew shall be allowed to move out of harm's way or shall be relocated from the work area either through direct capture or through passive exclusion by a qualified biologist(s) with appropriate permits.
- Any special-status species observed will be reported to the CNDDB.

MM BIO-12: Bats. For construction of future Tier 3 or Tier 4 solar energy facilities, if suitable habitat for bat species is determined to be present within work areas and/or 500-foot buffer during the Habitat Assessment, then prior to construction within 500 feet of areas that could support bat species, the following measures shall be applicable to the future solar energy facilities:

- To determine if daytime, nighttime, wintering (hibernacula), and/or maternity roost sites are present, a qualified biologist(s) with relevant experience and training shall conduct presence/absence surveys for bats during each season prior to the start of construction. Surveys shall be conducted during favorable weather conditions to understand the extent of bat usage. Each survey shall consist of one dusk emergence survey (start one hour before sunset and last for three hours) and one daytime visual inspection of all potential roosting habitats within work areas. Visual inspections shall focus on the identification of bat signs (i.e., individuals, guano, urine staining, corpses, feeding remains, scratch marks, and/or bats

squeaking and chattering). Surveys shall be conducted using acoustic detectors and by searching tree cavities, crevices, and other areas where bats may roost. Bat detectors, bat call analysis, and visual observation shall be used during all dusk emergence surveys.

- If active hibernacula or maternity roosts are identified in the work areas and/or 500-foot buffer, Project construction shall only occur between September 1 and March 31, outside of the maternity roosting season when young bats are present but are not yet ready to fly out of the roosts. Maternity roosts shall not be evicted, excluded, removed, or disturbed. A minimum 500-foot no-disturbance buffer shall be provided around hibernacula. Buffers shall remain in place until the end of construction activities or until a qualified bat biologist determines that the hibernacula are no longer active, and construction activities shall not occur between 30 minutes before sunset and 30 minutes after sunrise. Hibernacula roosts shall not be evicted, excluded, removed, or disturbed.
- Exclusion devices may be installed to discourage bats from occupying the work areas outside of the maternity season in consultation with the CDFW. Netting shall not be used as an exclusion material. If a roost is determined by a qualified biologist(s) to be used by a large number of bats (large hibernaculum), bat boxes shall be installed near the work areas prior to installing exclusion devices. The number of bat boxes installed will depend on the size of the hibernaculum and shall be determined through consultations with the CDFW. If a maternity colony has become established, all construction activities shall be postponed within a 500-foot buffer around the maternity colony until it is determined by a qualified biologist(s) that the young have dispersed. Once it has been determined that the roost is clear of bats, the roost shall be removed immediately.
- Any exclusion devices shall be designed to avoid entrapment of birds or bats and allow exit from, but not entry to, the exclusion area. Exclusion devices shall be installed between September 30 and February 1 and removed at the end of construction. A qualified bat biologist(s) shall be present upon exclusion device installation and repair to survey for and ensure that birds and bats are not trapped behind exclusion devices.
- Exclusion monitoring shall occur daily by a qualified biologist(s)to determine effectiveness of devices. Any exclusion device repair must be completed within three days of observation under supervision of a qualified biologist(s) to ensure that bat entrapment does not occur.

MM BIO-13: Critical Habitat. For construction of future Tier 3 or Tier 4 solar energy facilities on lands designated as critical habitat (see Draft PEIR Figure 3.4-3), if critical habitat will potentially be impacted by construction, but there is no "federal nexus" (e.g., impacts to a federally listed species, impacts to USACE waters or wetlands, federal funding), then no further mitigation is necessary. However, if critical habitat will potentially be impacted by construction; there is a federal nexus; and the habitat to be impacted contains PCEs to support the federally-listed species (as defined in the Federal Register designating critical habitat for that species), then consultation with the USFWS shall be required and may include mitigation for permanent impacts to critical habitat (e.g., at a minimum mitigation-to-impact ratio of 1:1 or greater, or as determined by the USFWS).

Residual Impacts

With implementation of the above mitigation measures, adverse impacts to special-status plants and wildlife species as well as critical habitat associated with future solar facilities would be insignificant.

Threshold b) The Project would have a significant impact if the Project would result in a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

Impact BIO-2: Future solar energy facilities enabled under the Project could potentially result in a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

Based on the CALVEG database, there are 20 vegetation types that have been mapped within the Project area. The following vegetation communities, or some associations of these communities, are considered sensitive natural communities by CDFW (CDFW 2023):

- Basin big sagebrush
- Blackbush
- Ceanothus mixed chaparral
- Chamise chaparral
- Chokecherry – serviceberry – rose
- Coastal sage shrub
- Creosote bush scrub
- Forest land
- Montane meadows
- Montane shrubland
- Mountain big sagebrush
- North coastal scrub
- Salt desert shrub
- Scrub oak mixed chaparral
- Valley grassland
- Wetland

In addition, there are numerous aquatic features within the Project area that could support riparian habitat (see Figure 3.4-4).

Future solar energy facilities enabled under the Project in areas with sensitive vegetation communities could result in negative effects to these communities. Site-specific surveys would be needed to determine presence/absence and whether there is a potential impact. If sensitive natural communities are present and impacts cannot be avoided, then impacts to sensitive natural communities from construction, operation, or decommissioning of future community-scale and utility-scale solar energy facilities would be potentially significant.

Construction and Decommissioning

As discussed above, 16 CALVEG vegetation types that could support sensitive natural communities designated by the CDFW have been recorded in the County.

As mentioned above, Future Tier 1 solar energy systems are already allowed throughout the unincorporated County areas and would have no or negligible ground impacts. Therefore, impacts to sensitive natural communities from construction and decommissioning of future Tier 1 solar facilities would be insignificant and no mitigation is required. Future Tier 2 solar facilities would only be permitted on existing developed land that would not support sensitive natural communities, although it is possible that associated construction activities and staging could have the potential to impact sensitive natural communities if such activities occur outside of developed land areas into adjacent areas that support such communities. Therefore, impacts could occur to sensitive natural communities, if present, from construction and decommissioning of future Tier 2 solar facilities and would therefore be considered

potentially significant. In order to avoid and/or minimize construction- and decommissioning-related impacts from future Tier 2 solar energy systems to sensitive natural communities within the Project area, MM BIO-1: Construction Activities and Staging Areas for Tier 2 Solar Energy Systems would be implemented. With implementation of this mitigation measure, construction- and decommissioning-related impacts to sensitive natural communities from future Tier 2 solar systems would be insignificant.

The location of future Tier 3 and Tier 4 solar energy facilities that could be developed under the Project could be proposed in areas that support riparian habitat or sensitive natural communities. If that were to occur, construction and decommissioning activities associated with the future Tier 3 and Tier 4 solar facilities, including equipment staging, grading, vegetation clearing and grubbing, earth moving, and vehicle and equipment use may result in loss of sensitive natural communities, if present. However, the Project would include development standards and policy requirements to design and locate such facilities in a manner to minimize or avoid any adverse biological impacts to sensitive natural communities and Environmentally Sensitive Habitats (ESH). Even with minimization measures incorporated, impacts could occur to sensitive natural communities, if present, from construction and decommissioning of future Tier 3 and Tier 4 solar facilities and would therefore be considered potentially significant.

In order to avoid and/or minimize construction-related impacts to sensitive vegetation communities from future Tier 3 and Tier 4 solar facilities, MM BIO-3: Vegetation Mapping and Habitat Assessment, MM BIO-5: Construction Worker Environmental Awareness Program, MM BIO-6: Invasive Plant Species Control Measures, MM BIO-7: General Construction Best Management Practices, MM BIO-8: Qualified Biological Monitor, MM BIO-9: Revegetation Plan, and MM BIO-14: Sensitive Natural Communities would be implemented, as applicable. With implementation of these mitigation measures, construction- and decommissioning-related impacts of future Tier 3 and Tier 4 solar energy facilities to sensitive natural communities would be insignificant.

Furthermore, future Tier 3 and Tier 4 solar energy facilities developed under the Project would be required to undergo site-specific environmental review in accordance with CEQA as part of the planning application process in order to identify and mitigate potential significant impacts to sensitive natural communities. Future Tier 3 and Tier 4 solar projects would be required to conduct a site-specific biological resources survey (i.e., MM BIO-3: Vegetation Mapping and Habitat Assessment), which could inform subsequent environmental review and which could result in additional site-specific mitigation measures, as deemed necessary.

Operation

Once constructed, operational activities for future solar energy facilities would be limited to routine maintenance and cleaning. For future Tier 3 and Tier 4 solar energy facilities, maintenance of solar facilities would involve activities such as vegetation establishment and maintenance, panel cleaning, and occasional repairs or replacement of component parts. The future solar energy facilities would generally operate passively, unless incidental repairs or parts replacement is required due to damage. These maintenance activities would occur within previously disturbed areas and are not expected to result in impacts to sensitive natural communities. Therefore, impacts from operation of future solar energy facilities would be insignificant and no mitigation is required.

Mitigation Measures

MM BIO-1: Construction Activities and Staging Areas for Tier 2 Solar Energy Systems.

MM BIO-3: Vegetation Mapping and Habitat Assessment.

MM BIO-5: Construction Worker Environmental Awareness Program.

MM BIO-6: Invasive Plant Species Control Measures.

MM BIO-7: General Construction Best Management Practices.

MM BIO-8: Qualified Biological Monitor.

MM BIO-9: Revegetation Plan.

MM BIO-14: Sensitive Natural Communities. For construction of future Tier 3 or Tier 4 solar energy facilities, if any sensitive natural communities are determined to be present within work areas and/or 500-foot buffer during the Habitat Assessment, solar energy facilities shall be designed to avoid sensitive natural communities to the maximum extent feasible.

Sensitive natural communities identified for avoidance shall be demarcated (e.g., using brightly colored flagging) and avoided during construction. The marked boundaries shall be maintained for the duration of construction activities in each work area and shall be clearly visible to personnel on foot and by heavy equipment operators. If sensitive natural communities can be avoided, then no further mitigation is necessary.

If future solar facilities cannot be sited to avoid permanent impacts to sensitive natural communities, impacts to sensitive natural communities shall be mitigated by one of the methods mentioned below in a way that exceeds the biological value of that which is destroyed at a minimum 1:1 impact-to-mitigation ratio. This may include, but is not limited to:

- The purchase of credits from a mitigation bank or in-lieu fee program;
- On- and/or off-site land acquisition and preservation; and/or
- On- and/or off-site creation, restoration, and/or enhancement of sensitive natural communities.

If compensatory mitigation is to occur on- or off-site (i.e., not a mitigation bank or in-lieu fee program), a Sensitive Natural Community Mitigation and Monitoring Plan shall be prepared by a qualified biologist/restoration ecologist. The plan shall include details related to implementation requirements (e.g., seeding, planting, and/or staking of sensitive natural community species; salvage/dispersal of duff and seed bank; and/or removal of invasive, non-native species), performance standards, maintenance requirements, success criteria (e.g., less than 5 percent invasive species cover), and future monitoring requirements (e.g., five years of monitoring or until success criteria have been met).

Residual Impacts

With implementation of MM BIO-1: Construction Activities and Staging Areas for Tier 2 Solar Energy Systems, MM BIO-3: Vegetation Mapping and Habitat Assessment, MM BIO-5: Construction Worker Environmental Awareness Program, MM BIO-6: Invasive Plant Species Control Measures, MM BIO-7: General Construction Best Management Practices, MM BIO-8: Qualified Biological Monitor, MM BIO-9: Revegetation Plan, and MM BIO-14: Sensitive Natural Communities, potential impacts from future solar facilities to sensitive natural communities would be insignificant.

Threshold c) The Project would have a significant impact if the Project would result in a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means.

Impact BIO-3: Future solar energy facilities enabled for permitting under the Project could potentially result in a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means.

As discussed in Section 3.4.2, there are four primary watersheds within the County (Santa Maria, which includes the Cuyama and Sisquoc watersheds; San Antonio Creek; Santa Ynez; and South Coast) that support aquatic features including the Santa Maria, Sisquoc, Cuyama, and Santa Ynez rivers, as well as wetlands that have been mapped by the USFWS NWI (USFWS 2025b). These aquatic features are shown in Figure 3.4-4 and could be subject to USACE, RWQCB, and/or CDFW jurisdiction and regulatory authority. In addition, wetlands that have not been included in the NWI may be present within the unincorporated areas of the County and could also be subject to USACE, RWQCB, CDFW, and/or CCC jurisdiction and regulatory authority. Future solar energy facilities enabled for permitting under the Project in areas that include state or federally protected wetlands should be consistent with applicable County wetland protection policies and development standards, and with the County's Standard Conditions (or as noted in the current Standard Conditions at the time of Project implementation), including Bio-07 that requires a habitat setback (e.g., typically 50 to 100 feet depending on the resource and project type) from either side of sensitive riparian habitat areas; Bio-08 that states there shall be no alteration to stream channels or banks until the Owner/Applicant demonstrates receipt of all authorizations from CDFW and/or federal agencies are obtained; and Bio-20 and Bio-20a that require that construction equipment filling and storage areas and construction equipment washout areas be located at least 100 feet from any storm drain, waterbody or sensitive biological resources. Thus, if appropriate setbacks are implemented to ensure that impacts to aquatic resources can be avoided, then impacts would be insignificant. However, if aquatic resources could potentially be impacted by construction, then implementation of the Project could result in negative effects to these resources. If state or federally protected wetlands are present and cannot be avoided, then impacts to state or federally protected wetlands from construction, operation, or decommissioning of future community-scale and utility-scale solar energy facilities would be potentially significant.

Construction and Decommissioning

Wetlands within the Project area have been identified by the USFWS NWI and are shown in Figure 3.4-4. These wetlands may be subject to USACE, RWQCB, CDFW, and/or CCC jurisdiction and regulatory authority. In addition, wetlands that have not been included in the NWI may be present within the Project area and could also be subject to USACE, RWQCB, CDFW, and/or CCC jurisdiction and regulatory authority.

As discussed above, future Tier 1 solar energy systems are already allowed everywhere in the unincorporated County areas and would have no or negligible ground impacts. Therefore, impacts to state and federally protected wetlands from construction and decommissioning of future Tier 1 and Tier 2 solar facilities would be insignificant and no mitigation is required. Future Tier 2 solar facilities would only be permitted on existing developed land that would not support wetlands, although it is possible that associated construction activities and staging could have the potential to impact wetlands if such activities

occur outside of developed land areas into adjacent areas that support wetland features. Therefore, impacts could occur to state and federally protected wetlands, if present, from construction and decommissioning of future Tier 2 solar facilities and would therefore be considered potentially significant. In order to avoid and/or minimize construction- and decommissioning-related impacts from future Tier 2 solar energy systems to sensitive natural communities within the Project area, MM BIO-1: Construction Activities and Staging Areas for Tier 2 Solar Energy Systems would be implemented. With implementation of this mitigation measure, construction- and decommissioning-related impacts to state and federally protected wetlands from future Tier 2 solar systems would be insignificant.

Future Tier 3 and Tier 4 solar energy facilities that could be developed under the Project could be proposed in areas that impact state and federally protected wetlands. If that were to occur, construction and decommissioning activities associated with the future Tier 3 and Tier 4 solar energy facilities, including equipment staging, grading, vegetation clearing and grubbing, earth moving, and vehicle and equipment use may result in impacts to state and federally protected wetlands, if present. However, the Project would include requirements to design and locate such facilities in a manner to minimize any adverse biological impacts to sensitive natural communities and Environmentally Sensitive Habitats (ESH). Even with minimization measures incorporated, impacts (e.g., direct impacts from disturbance or encroachment, indirect impacts from runoff or changing the hydrology of a site) could occur to state and federally protected wetlands, if present, from construction and decommissioning of future Tier 3 and Tier 4 solar facilities and would therefore be considered potentially significant.

In order to avoid and/or minimize construction- and decommissioning-related impacts to state and federally protected wetlands from future Tier 3 and Tier 4 solar facilities, MM BIO-3: Vegetation Mapping and Habitat Assessment, MM BIO-5: Construction Worker Environmental Awareness Program, MM BIO-6: Invasive Plant Species Control Measures, MM BIO-7: General Construction Best Management Practices, MM BIO-8: Qualified Biological Monitor, MM BIO-9: Revegetation Plan, and MM BIO-15: Aquatic Resources would be implemented. With implementation of these mitigation measures, construction- and decommissioning-related impacts of future Tier 3 and Tier 4 solar facilities to state and federally protected wetlands would be insignificant.

Furthermore, future Tier 3 and Tier 4 projects developed under the Project requiring discretionary approval would be required to undergo site-specific environmental review in accordance with CEQA as part of the planning application process in order to identify and mitigate potential significant impacts to state or federally protected wetlands. Future Tier 3 and Tier 4 projects would be required to conduct a site-specific biological resources survey (i.e., MM BIO-3: Vegetation Mapping and Habitat Assessment), which could inform subsequent environmental review and which could result in additional site-specific mitigation measures, as deemed necessary.

Operation

Once constructed, operational activities of any future solar energy facilities would be limited to routine maintenance and cleaning. For Tier 3 and Tier 4 solar facilities, maintenance of solar facilities would involve activities such as vegetation establishment and maintenance, panel cleaning, and occasional repairs or replacement of component parts. The future solar energy facilities would generally operate passively, unless incidental repairs or parts replacement is required due to damage. These maintenance activities would occur within previously disturbed areas and are not expected to result in impacts to state

or federally protected wetlands. Therefore, the impact from the operation of future solar energy facilities would be insignificant and no mitigation is required.

Mitigation Measures

MM BIO-1: Construction Activities and Staging Areas for Tier 2 Solar Energy Systems.

MM BIO-3: Vegetation Mapping and Habitat Assessment.

MM BIO-5: Construction Worker Environmental Awareness Program.

MM BIO-6: Invasive Plant Species Control Measures.

MM BIO-7: General Construction Best Management Practices.

MM BIO-8: Qualified Biological Monitor.

MM BIO-9: Revegetation Plan.

MM BIO-15: Aquatic Resources. For construction of future Tier 3 or Tier 4 solar energy facilities, if any aquatic resources are determined to be present within work areas and/or a 500-foot buffer during the Habitat Assessment, an aquatic resources delineation shall be conducted to determine the limits of potential jurisdictional aquatic resources within the vicinity of the system or facility. The solar energy system or facility shall be designed to avoid aquatic resources to the maximum extent feasible.

Aquatic resources and an appropriate avoidance buffer to be determined by a qualified biologist, which should be consistent with applicable County resource protection policies and with the County's Standard Condition Bio-07 that requires a habitat setback (e.g., typically 50 to 100 feet depending on the resource and project type) from either side of sensitive riparian habitat areas or as noted in the current Standard Conditions at the time of Project implementation, shall be demarcated (e.g., using brightly colored flagging) and avoided during construction. The marked boundaries shall be maintained for the duration of construction activities in each work area and shall be clearly visible to personnel on foot and by heavy equipment operators. If aquatic resources can be avoided, then no further mitigation is necessary.

If aquatic resources will potentially be impacted by construction, then the appropriate regulatory permits shall be obtained (e.g., CWA Section 404 Nationwide Permit from the USACE, CWA Section 401 Water Quality Certification or Porter-Cologne Act Waste Discharge Requirement permit from the RWQCB, and Streambed Alteration Agreement permit under Section 1602 of the California Fish and Wildlife Code from the CDFW). The following would be incorporated, as a minimum, into the permitting, subject to approval by the regulatory agencies:

- On- and/or off-site creation, restoration and/or enhancement of USACE/RWQCB jurisdictional wetlands, waters of the U.S., and/or waters of the State at a ratio no less than 2:1 for permanent impacts, and for temporary impacts, restore impact area to pre-work conditions (i.e., pre-work contours and revegetate with native species, where appropriate). Off-site creation, restoration, and/or enhancement at a ratio no less than 2:1 may include the purchase of mitigation credits at an agency-approved off-site mitigation bank or in-lieu fee program.
- On- and/or off-site creation, restoration, and/or enhancement of CDFW/CCC jurisdictional streambed and associated riparian habitat at a ratio no less than 2:1 for permanent impacts, and for temporary impacts, restore impact area to pre-work conditions (i.e., pre-work

contours and revegetate with native species, where appropriate). Off-site creation, restoration, and/or enhancement at a ratio no less than 2:1 may include the purchase of mitigation credits at an agency-approved off-site mitigation bank or in-lieu fee program.

Residual Impacts

With the implementation of MM BIO-1: Construction Activities and Staging Areas for Tier 2 Solar Energy Systems, MM BIO-3: Vegetation Mapping and Habitat Assessment, MM BIO-5: Construction Worker Environmental Awareness Program, MM BIO-6: Invasive Plant Species Control Measures, MM BIO-7: General Construction Best Management Practices, MM BIO-8: Qualified Biological Monitor, MM BIO-9: Revegetation Plan, and MM BIO-15: Aquatic Resources, impacts to state or federally protected wetlands would be insignificant.

Threshold d) The Project would have a significant impact if the Project would interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Impact BIO-4: Future solar energy systems and facilities enabled under the Project could interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

As discussed above, wildlife movement within the Project area is possible through mountainous regions and riparian corridors. There are two essential connectivity areas within the County, including the western portion of the Project area from south of Guadalupe to south of Lompoc, and a large area of the mountainous regions in the southeastern portion of the Project area. Three movement corridors have been identified in the western portion of the County and are associated with the Santa Ynez River, San Antonio Creek/Purissima Hills, and along the south coast near Gaviota. In addition, CDFW's Restoring California's Wildlife Connectivity Report identifies barriers to wildlife movement that are high priority for remediation. One of the identified barriers is located within the County, Gaviota Pass, which is a 6.3-mile segment of US Highway 101 in the southern portion of the County. Wildlife corridors within the Project area are shown in Figure 3.4-5. Wildlife movement corridors that have not been included in the CDFW Terrestrial Habitat Connectivity Mapper and Missing Linkages report may be present within the Project area.

Nursery sites within the County include trees, shrubs, forblands, and grasslands that may provide habitat for nesting birds (e.g., individual nests or rookeries) or that are important nursery areas for other wildlife species (e.g., bat maternity colonies). Even the disturbed and developed areas within the County may provide suitable habitat for ground-nesting species such as killdeer.

Future solar energy facilities enabled under the Project should be consistent with the County's Standard Conditions (or as noted in the current Standard Conditions at the time of Project implementation), including Bio-23 that requires nesting bird surveys no more than one week (7 days) prior to commencement of vegetation removal, grading, or other construction activities (incorporated into this EIR as MM BIO-2); thus potential impacts to nesting birds would be insignificant. However, future solar energy facilities enabled under the Project in areas that support wildlife movement and/or other nursery sites (e.g., bat maternity colonies) could result in impacts to native resident or migratory wildlife corridors

or impede the use of native wildlife nursery sites. If these resources are present and cannot be avoided, then impacts to native resident or migratory wildlife corridors and/or native wildlife nursery sites from construction and operation of future community-scale and utility-scale solar energy facilities would be potentially significant.

Construction and Decommissioning

Wildlife Movement

As shown in Figure 3.4-5, wildlife movement corridors are present within the Project area. As discussed above, future Tier 1 solar energy systems are already allowed everywhere in the unincorporated County areas and would have no or negligible ground impacts. Therefore, impacts to wildlife movement from construction and decommissioning of future Tier 1 solar facilities would be insignificant and no mitigation is required. Future Tier 2 solar facilities would only be permitted on existing developed land that would not likely facilitate wildlife movement or contain wildlife movement corridors, although it is possible that associated construction activities and staging could have the potential to impact adjacent wildlife movement if such activities occur outside of developed land areas into adjacent areas that support wildlife movement corridors. Therefore, impacts could occur to wildlife movement corridors, if present, from construction and decommissioning of future Tier 2 solar facilities and would therefore be considered potentially significant. In order to avoid and/or minimize construction- and decommissioning-related impacts from future Tier 2 solar energy systems to sensitive natural communities within the Project area, MM BIO-1: Construction Activities and Staging Areas for Tier 2 Solar Energy Systems would be implemented. With implementation of this mitigation measure, construction- and decommissioning-related impacts to wildlife movement from future Tier 2 solar systems would be insignificant. Additionally, if a Tier 2 facility were to increase the lighting at a Project site, it would need to comply with the County LUDC lighting standards in Chapter 35.30.120 (Outdoor Lighting) to minimize disturbance to wildlife and people.

Future Tier 3 and Tier 4 solar energy facilities that could be developed under the Project could be located in areas that support wildlife movement. As discussed under Impacts BIO-1 and BIO-2, construction activities could result in impacts to suitable habitat for special-status species and sensitive vegetation, which may support wildlife corridors for a variety of species. Construction and decommissioning activities associated with the future Tier 3 and Tier 4 solar facilities, especially those on undeveloped lands, could result in localized, short-term hinderance of movement by resident or migratory wildlife within the County due to temporary increases in noise, lighting, dust, and human activities as well as introduction of non-native species that could degrade habitat. However, the Project would include requirements to design and locate such facilities in a manner to minimize any adverse biological impacts to critical habitat corridors, sensitive natural communities, and Environmentally Sensitive Habitats (ESH). Additionally, Tier 3 and Tier 4 solar energy facilities increasing the lighting at a Project site would need to comply with the County LUDC lighting standards in Chapter 35.30.120 (Outdoor Lighting) and submit a lighting plan demonstrating compliance with those standards. Even with minimization measures incorporated, impacts could occur to wildlife movement from construction and decommissioning of future Tier 3 and Tier 4 solar facilities and would therefore be considered potentially significant.

In order to avoid and/or minimize construction- and decommissioning-related impacts from future Tier 3 and Tier 4 solar facilities to wildlife corridors within the Project area, MM BIO-3: Vegetation Mapping

and Habitat Assessment, MM BIO-5: Construction Worker Environmental Awareness Program, MM BIO-6: Invasive Plant Species Control Measures, MM BIO-7: General Construction Best Management Practices, MM BIO-9: Revegetation Plan, and MM BIO-16: Wildlife Connectivity would be implemented. With implementation of these mitigation measures, construction- and decommissioning-related impacts to wildlife movement from future Tier 3 and Tier 4 solar facilities would be insignificant.

Furthermore, future Tier 3 and Tier 4 projects developed under the Project requiring discretionary approval would be required to undergo site-specific environmental review in accordance with CEQA as part of the planning application process in order to identify and mitigate potential significant impacts to wildlife movement. Future Tier 3 and Tier 4 projects would be required to conduct a site-specific biological resources survey (i.e., MM BIO-3: Vegetation Mapping and Habitat Assessment), which could inform subsequent environmental review and which could result in additional site-specific mitigation measures, as deemed necessary.

Nursery Sites

As discussed above, future Tier 1 solar energy systems are already allowed everywhere in the unincorporated County areas and would have no or negligible ground impacts. Future Tier 2 solar facilities would only be permitted on existing developed land. However, even the disturbed and developed areas within the Project area may provide suitable habitat for nesting birds, and it is possible that associated construction activities and staging could have the potential to impact nesting birds if such activities occur outside of developed land areas into adjacent areas that support potential habitat for nesting birds. Construction and decommissioning activities associated with the future Tier 2 solar systems could disturb nesting birds and cause nest site abandonment and/or reproductive failure (e.g., from increased noise, human presence, and/or disturbance to the nest). Therefore, impacts to nesting birds from construction and decommissioning of future Tier 2 solar facilities would be considered potentially significant. In order to avoid and/or minimize construction- and decommissioning-related impacts from future Tier 2 solar energy systems to nesting birds within the Project area, MM BIO-1: Construction Activities and Staging Areas for Tier 2 Solar Energy Systems and MM BIO-2: Nesting Birds would be implemented. With implementation of these mitigation measures, construction- and decommissioning-related impacts to nesting birds from future Tier 2 solar systems would be insignificant.

Future Tier 3 and Tier 4 solar energy facilities that could be developed under the Project could be located in areas that support nesting of a variety of bird species that are protected under state and federal regulations and/or other nursery sites (e.g., bat maternity colonies). Construction and decommissioning activities associated with the future Tier 3 and Tier 4 solar facilities could disturb nesting birds and/or other nursery sites and cause nest/nursery site abandonment and/or reproductive failure from increased noise, artificial light, human presence, and/or removal of habitat. However, the Project would include requirements to design and locate such facilities in a manner to minimize any adverse biological impacts to nesting birds, sensitive natural communities, and Environmentally Sensitive Habitats (ESH). Even with minimization measures incorporated, impacts could occur to other nursery sites from construction and decommissioning of future Tier 3 and Tier 4 solar facilities and would therefore be considered potentially significant.

In order to avoid and/or minimize construction- and decommissioning-related impacts from future Tier 3 and Tier 4 solar facilities to other nursery sites within the Project area, MM BIO-2: Nesting Birds, MM BIO-3: Vegetation Mapping and Habitat Assessment, MM BIO-5: Construction Worker Environmental Awareness Program, MM BIO-7: General Construction Best Management Practices, MM BIO-8: Qualified Biological Monitor, and MM BIO-12: Bats would be implemented. With implementation of these mitigation measures, construction- and decommissioning-related impacts to nesting birds from future Tier 3 and Tier 4 solar facilities would be insignificant.

Furthermore, future Tier 3 and Tier 4 projects developed under the Project requiring discretionary approval would be required to undergo site-specific environmental review in accordance with CEQA as part of the planning application process in order to identify and mitigate potential significant impacts to state or federally protected wetlands. Future Tier 3 and Tier 4 projects would be required to conduct a site-specific biological resources survey (i.e., MM BIO-3: Vegetation Mapping and Habitat Assessment), which could inform subsequent environmental review and which could result in additional site-specific mitigation measures, as deemed necessary.

Operation

Wildlife Movement and Nursery Sites

Once constructed, operational activities for future solar energy facilities would be limited to routine maintenance and cleaning. For future Tier 3 and Tier 4 solar energy facilities, maintenance of solar facilities would involve activities such as vegetation establishment and maintenance, panel cleaning, and occasional repairs or replacement of component parts. The future solar energy facilities would generally operate passively, unless incidental repairs or parts replacement is required due to damage. These maintenance activities would occur within previously disturbed areas and are not expected to result in impacts to wildlife movement, nesting birds, or nursery sites. Therefore, the impact from the operation of future solar energy facilities would be insignificant and no mitigation is required.

Mitigation Measures

MM BIO-1: Construction Activities and Staging Areas for Tier 2 Solar Energy Systems.

MM BIO-2: Nesting Birds.

MM BIO-3: Vegetation Mapping and Habitat Assessment.

MM BIO-5: Construction Worker Environmental Awareness Program.

MM BIO-6: Invasive Plant Species Control Measures.

MM BIO-7: General Construction Best Management Practices.

MM BIO-8: Qualified Biological Monitor.

MM BIO-9: Revegetation Plan.

MM BIO-12: Bats.

MM BIO-16: Wildlife Connectivity. If the results of the Habitat Assessment identify a wildlife corridor or important habitat linkage within the work area and/or 500-foot buffer, then future solar energy facilities would be designed to include mitigation as determined by a qualified

biologist, such a minimum setback of 100 feet or greater from the wildlife movement corridor or habitat linkage.

Residual Impacts

With the implementation of MM BIO-1: Construction Activities and Staging Areas for Tier 2 Solar Energy Systems, MM BIO-2: Nesting Birds, MM BIO-3: Vegetation Mapping and Habitat Assessment, MM BIO-5: Construction Worker Environmental Awareness Program, MM BIO-6: Invasive Plant Species Control Measures, MM BIO-7: General Construction Best Management Practices, MM BIO-8: Qualified Biological Monitor, MM BIO-9: Revegetation Plan, MM BIO-12: Bat, and MM BIO-16: Wildlife Connectivity, impacts to wildlife movement and/or nursery sites would be insignificant.

Threshold e) The Project would have a significant impact if the Project would conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Impact BIO-5: Future solar energy facilities enabled under the Project could conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

As discussed above, the County has developed and implemented local policies and plans to protect biological resources including the Comprehensive Plan; CLUP; County Code, which includes the County zoning ordinances and, subsequently, the County Deciduous Oak Tree Protection and Regeneration Ordinance. In addition, there are a number of local Community and Area Plans within the County that would be applicable to any future solar energy facilities that are proposed within their plan areas. Future solar facilities enabled under the Project could conflict with local policies and ordinances protecting biological resources; therefore, the impact would be potentially significant.

Construction and Decommissioning

As discussed above, Future Tier 1 solar systems are already allowed everywhere in the unincorporated County areas and would have no or negligible ground impacts. Therefore, construction and decommissioning of future Tier 1 solar facilities would not conflict with local policies and ordinances and no mitigation is required. Future Tier 2 solar facilities would only be permitted on existing developed land, although it is possible that associated construction activities and staging could have the potential to impact natural communities if such activities occur outside of developed land areas into adjacent areas that protected biological resources. Therefore, impacts could occur to protected biological resources, if present, from construction and decommissioning of future Tier 2 solar facilities, which could conflict with local policies and ordinances and would therefore be considered potentially significant. In order to avoid and/or minimize construction- and decommissioning-related impacts from future Tier 2 solar energy systems to protected biological resources within the Project area, MM BIO-1: Construction Activities and Staging Areas and MM BIO-2: Nesting Birds for Tier 2 Solar Energy Systems would be implemented. With implementation of these mitigation measures, construction- and decommissioning-related impacts to protected biological resources from future Tier 2 solar systems would be insignificant and would not conflict with local policies and ordinances.

As required by development standards for Tier 3 and Tier 4 solar energy facilities per the proposed ordinance amendments, Tier 3 and Tier 4 solar energy facilities shall be designed and located in a manner to minimize any adverse biological impacts to sensitive natural communities and Environmentally Sensitive Habitats (ESH). However, future Tier 3 and Tier 4 solar energy facilities that could be developed under the Project could be proposed in areas that contain protected native trees and other biological resources that are protected by applicable County plans, policies, and ordinances, including those biological communities discussed within the County Environmental Thresholds and Guidelines Manual. However, the Project would include requirements to design and locate such facilities in a manner to minimize any adverse biological impacts to known sensitive natural communities, Environmentally Sensitive Habitats (ESH), rare and special-status plant species, special-status wildlife species and their habitats, critical habitat corridors, and nesting birds (proposed ordinance amendments). Where applicable to ensure consistency with County policies protecting native trees, future Tier 3 and Tier 4 solar energy facilities should be consistent with the County's Standard Conditions (or as noted in the current Standard Conditions at the time of Project implementation), including Bio-01 that requires a Tree Protection Plan, Bio-02a and Bio-02b that require a Tree Replacement Plan for the planned or unexpected damage or removal of protected native trees, and Bio-03 that requires that a County Planning & Development (P&D)-approved arborist/biologist be onsite throughout all grading construction activities that may impact protected native trees and to ensure that the Tree Protection Plan and Tree Replacement Plan are implemented. Thus, potential impacts to protected native trees would be insignificant. In addition, MM BIO-2: Nesting Birds, MM BIO-3: Vegetation Mapping and Habitat Assessment, MM BIO-4: Special-Status Plant Species, MM BIO-5: Construction Worker Environmental Awareness Program, MM BIO-6: Invasive Plant Species Control Measures, MM BIO-7: General Construction Best Management Practices, MM BIO-8: Qualified Biological Monitor, MM BIO-9: Revegetation Plan, MM BIO-10: Listed Endangered/Threatened Wildlife Species, MM BIO-11: Non-Listed Special Status Wildlife Species, MM BIO-12: Bats, MM BIO-13: Critical Habitat, MM BIO-14: Sensitive Natural Communities, MM BIO-15: Aquatic Resources, and MM BIO-16: Wildlife Connectivity would be implemented. Implementation of these measures would avoid, reduce and minimize, and/or mitigate potential impacts to sensitive biological resources that are protected by the Comprehensive Plan, CLUP, and applicable Community Plans. In addition, the Project would be required to comply with the requirements of the County Code. Therefore, construction of future Tier 3 and Tier 4 facilities would be insignificant with respect to compliance with local policies or ordinances protecting biological resources.

Furthermore, future Tier 3 and Tier 4 projects developed under the Project requiring discretionary approval would be required to undergo site-specific environmental review in accordance with CEQA as part of the planning application process in order to identify and mitigate potential significant impacts with respect to conflicts with local policies or ordinances. Through subsequent environmental review, future Tier 3 and Tier 4 projects would be required to conduct a site-specific biological resources survey (i.e., MM BIO-3: Vegetation Mapping and Habitat Assessment), which could result in additional site-specific mitigation measures, as deemed necessary.

Operation

Once constructed, operational activities for future solar energy facilities would be limited to routine maintenance and cleaning. For future Tier 3 and Tier 4 solar energy facilities, maintenance of solar facilities would involve activities such as vegetation establishment and maintenance, panel cleaning, and occasional repairs or replacement of component parts. The future solar energy facilities would generally

operate passively, unless incidental repairs or parts replacement is required due to damage. These maintenance activities would occur within previously disturbed areas and are not expected to result in impacts to sensitive biological resources that are protected by local plans, policies, or ordinances and would not include actions that would conflict with any local plans, policies, or ordinances protecting biological resources. Therefore, impacts from operation of future solar energy facilities would be insignificant and no mitigation is required.

Mitigation Measures

MM BIO-1: Construction Activities and Staging Areas for Tier 2 Solar Energy Systems.

MM BIO-2: Nesting Birds.

MM BIO-3: Vegetation Mapping and Habitat Assessment.

MM BIO-4: Special-Status Plant Species.

MM BIO-5: Construction Worker Environmental Awareness Program.

MM BIO-6: Invasive Plant Species Control Measures.

MM BIO-7: General Construction Best Management Practices.

MM BIO-8: Qualified Biological Monitor.

MM BIO-9: Revegetation Plan(s).

MM BIO-10: Listed Endangered/Threatened Wildlife Species.

MM BIO-11: Non-Listed Special Status Wildlife Species.

MM BIO-12: Bats.

MM BIO-13: Critical Habitat.

MM BIO-14: Sensitive Natural Communities.

MM BIO-15: Aquatic Resources.

MM BIO-16: Wildlife Connectivity.

Residual Impacts

With the implementation of MM BIO-1: Construction Activities and Staging Areas for Tier 2 Solar Energy Systems, MM BIO-2: Nesting Birds, MM BIO-3: Vegetation Mapping and Habitat Assessment, MM BIO-4: Special-Status Plant Species, MM BIO-5: Construction Worker Environmental Awareness Program, MM BIO-6: Invasive Plant Species Control Measures, MM BIO-7: General Construction Best Management Practices, MM BIO-8: Qualified Biological Monitor, MM BIO-9: Revegetation Plan, MM BIO-10: Listed Endangered/Threatened Wildlife Species, MM BIO-11: Non-Listed Special Status Wildlife Species, MM BIO-12: Bats, MM BIO-13: Critical Habitat, MM BIO-14: Sensitive Natural Communities, MM BIO-15: Aquatic Resources, and MM BIO-16: Wildlife Connectivity, the Project would not conflict with local plans, policies, or ordinances. Impacts would be insignificant.

Threshold f) The Project would have a significant impact if the Project would conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Impact BIO-6: Future solar energy systems and facilities enabled under the Project could conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

There are no adopted habitat or natural community conservation plans in the region. Therefore, implementation of the Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. There would be no impact and no mitigation is required.

Mitigation Measures

None required.

Residual Impacts

No impact.

3.4.5 Cumulative Impacts Analysis

Implementation of the Project could result in impacts to special-status species, riparian habitat or other sensitive natural communities, state or federally protected wetlands, and/or wildlife movement corridors or native wildlife nursery sites that have a potential to occur within the Project area. Similarly, development of past, present, and reasonably foreseeable future projects within the County, as identified in Table 3-1, *Cumulative Projects List*, in Chapter 3, *Environmental Setting*, of this Draft Program EIR, would also have impacts on these biological resources. As a result, cumulative impacts would be considered potentially significant.

Under the Project, Tier 1 solar facilities would include building-integrated or roof-mounted solar energy systems that may be located on any existing or proposed buildings or structures as well as small ground-mounted solar energy systems that may be allowed on undeveloped land or existing developed land, and Tier 2 solar facilities would include building-integrated or roof-mounted solar energy systems as well as small ground-mounted solar energy systems that would be allowed only on existing developed land. Due to the relatively small scale of Tier 1 and Tier 2 solar facilities compared to past, present, and reasonably foreseeable cumulative projects that have been identified in Table 3-1, and the limited nature of construction and operational activities associated with the future solar facilities, the Project's contribution to cumulative impacts would be less-than-cumulatively considerable. Tier 3 solar facilities would include community-scale solar energy facilities between 0.5 and up to and including 30 acres, and Tier 4 solar facilities would include utility-scale solar energy facilities greater than 30 acres. As required by Development Standards for Tier 3 and Tier 4 solar energy facilities per the County's Land Use and Development Code, Tier 3 and Tier 4 solar energy facilities shall be designed and located in a manner to minimize any adverse biological impacts. As applicable to ensure consistency with County policies, future Tier 3 and Tier 4 solar energy facilities should be consistent with the County's Standard Conditions

(or as noted in the current Standard Conditions at the time of Project implementation), including Bio-01 that requires a Tree Protection Plan, Bio-02a and Bio-02b that require a Tree Replacement Plan for protected native trees, and Bio-03 that requires that a County P&D-approved arborist/biologist by onsite throughout all grading construction activities to ensure that the Tree Protection Plan and Tree Replacement Plan are implemented; Bio-07 that requires a habitat setback (e.g., typically 50 to 100 feet depending on the resource and project type) from either side of sensitive riparian habitat areas; and Bio-23 that requires nesting bird surveys (MM BIO-2). Additionally, for any potentially significant impacts, the Project would implement one or more of the following mitigation measures as applicable to offset a project-specific potentially significant impact, which will be determined by the Habitat Assessment (conducted in MM BIO-3) or other means: MM BIO-1: Construction Activities and Staging Areas for Tier 2 Solar Energy Systems, MM BIO-3: Vegetation Mapping and Habitat Assessment, MM BIO-4: Special-Status Plant Species, MM BIO-5: Construction Worker Environmental Awareness Program, MM BIO-6: Invasive Plant Species Control Measures, MM BIO-7: General Construction Best Management Practices, MM BIO-8: Qualified Biological Monitor, MM BIO-9: Revegetation Plan, MM BIO-10: Listed Endangered/Threatened Wildlife Species, MM BIO-11: Non-Listed Special Status Wildlife Species, MM BIO-12: Bats, MM BIO-13: Critical Habitat, MM BIO-14: Sensitive Natural Communities, and MM BIO-15: Aquatic Resources. Thus, the Project's contribution to cumulative impacts would be less-than-cumulatively considerable. Therefore, the cumulative impact to special-status plant and wildlife species, riparian habitat or other sensitive natural communities, state or federally protected wetlands, wildlife movement corridors or native wildlife nursery sites would be insignificant**.**

As discussed above, all construction of future solar facilities would be required to follow County development requirements, including compliance with local policies, ordinances, and applicable permitting procedures related to the protection of biological resources. All other future solar facilities installed within the County would also be required to comply with applicable County development requirements. Therefore, the cumulative impact would be insignificant. Due to the limited nature of activities associated with operation of the future solar energy facilities, the Project's contribution to cumulative impacts would be insignificant.

There are no adopted habitat or natural community conservation plans in the region. Therefore, the Project, in combination with other development, would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. There would be no cumulative impact.

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3.5 SR-Cultural, Paleontological, and Tribal Cultural Resources

3.5.1 Introduction

This section analyzes impacts to cultural, paleontological, and tribal cultural resources within Santa Barbara County that would result from implementation of the Project, and feasible mitigation measures to reduce these potential impacts. This section describes the physical environment and regulatory setting, the criteria and thresholds used to evaluate the significance of impacts, the methods used in evaluating these impacts, and the results of the impact assessment. Supporting information used in the analysis presented below is contained in Appendix D of this Draft PEIR.

During the scoping period for the project, Santa Barbara County received comments from the Gaviota Coast Conservancy (GCC) regarding Cultural and Tribal Cultural Resources. The GCC indicated the presence of important Native American cultural sites and historic resources within the Gaviota Coast and noted that cultural resource constraints are particularly heightened in areas west of Gaviota Pass that are less accessible to the public. The GCC indicated that the Gaviota Coast Plan (GCP) provides only for community-scale solar energy projects and not utility-scale solar energy projects (GCP Action TEI-7, titled *Enabling Ordinance for Small Scale, Community Scale, and Utility Scale Wind Energy Generation and Community Scale Solar Energy Generation*). The GCC contends that while the GCP provides for Tiers 1 - 2 solar energy systems and Tier 3 facilities, Tier 4 utility-scale solar energy projects may not be appropriate for the Gaviota coast.

3.5.2 Environmental Setting

The Project is located in the unincorporated areas of the County of Santa Barbara (County). It is bordered by San Luis Obispo County to the north, the Pacific Ocean to the south and the west, Ventura County to the east, and Kern County to the northeast. Approximately one-half of the undeveloped land in the County falls within the Los Padres National Forest and Vandenberg Space Force Base (ESA 2025). The County is diverse and is made up of built and natural environments. Urban communities are bounded and separated by rural lands. The inland North County areas consist of “rural open spaces of chaparral hillsides, oak woodlands, grassland meadows, and agricultural and pastoral landscapes containing farmlands, vineyards, and ranch-style development surrounding distinct urban communities,” while the South Coast includes “an undisturbed natural environment on the periphery of urban areas in the foothills and along the coastline” (County of Santa Barbara 2023). Lastly, the coastline contains “dunes, sandy beaches, sea cliffs, and views of the surrounding mountains, Channel Islands, and Pacific Ocean” (County of Santa Barbara 2023).

Geologic Setting

Santa Barbara County lies at the western on-land terminus of the Transverse Ranges and the geology clearly reflects that history. The western Transverse Ranges formed through 110 degrees of clockwise rotation as the transform plate margin expanded northward in the Miocene Epoch, starting 18 million years ago (Sylvester and O’Black Gans 2016). This led to uplift of the older, primarily (in Santa Barbara County) Paleogene to early Neogene marine deposits (Crouch et al. 1984). These bands of mudstone, sandstone, and minor limestone beds make up the coastal mountains throughout the county. As the area is still vigorously tectonically active, the coastline is dominated by uplifted marine terraces that preserve nearshore marine deposits that range back through the Pleistocene Epoch. Additionally, the easily eroded

marine units have led to numerous canyons carved through the Transverse Ranges, leading to deposits of valley and coastal plain alluvium that filled the low-lying areas.

To assess the unincorporated portions of Santa Barbara County, a variety of published geological maps were reviewed (Dibblee and Minch, 2005; Dibblee and Ehrenspeck, 1986, 1987, 1988, 1989, 1993, 1994; Dibblee, Ehrenspeck, and Bartlett, 1994; and Minor et al., 2009). The general overview is best organized by geological chapters that typify the region. The oldest event is recorded in crystalline rocks that formed the basement below a tectonic volcanic arc in the Mesozoic Era. The second-oldest chapter involves deposition and volcanism in this arc near the Mesozoic. As conditions changed from convergence to transform tectonics, the area now occupied by Santa Barbara County began to dismember into a series of subbasins. The largely marine basins are filled with a variety of siltstone and sandstone as well as rare limestone. Volcanoes are rare, but eruptions happened during this interval as well. The next chapter captures the recession of the ocean and the transition to largely non-marine units during the Pliocene Epoch. The final chapter broadly encompasses the alluvium that fills the valley floors and broad plains, deposited during the Pleistocene up to the present day as the area still undergoes varying degrees of tectonic uplift.

Precontact Setting

Pleistocene-Holocene Transition (14000 to 10000 years B.P.)

While archaeological evidence from the Northern Channel Islands shows that the wider region has been occupied since as early as 13,200 years before present (B.P.), no sites of similar age have been located within the Project area. It may be that areas appealing to early peoples, such as estuary environments along the coast, were covered by the 100 meters (300 feet) of subsequent sea level rise. Judging from the Northern Channel Islands, the coastal people likely belonged to the Paleo-Coastal Tradition that relied mostly on near-shore marine foods such as shellfish. (Erlandson 2012; Erlandson 2007). Stone tools to process plant foods have not been found dating from this period, leaving archaeologists in the dark about the rest of the Paleo-Coastal diet (Glassow 2007).

Early Holocene (10,000 – 7000 years B.P.)

During the beginning of the Early Holocene, climatic warming led to an increase in chaparral and grassland plant species. The greater availability of edible plants seems to have helped the human population in the Project vicinity and surrounding areas increase. By 9,000 years B.P., heavy stone tools for grinding plant seeds into flour appear, marking the beginning of the Millingstone Horizon. This way of life is characterized by increasing population size, greater importance of grass and perennial plant seeds in the diet, and a decrease in how often people moved their settlements during the year. Seeds likely became important because they can be stored for long periods of time, alleviating the pressure of environmental change. Marine foods such as sea mammals and shellfish continue to be very important in the diet. Near the end of this period, the first olivella (a gastropod) shell beads were produced, perhaps indicating the beginnings of a regional trade network that grew during later periods (Arnold 2010; Glassow 2007). Skeletal and archaeological evidence indicates that the ancestors of the Chumash peoples, who still inhabit the region today, were present by this time, although the linguistic evidence is less certain (Golla 2007).

Middle Holocene (7000 – 4000 years B.P.)

The first half of the Middle Holocene is generally a continuation of trends from the end of the Early Holocene, including the Millingstone Horizon. Between 8,000 and 6,000 years B.P. there appears to have been a decline in population along the coast, perhaps linked to a period of warmer seawater that depressed the shellfish and fish species. This signals the end of the Millingstone Horizon in the Project vicinity. A reaction to lack of marine resources may have caused people to start to eat acorns or starchy tubers as a staple food. This is suggested by the appearance of mortars and pestles. At the same time, the number of projectile points increases dramatically and changes from leaf-shaped to a side-notched form, indicating that hunting was important and that people were hunting a variety of animals (Arnold 2010; Glassow 2007).

Late Holocene (4000 years B.P. – Present)

By the Late Holocene, the Millingstone Horizon had disappeared, replaced by a way of life that involved less frequent movement of settlements throughout the year and a reliance on acorns as the main staple food, called the Intermediate Horizon. Other plant foods also seem to have been important, such as chaparral yucca, roasted in rock rings. The presence of more settlements on the mainland coast and an increase in both fishing and trade with the Channel Islands indicate that people's lives were very much oriented to the ocean. Rather than the majority of the dietary protein coming from shellfish, food sources became much more diverse, indicated by a wide array of fishing technologies, including circular shell fishhooks, stone fishing line sinkers, and fishing net weights. The hooks and line sinkers also show that fishing was not restricted to along the shoreline and that people were venturing further into the ocean to procure fish, probably in the kelp forests of the Santa Barbara Channel. The earliest evidence for asphaltum use in manufacturing tools is from the beginning of this period (Arnold 2010; Glassow 2007).

The second half of the Late Holocene, referred to as the Late Horizon, is another period of significant technological change, population expansion, and an increase in complicated trade networks, political systems, and social classes based on wealth. The two transformative technologies both appear on the coast between 1,500 and 1,000 years B.P.: the redwood plank-canoe (*tomol*) and the bow and arrow. Plank-canoes were built by specialists in the Carpinteria area. These allowed for relatively safe voyages into the open ocean and made it possible for people to fish for large ocean fish, particularly swordfish, and to expand their trade networks. The plank-canoe became both the way to increase social standing and a symbol of that standing, as canoe owners rented out their boats in exchange for food and other goods. By 800 years B.P., people along the coast lived in large permanent villages controlled by chiefs and used temporary camps near resources to gather storable foods such as acorns. Olivella shell beads, important for thousands of years, became a form of currency used in trade networks that connected the coast with the Nevada desert and beyond (Arnold 2010; Glassow 2007). Interior villages were of smaller size and focused more on terrestrial plants and animals as their main foods, supplemented by runs of large fish such as steelhead trout. The populations of these villages were also the link between the people of the coast and those of the interior deserts. While these villages were likely inhabited throughout the year, the lack of access to food-rich coastal areas made it necessary for people to move more often between resource-gathering camps (Glassow 2007).

Historic Setting

Spanish Period

Initial Spanish contact in the region occurred when Juan Cabrillo's exploration landed in 1542 on the Northern Channel Islands (Rawls 1993). Later in 1602, Sebastían Vizcaino sailed his ships through the channel and into Monterey Bay. In July of 1769, Gaspar de Portolà, his men, and Franciscan padres camped at the mouth of the Santa Maria River. The first Spanish constructions in the Project area were the El Presidio Real de Santa Bárbara in 1782, used as a barracks until the Santa Barbara Mission was constructed in 1786. Mission La Purísima Concepción was completed in 1787 in Lompoc and Mission Santa Inés in Solvang in 1804 (Yenne 2009). The mission locations were based on the area's farming potential and water supply. Once the mission was in a secure location, the missionaries had the Native Americans make adobe bricks, ceramic roof tiles, cut beams, and reeds. Construction would utilize the material from the surrounding area. The establishment of the missions and numerous ranchos altered both the physical and cultural landscape of the region. The missions were the center of Spanish influence in the region and affected native patterns of settlement, culture, trade, industry, and agriculture (California State Legislature 2011).

Mexican Period

After the Mexican War of Independence of 1821, the region changed dramatically as California was opened to foreign trade and as the mission lands were secularized and granted as ranchos to both prominent local citizens and new immigrants. Santa Barbara County was broken up into 36 ranchos. (Perez 1982). The use of the land became focused on horse, sheep, and cattle ranching and the displaced Native American population had little choice but to find work on them. Immigration increased now that the lands were not under Spanish control. Monterey became a major stopping point for American traders and whalers in the northern Pacific (Rawls 1993).

American Period

On July 7th, 1846, Commodore Sloat sailed into Monterey and raised the American flag over the Customs House, declaring it part of the United States. Over the next few days, an American flag was raised above the presidios at San Francisco and Sonoma, as well as Sutter's Fort (Cleland 1922). The American Period is characterized by the shift from cattle ranching to intensive farming and industrialization. Larger tracts of land were opened for farming and these agricultural developments demanded a large labor force, sparking a new wave of immigration into the region. Santa Barbara, San Luis Obispo, Monterey, and Santa Clara were among the first 26 counties established in 1850 at statehood. This coincided with the California Gold Rush, bringing many new immigrants to the region and increasing the economic infrastructure of California (Ryan 2010). The demand for beef and grain grew to meet the needs of each incoming miner. Droughts hit the area in the 1860s, wiping out cattle and decimating the ranchos. Lands were sold to incoming developers to cover debt. By 1873, the economy of the region had almost completely abandoned cattle ranching (Newman 2003).

Major forces of regional change occurred during the late 1800s through the 1900s, including: the development of the railroad system, the growth of agriculture, tourism, the rise of the fishing and canning industries, and the development of the oil industry. In the late 1800s, transportation became a major factor in supporting the growing economy of the region. At this time, access to California's central coast consisted

of wagon roads along which stagecoach lines would run. In 1870, Southern Pacific Railroad announced its plans to build a coastal rail line that connected San Francisco to Los Angeles. As the railroad construction pushed farther south, it opened new markets and stimulated settlement of new towns. Completed in 1901, this new transport capability allowed crops to be shipped to market more efficiently. As improved irrigation systems were introduced to the area in the late 19th century, combined with additional railroad connections, production of fruits and vegetables replaced dry farming of grains as the leading agricultural products (Ryan 2010). The train system also brought wealthy families from the east and south coasts of the United States. Grand resorts were built along the coastline to cater to these families.

The discovery of oil changed the local economy as well as the landscape. While the natural oil seeps had long been known and used, their value as a fuel did not become widely known until the late 19th century. The first sale of petroleum oil drilled in the region was in 1865 (Newman 2003). In the 1890s, the large Summerland Oil Field was found in Santa Barbara and began to be developed. Summerland was the site of the world's first offshore oil well. While most of the oil had been pumped out by 1910, derricks remained on the beach in Summerland into the 1920s, and the field remained partially productive until 1940. In 1942, during World War II, a Japanese submarine conducted a naval attack on Ellwood Oil field in Santa Barbara; while the attack provided minimal damage, the threat of further attacks led to the internment of Japanese Americans in the United States (Rintoul 1990).

State Highway 1 was constructed in 1921 and US Route 101 in 1926, connecting Southern California to Northern California through the Central Coast. US Route 101 follows the preexisting route carved out by the Spanish El Camino Real. While construction of these highways proved very difficult due to the terrain, they provided an easier route for transportation that ushered in population and an expansion of tourism (Caltrans 2014). Orchards that once covered the landscape were now replaced by development and golf courses. Another big change for this region came with the introduction of a new product, the semiconductor chip, developed in the 1950s.

Today, the region has become a well-known tourist destination. Coastal cities provide beautiful beaches, wineries, and spa resorts. Inland areas include rugged mountains for the avid adventurer, including the Channel Island National Park (National Park Service 2024).

Ethnographic Setting

The County of Santa Barbara is located within the territorial boundary of the Chumash. Chumash territory extended from the existing city of Malibu, north past San Luis Obispo, and approximately 68 kilometers (42 miles) inland (Glassow 1996). The Chumash also occupied the northern Channel Islands: Santa Cruz, Santa Rosa, San Miguel, and Anacapa. The Chumash spoke six languages, and were and are, divided into two broad groups: Northern and Southern Chumash. The Northern Chumash group spoke the Obispeño language, while the Southern Chumash group spoke Purisimeño, Ineseño, Barbareño, Ventureño, and Island Chumash languages (Mithun 1999). The Chumash are divided into three main geological groupings: Interior, Coastal, and Northern Channel Islands Chumash (Grant 1978).

In the precontact era, the Chumash subsistence model was that of a hunter-gatherer society, and they lived in permanent villages. The size of Chumash villages ranged considerably from the coastal areas to the inland areas with many villages on the coast having several hundred occupants, whereas villages inland were significantly smaller, sometimes containing only a couple dozen inhabitants. Chumash villages were

most abundantly located along the coast and were often situated on high ground adjacent to a river or stream that flowed into the ocean or along the borders of sloughs or wetlands (Grant 1978).

Chumash subsistence included both terrestrial and maritime resources. Amongst terrestrial plant resources, the acorn, collected mainly from the California live oak, was the most important. Additional plant resources included pine nuts, wild cherry, cattail, California laurel berries, and chia sage seeds. Mule deer, coyote, and fox were hunted using the bow and arrow, and smaller game was taken using deadfalls and snares. Migratory birds such as ducks and geese were also hunted. In addition to terrestrial resources, the Chumash utilized an array of maritime resources including shellfish, sea mammals, and pelagic and schooling fish. Large fish and sea mammals such as seals, sea otters, and porpoises were hunted with harpoons. Dip nets, seines, and line and hook were used for smaller fish (Grant 1978).

Chumash villages were composed of a patrilineal descent group and usually had at least one chief, known as the *wot* or *wocha*, whose position was inherited but was subject to village approval. Chumash dwellings were hemispherical structures constructed by driving pliable wooden poles into the ground, bending them towards the center of the dwelling, and tying them together. The wooden pole frame was then covered with interwoven grass mats. While accompanying the Portola expedition, Father Juan Crespi noted that Chumash dwellings could be up to 50 feet in diameter and hold up to 70 people. Most villages contained one or more sweat houses that were semi-subterranean and consisted of a wooden pole frame covered with earth. Additional village structures included storehouses and ceremonial enclosures (Grant 1978).

Not much is known of the religion practiced by the Chumash. Father Olbés of the Santa Barbara mission noted a Chumash deity called *sup*, and, although the Chumash had no figures or idols of the deity, they made offerings of seeds and feathers to show their acknowledgement and gratitude for the blessings given them. Additionally, Chumash rock art sites, such as Painted Cave in San Marcos Pass, located near the City of Santa Barbara, and Burro Flats Painted Cave, located in the northwestern portion of the San Fernando Valley, may have represented shrines or sacred areas. Many of the pictographs present at rock art sites consist of geometric figures as well as animal figures and are painted in vibrant colors that may have been painted while under the influence of the hallucinogenic ceremonial drink, toloache, which is associated with the *Chinigchinich* religion of the Gabrielino-Tongva (Grant 1978). The Chumash buried their dead with the body being bound in a flexed position (Kroeber 1925). The graves of prominent individuals were marked with planks containing images or from which the possessions of the deceased were hung.

The Chumash were one of the first native Californian groups met by Juan Rodriguez Cabrillo when he sailed into the Santa Barbara Channel Island region in 1542-43 (Kroeber 1925). The Gaspar de Portola expedition passed through Chumash territory on its way to Monterey Bay in 1769. Between 1772 and 1804, five missions, including Missions San Luis Obispo (1772), San Buenaventura (1782), Santa Barbara (1786), La Purisima Concepcion (1787), and Santa Ynez (1804) were established in Chumash territory. The establishment of the missions fractured the traditional culture of the Chumash, and by 1834, when the missions were secularized, the Chumash population had declined dramatically as a result of European diseases and treatment at the hands of the colonialists (Grant 1978).

3.5.3 Paleontological Resources Background

Paleontological resources include both fossils and the sedimentary or other geological units that contain the fossils. Because paleontological resources are considered a non-renewable resource used to understand rich evolutionary record of life on Earth, they are protected by regulations at various levels. Unlike cultural resources, paleontological resources are more difficult to predict as they are typically not exposed at the surface, but need to be predicted based on the age, environmental context or 'facies', and geometric distribution of the geological formations. Resource assessment relies primarily on published geological maps, often accentuated by analysis of aerial photography or lidar imagery and, when necessary, field surveys. After the geological context is defined, the assessment turns to the published literature, unpublished theses and reports, and museum records to construct the potential for geological units to host scientifically significant paleontological resources.

As this analysis is over a very large geographical area, the assessment of known paleontological resources is founded on a review of the online holdings of the University of California Museum of Paleontology (April, 2025). The data from the University of California Museum of Paleontology (UCMP) were sorted, and Holocene (Recent) specimens were removed from the analysis. Microfossils were also removed as they are not considered protected paleontological resources due to their commonality. Errors in age assignments (e.g., "Tertiary" or Pliocene-Pleistocene) were also updated to the modern geological time scale approved by the International Commission on Stratigraphy (assessed April 2025). This led to 2,272 accepted records in Santa Barbara County. While these results could not be georeferenced to the unincorporated portions of the County specifically, it helps to establish the general potential for the region.

Of the 2,272 specimens, slightly more than half are from the Pleistocene Epoch (1,253) and nearly all of these (1,199) are marine invertebrates. The next largest collection is from the Neogene, specifically the Miocene (890) but here, the collection is biased toward vertebrates (764). The Cretaceous and Paleogene each have 30 and 42 fossils, respectively.

Sorting by fossil type, there is a clear bias toward invertebrates with 1,447 specimens. Vertebrates account for 801 specimens and plants for 24. Mollusks dominate the collection with 993 gastropods, 365 bivalves, 3 scaphopods, and 1 polyplacophoran. Additionally, there are 41 echinoderms and 14 malacostracans. Other groups are in single digits. Vertebrates are mostly fish (314 chondrichthyians and 102 osteichtyians) followed by mammals (362) and birds (21). While invertebrates are nearly all marine, the mammal record is biased toward terrestrial forms such as mice (e.g., Proheteromys) and horses (e.g., Merychippus). As is typical of California, plants are dominated by Pinopsida (18) followed by Magnoliopsida (6). This data clearly establishes a strong, yet biased paleontological record for the entirety of Santa Barbara County.

By comparing this data with the geological mapping, the paleontological record of unincorporated Santa Barbara County can be summarized as follows. The older, Cretaceous marine rocks contain a rich and varied invertebrate record but do not support marine reptiles or other vertebrates as noted elsewhere in the state. Similarly, the older, Paleogene marine units are primarily invertebrate-dominated though marine mammals and sharks are noted from the Oligocene or early Miocene[1] Vaqueros Formation. By the Miocene, there is a significant shift to a rich record of terrestrial mammals from units such as the Branch

[1] The Miocene age of the Vaqueros formation is based on assumptions and has not been defined as a stratigraphic unit. Some portions of the formation are mapped as Oligocene (Schenck 1935).

Canyon Formation though marine fauna are recorded from the Monterey and Sisquoc formations and Rincon Shale. The Pliocene records shift from marine to terrestrial invertebrates and vertebrates. The final chapter is recognized by a diverse terrestrial Ice Age fauna including horses, bison, mammoths, tapirs, and camelids as well as diverse birds.

Identification of Cultural Resources

Preparation of the program-level study involved a review of the National Register of Historic Places, California Register of Historical Resources, Santa Barbara County Landmarks, and Santa Barbara County Places of Historic Merit. Preparation of the study also involved archival research which entailed a desktop review of relevant geologic maps, readily available literature, and in-house records for previously recorded historic and archaeological resources within and immediately surrounding the Program area. Additionally, this information was synthesized into a general archaeological sensitivity assessment for the Project, which appears below.

Built Environment Resources

ESA accessed the National Register of Historic Places, California Register of Historical Resources, Santa Barbara County Landmarks and Santa Barbara County Places of Historic Merit public online databases on March 28, 2025, and reviewed their contents to identify listed historic properties/historical resources that are present within the Program Area. As information was available, ESA further included the appropriate zoning area, community plan area, and location within unincorporated Santa Barbara County for each listed historic property/historical resource within the datasets. **Tables 3.5-1** to **3.5-4** below reflect the listed historic resources per referenced database. In total, there are 79 listed historic resources in unincorporated Santa Barbara County among the National Register of Historic Places, the California Register of Historical Resources, the Santa Barbara County Landmarks list, and the Santa Barbara County Places of Historic Merit list, several of which are cross-listed.

National Register of Historic Places

The National Park Service (NPS) maintains the National Register of Historic Places (NRHP) which is the official list of the Nation's historic properties worthy of preservation. As a result of this effort, Santa Barbara County has five listed NRHP properties, all of which are cross-listed on the California Register of Historical Resources. Of the NRHP resources, one is zoned in an AG-II area. Listed NRHP resources are included in the following identified community plan areas: one is in Los Alamos, one is in Eastern Goleta Valley, and three are in Montecito. **Table 3.5-1**, *National Register of Historic Places Recorded Built Environment Resources*, includes the NRHP resources identified within Santa Barbara County.

California Register of Historical Resources

The California Register of Historical Resources (CRHR) includes buildings, sites, structures, objects and districts significant to the State of California. A list of resources listed in the CRHR approved by the State Historical Resources Commission includes seven listed CRHRs in unincorporated Santa Barbara County, of which four are also considered NRHPs. Of these resources, one property is zoned as AG-I and one property is zoned as AG-II. Listed CRHR resources are included in the following identified community plan areas: one is in Eastern Goleta Valley, one in the Gaviota Coast, three are in Montecito, and one is in Santa Ynez. **Table 3.5-2**, *California Register of Historic Resources Recorded Built Environment Resources*, includes the CRHR resources identified within unincorporated Santa Barbara County.

TABLE 3.5-1
NATIONAL REGISTER OF HISTORIC PLACES RECORDED BUILT ENVIRONMENT RESOURCES

Resource ID #	Resource Name or Address	Zone	Community Plan Area
NR #70000148 ‡▲	Los Alamos Ranch House	AG-II	Los Alamos
NR #78000783 ‡▲	Thomas Hope House 399 Nogal Dr., Santa Barbara	-	Eastern Goleta Valley
NR #87000002 ‡	Steedman Estate 1387 E. Valley Rd., Montecito	-	Montecito
NR #95000359 ‡	Val Verde 2549 Sycamore Canyon Rd., Santa Barbara	-	Montecito
NR #97000750 ‡	Acacia Lodge 109 Miramar Ave., Santa Barbara	-	Montecito

NOTES:
‡ = Cross-listed on the CRHR
▲= Cross-listed on Built-environment and Archaeological Resource Tables

TABLE 3.5-2
CALIFORNIA REGISTER OF HISTORIC RESOURCES RECORDED BUILT ENVIRONMENT RESOURCES

Resource ID #	Resource Name or Address	Zone	Community Plan Area
CR Landmark 248▲	Gaviota Pass N-bound State Hwy 101 rest stop (P.M. 46.9), 1.5 mi NW of Gaviota	-	Gaviota Coast
CR Landmark 582▲	Well, Hill 4 Mission Hills District, plaque is located 1.6 mi N of Union Oil Co. Production Office, office is located off Rucker Rd, 5 mi NE of Lompoc	AG-II	-
CR Landmark N1479 †	Steedman Estate 1387 E. Valley Rd., Montecito	-	Montecito
CR Landmark N1906 †	Val Verde 2549 Sycamore Canyon Rd., Santa Barbara	-	Montecito
CR Landmark N1982 †	Acacia Lodge 109 Miramar Ave., Santa Barbara	-	Montecito
CR Landmark N55 †▲	Los Alamos Ranch House	AG-II	Los Alamos
CR Landmark N714 †▲	Thomas Hope House 399 Nogal Dr., Santa Barbara	-	Eastern Goleta Valley
CR Landmark P11	Ballard Presbyterian Church Santa Ynez	AG-I	Santa Ynez

NOTES:
† = Cross-listed on the NRHP
▲= Cross-Listed on Built-environment and Archaeological Resource Tables

Santa Barbara County Landmarks

The County of Santa Barbara's Historic Landmarks Advisory Commission maintains the Santa Barbara County Landmarks (SBCL) and involves a review process and register criteria for inclusion which provides protections for the resource. Santa Barbara County has 51 listed SBCLs in unincorporated Santa Barbara County, of which four are cross-listed as NRHP and/or CRHRs resources, and one is cross-listed as a Santa Barbara County Place of Historic Merit. Of the SBCLs, seven properties are zoned as AG-I, nine resources are zoned as AG-II, and one resource is zoned as PI, which are zones in which the Project would occur. Listed landmarks are included in the following identified community plan areas: seven in the Eastern Goleta Valley, one in Gaviota Coast, two in Los Alamos, twelve in Montecito, three in Mission Canyon, one in Orcutt, 11 in Santa Ynez, and one in Summerland. **Table 3.5-3**, *Santa Barbara County Landmarks Recorded Built Environment Resources*, includes the Santa Barbara County Landmarks identified within unincorporated Santa Barbara County.

TABLE 3.5-3
SANTA BARBARA COUNTY LANDMARKS RECORDED BUILT ENVIRONMENT RESOURCES

Resource ID #	Resource Name or Address	Zone	Community Plan Area
N/A: Historic Trail	The Rattlesnake Trail 2325 Gibraltar Road, Santa Barbara	AG-II	-
N/A: Historic Trail	The Hot Springs Trail East Mountain Drive, Montecito	-	-
N/A: Historic Trail	The Romero Canyon Trail Los Padres Nation Forest, Carpinteria	-	-
SBCL #01	Sisquoc Church and San Ramon Chapel Cemetery Forest Route 10N06, Santa Maria	AG-II	-
SBCL #04 ‡	Ballard Presbyterian Church 2465 Baseline Avenue, Ballard	-	Santa Ynez
SBCL #05	Ballard Little Red Schoolhouse 2425 School Street, Ballard	AG-I	Santa Ynez
SBCL #07	Benjamin Foxen Adobe Site Foxen Canyon Road, Santa Maria	AG-II	-
SBCL #09	Pine Grove Cemetery 1100 Stubblefield Road, Orcutt	PI	Orcutt
SBCL #10 ‡ †	Hope House 399 Nogal Drive, Goleta	-	Eastern Goleta Valley
SBCL #11	Santa Ynez Branch Library 3598 Sagunto Street, Santa Ynez	-	Santa Ynez
SBCL #12	Rancho El Alamo Pintado Adobe 1562 Alamo Pintado Road, Solvang	AG-I	Santa Ynez
SBCL #13	Sunday School Oak 4510 Foothill Road, Carpinteria	AG-I	-
SBCL #15	Glendessary 2620 Glendessary Lane, Santa Barbara	-	Mission Canyon
SBCL #16	Deane School Buildings, Westmont College 955 La Paz Road, Montecito	-	Montecito
SBCL #17	Wulff's Windmill 1245 Fredensborg Canyon Road, Solvang	AG-I	Santa Ynez
SBCL #18	San Ysidro Adobe 900 San Ysidro Lane, Montecito	-	Montecito

TABLE 3.5-3
SANTA BARBARA COUNTY LANDMARKS RECORDED BUILT ENVIRONMENT RESOURCES

Resource ID #	Resource Name or Address	Zone	Community Plan Area
SBCL #19	San Marcos Barn and Spring House 1520 San Marcos Pass Road, Santa Barbara	AG-II	Eastern Goleta Valley
SBCL #20	The Ballard Adobes 2411 Alamo Pintado Road, Los Olivos	AG-I	Santa Ynez
SBCL #21	Rancho Las Fuentes Lemon Packing House 2031 Packing House Road, Montecito	-	Montecito
SBCL #23	Cota Adobe on Rancho Santa Rosa 415 Mail Road, Lompoc	AG-II	Montecito
SBCL #24	Santa Barbara Botanic Garden, Mission Dam and Aqueduct 1212 Mission Canyon Road, Santa Barbara	-	Mission Canyon
SBCL #25	San Jose Winery 5320 Vineyard Road, Goleta	AG-II	Eastern Goleta Valley
SBCL #26 ◊	Berean Baptist Church 2293 Alamo Pintado Avenue, Los Olivos	-	Santa Ynez
SBCL #27	Helena T. Devereux Hall 7055 Seaway Drive, Isla Vista	-	-
SBCL #28	Casa Blanca Poolhouse 851 Sand Point Road, Carpinteria	-	-
SBCL #30	Hartley House 2329 Jonata Street, Los Olivos	-	Santa Ynez
SBCL #31	Masini Adobe 129 Sheffield Drive, Santa Barbara	-	-
SBCL #32	Orella Adobes 12000 Calle Real, Goleta	AG-II	Gaviota Coast
SBCL #33	Leaping Greyhound Bridge 800 Riven Rock Road, Goleta	-	Montecito
SBCL #34	Juarez-Hosmer Adobe 461 San Ysidro Road, Montecito	-	Montecito
SBCL #35	World War I Monument 2475 Lillie Avenue, Summerland	-	Summerland
SBCL #37	Hitching Post 3325 Point Sal Road, Casmalia	-	-
SBCL #38 ‡ †	Val Verde 2549 Sycamore Canyon Road, Santa Barbara	-	Montecito
SBCL #39	Union Hotel and California Garage 362 and 346 Bell Street, Los Alamos	-	Los Alamos
SBCL #41	Santa Rosa School 871 Mail Road, Lompoc	AG-II	-
SBCL #42	Canby House 1696 E Valley Road, Montecito	-	Montecito
SBCL #43	Coral Casino 1260 Channel Drive, Montecito	-	Montecito
SBCL #44	Irvine-Richard Property 5048 Lara Lane, Santa Barbara	-	Eastern Goleta Valley
SBCL #45	Foley Estates Vineyard and Winery 1711 Alamo Pintado Road, Ballard	AG-I	Santa Ynez

TABLE 3.5-3
SANTA BARBARA COUNTY LANDMARKS RECORDED BUILT ENVIRONMENT RESOURCES

Resource ID #	Resource Name or Address	Zone	Community Plan Area
SBCL #46	Sisquoc Store 4960 Foxen Canyon Road, Santa Maria	-	-
SBCL #47	Mattei's Tavern 2326 Railway Avenue, Los Olivos	-	Santa Ynez
SBCL #48	Bryce Beach Cabana and Funicular 1553 Roble Drive, Santa Barbara	-	Eastern Goleta Valley
SBCL #49	Irene and Frances Rich Beach Cabana 4353 Marina Drive, Santa Barbara	-	Eastern Goleta Valley
SBCL #50	Moody Sisters Cottage 170 Middle Road, Montecito	-	Montecito
SBCL #51	Davison House 1930 Alamo Pintado Road, Santa Barbara	-	Santa Ynez
SBCL #52	Main-Begg Farmhouse 5001 Hollister Avenue, Santa Barbara	-	Eastern Goleta Valley
SBCL #53	Sheldon House 701 Buena Vista Drive, Montecito	-	Montecito
SBCL #54	Rocky Nook Park 610 Mission Canyon Road, Santa Barbara	-	Mission Canyon
SBCL #55	All Saints by the Sea Episcopal Church 80 Eucalyptus Lane, Montecito	-	Montecito
SBCL #56	Cold Spring Canyon Bridge State Route 154 Post Mile 22.95-23.19, SB County	AG-II	-

NOTES:
‡ = Cross-listed on the CRHR
† = Cross-listed on the NRHP
◊ = Cross-listed on the SB County Places of Historic Merit

Santa Barbara County Places of Historic Merit

Santa Barbara County Places of Historic Merit includes resources that may satisfy the criteria for designation as historic landmarks, or have a special historic, aesthetic, or cultural value to the County as designated by the Santa Barbara County Historic Landmarks Advisory Commission. These properties may be designated as having historic merit, even though they may not qualify for designation as a historic landmark (SB Code 2025). The County has 23 identified Santa Barbara County Places of Historic Merit, with one resource that is cross-listed as a Santa Barbara County Landmark. Of these resources, four are zoned as AG-II and one is zoned as AG-I. Listed Places of Historic Merit are included in the following identified community plan areas: twelve in Montecito, six in Santa Ynez, two in Gaviota Coast, and one in Eastern Goleta Valley. **Table 3.5-4**, *Santa Barbara County Place of Historic Merit Recorded Built Environment Resources*, includes the Santa Barbara County Places of Historic Merit.

From this research, there are five NRHP properties, eight CRHR properties, 50 Santa Barbara County Landmarks, and 23 Santa Barbara County Places of Historic Merit located within unincorporated Santa Barbara County. There is some overlap between these lists, as several listed resources appear on multiple registers.

TABLE 3.5-4
SANTA BARBARA COUNTY PLACE OF HISTORIC MERIT RECORDED BUILT ENVIRONMENT RESOURCES

Resource ID #	Assessor Parcel Number	Resource Name or Address	Zone	Community Plan Area
#51C-80	-	Lansing's Bridge, Grand & Santa Barbara Avenues over Alamo Pintado Creek, Los Olivos	AG-I	Santa Ynez
-	007-200-011	Glen Oaks Stable/Carriage House, 1741 Glen Oaks Drive, Montecito	-	Montecito
-	009-122-020	Casa del Greco (George Washington Smith House #2), 1200 Mesa Road, Montecito	-	Montecito
-	009-130-001	Clavelitos or Lutah Maria Riggs Place, 280 Middle Road, Montecito	-	Montecito
-	009-212-017	Hermosillo Road, 148 Hermosillo Road, Santa Barbara	-	Montecito
-	011-080-018	Stone Bridges of Riven Rock: Camelback Bridge, 1125 Garden Lane, Santa Barbara	-	Montecito
-	011-090-001	Riven Rock Stone Water Tower & Reservoir, 800 Riven Rock Road, Santa Barbara	-	Montecito
-	011-090-001	Stone Bridges of Riven Rock: Old Bridge, 800 Riven Rock Road, Santa Barbara	-	Montecito
-	011-090-001	Stone Bridges of Riven Rock: Skew or New Bridge, 800 Riven Rock Road, Santa Barbara	-	Montecito
-	013-180-019	605 Cowles Road, 605 Cowles Road Property	-	Montecito
-	065-080-008	Lane Family Main Farm House and Cottage, 5050 Hollister Avenue, Goleta	-	Eastern Goleta Valley
-	081-130-056	Vista del Mar School, 16880 Highway 101, central part of the Goleta Valley north of Highway 101	AG-II	Gaviota Coast Plan
-	099-640-006	Rancho La Purisma / Pleasant Valley School House, 2085 Jonata Park Road, Buellton	AG-II	-
-	135-082-021	Berean Baptist Church Sunday School Building, 2293 Alamo Pintado Avenue, Los Olivos	-	Santa Ynez
-	135-091-002	Tunnell-Brown House, 2939 Grand Avenue, Los Olivos	-	Santa Ynez
-	135-091-003	D. D. Davis Store, 2935 Grand Avenue, Los Olivos	-	Santa Ynez
-	135-110-014	William and Lydia Davis House, 2625 Santa Barbara Avenue, Los Olivos	-	Santa Ynez
-	137-020-071	Foley Estates Vineyard and Winery, 1711 Alamo Pintado Road, Ballard	AG-I	Santa Ynez
-	081-200-027	El Rancho Taiguas (Main House), 1300 Calle Real, Gaviota	AG-II	Gaviota Coast
-	083-180-033	Walter and Evelyn's Central Avenue House, 8201 Santa Rosa Road, Buellton	AG-II	Santa Ynez
-	011-080-003	Stone Bridges of Riven Rock: Wisteria Bridge, 790 Riven Rock Road, Santa Barbara	-	Montecito

TABLE 3.5-4
SANTA BARBARA COUNTY PLACE OF HISTORIC MERIT RECORDED BUILT ENVIRONMENT RESOURCES

Resource ID #	Assessor Parcel Number	Resource Name or Address	Zone	Community Plan Area
-	011-080-003	Stone Bridges of Riven Rock: Ivy Bridge, 790 Riven Rock Road, Santa Barbara	-	Montecito
-	011-080-003	Stone Bridges of Riven Rock: Forgotten Bridge, 790 Riven Rock Road, Santa Barbara	-	Montecito

SOURCE: Santa Barbara County, List of Places of Historic Merit, January 2024

Built Environment Resource Databases (Built Environment Resource Directory, County Historic Resources Database, and Central Coast Information Center Historic Resources Data)

Additional built environment resource databases that identify the presence of previously recorded built environment resources beyond the sources listed above include the Built Environment Resource Directory (BERD), a historic resources database maintained by the County of Santa Barbara (County database), and additional built environment data from the Central Coast Information Center (CCIC). These data sources include both listed and potentially eligible historic resources, many of which are identified in the sections above. The databases are considered supplemental to the above-listed resource registers and databases and were not analyzed for the purposes of this report due to their duplicative nature and the inconsistencies with reviewing extensive data sets for this County-wide effort.

The BERD list for Santa Barbara County provides information regarding non-archaeological resources in the California Office of Historic Preservation's (OHP) inventory and includes only resources that have been processed through the office. This includes resources reviewed for eligibility to the NRHP and CHL programs through compliance laws, and resources nominated under federal and state registration programs. The list also includes properties that have been determined to not be eligible as historic resources. OHP records are considered not to be comprehensive for CEQA reviews since lead agencies may determine a resource eligible for the CRHR without consulting the OHP. As such, local governments with potential resource jurisdiction should be contacted to inquire about information related to such potential resources.

The historic resources County database includes Santa Barbara County Landmarks and potential historic resources. It was created using a variety of different sources, including "June's Hand Written [sic] List," the Santa Barbara Landmarks Commission, the Santa Ynez Historical Society, California Department of Parks and Recreation (DPR) 523 Series forms, historic structures reports, EIR documents, cultural resources studies, historic resource mitigation reports, historic resource evaluations, among others. Properties in the County database include those that are listed historic resources, considered eligible or potentially eligible historic resources, considered ineligible as historic resources, or have undetermined historic status (ESA 2025).

The CCIC, located in the Santa Barbara Museum of Natural History, houses the California Historical Resources Information System (CHRIS) records for Santa Barbara County. These records include information regarding new and known cultural resources within the state, and supply information on resources and surveys to entities requiring resource data, allowing access for designated approved CHRIS-users. ESA staff reviewed limited in-house cultural resource data from the CCIC on file at ESA, which includes both listed and potentially eligible historic resources within the Program area (ESA 2025).

There are 23 historic resources as part of the CCIC dataset, of which one resource is cross-listed in the NRHR and CRHP, and another is cross-listed in the Santa Barbara County Landmarks. Of the 23 resources, a total of 16 are located in unincorporated portions of the County. Additionally, of those 16 recorded at the CCIC are located in community plan areas: three in Gaviota Coast, two in Los Alamos, one in Santa Ynez, and one in Cuyama and New Cuyama.

Archaeological Resources

Geologic Map Review

The geology of the Project area is highly varied with approximately 52 percent of its footprint being presented on geologic maps by Dibblee and Minch (Dibblee and Minch, 2005); Dibblee and Ehrenspeck (Dibblee and Ehrenspeck, 1986, 1987, 1988, 1989, 1993, 1994); and Dibblee, Ehrenspeck, and Bartlett (Dibblee, Ehrenspeck, and Bartlett 1994) (see **Table 3.5-5**, *Sample of Geologic Units in Project Area*). The discussion below is based on review of the following maps: DF-04 -Carpinteria, DF-06 - Santa Barbara, DF-07 – Goleta, DF-09 - Dos Pueblos, DF-15 - Santa Ynez/Tajiguas, DF-16 - Solvang/Gaviota, DF-17 - Santa Rosa Hills/Sacate, DF-18 - Lompoc Hills/Point Conception, DF-20 - Lompoc/Surf, DF-24 - Casmalia/Orcutt, DF-25 - Point Sal/Guadalupe, DF-44 - Los Olivos, DF-46 - Los Alamos, DF-51 - Santa Maria/Twitchel, DF-52 - Tepusquet Canyon, DF-53 – Sisquoc, DF-176 – Cuyama, and DF-179 - New Cuyama (Dibblee and Minch, 2005; Dibblee and Ehrenspeck,1986, 1987, 1988, 1989, 1993, 1994; Dibblee, Ehrenspeck, and Bartlett, 1994).

The Project area is underlain by geologic units spanning the Mesozoic geologic epoch (252 Mya) to present and is inclusive of Late Pleistocene to Holocene formations which are themselves commonly associated with human occupation. Early geologic period formations predating human occupation were identified throughout the Project Area and include, but are not limited to the following listed in Table 3.5-5.

Geologic formations dating from the Late Pleistocene to Early Holocene present within the Project include Orcutt Sands (Qo; 2.6 Mya – 8 Kya) and Older (Quaternary) Alluvium (Qoa, Qos; 500 Kya – 12 Kya), while Holocene age Surficial Sediments (Qa, Qg, Qs; 1 Kya - present) and Landslide Deribs (Qls; 1 Kya – present). These Late Pleistocene and Holocene geologic map units are corollary to human occupation within the Project area and, accordingly, where present, constitute locales which are sensitive for buried archaeological deposits.

National Register of Historic Places

The National Park Service maintains the National Register of Historic Places, which is the official list of the Nation's historic properties worthy of preservation. ESA accessed the NRHP public online database on March 24, 2025, and reviewed its contents to identify archaeological resources that may be present within the Project area. As a result of this effort, unincorporated Santa Barbara County has 3 listed National Register properties. Of these resources, one is zoned as AG-II. Listed NRHP resources are included in the following identified community plan areas: two in Eastern Goleta Valley and one in Los Alamos. **Table 3.5-6**, *National Register of Historic Places Recorded Archaeological Resources,* includes the archaeological resources identified within unincorporated Santa Barbara County. Some archaeological resources identified as part of this review have also been identified as part of the historic resources review above in Tables 3.5-1 to 3.5-4. They are included here as resources, while predominantly belonging to the built environment, as they are likely to have an associated archaeological component that should be considered.

TABLE 3.5-5
SAMPLE OF GEOLOGIC UNITS IN PROJECT AREA

Geology Types	Formation/Unit Name	Geologic Period
db	Diabase	Triassic
fc	Franciscan Assemblage	Jurassic/Cretaceous
fg	Franciscan Assemblage	Jurassic/Cretaceous
fs	Franciscan Assemblage	Jurassic/Cretaceous
fss	Franciscan Assemblage	Jurassic/Cretaceous
gl	Franciscan Assemblage	Jurassic/Cretaceous
Ke	Espada Formation	Cretaceaous
Kja	Jalama Formation	Cretaceaous
Kjsh	Jalama Formation	Cretaceaous
Kjss	Jalama Formation	Cretaceaous
Kucg	Unnamed Marine Strata	Upper Cretaceous
Kush	Unnamed Marine Strata	Upper Cretaceous
Kuss	Unnamed Marine Strata	Upper Cretaceous
Qa	Surficial Sediments	Holocene
Qca	Casitas Formation	Early-Middle Pleistocene
Qg	Surficial Sediments	Holocene
Qls	Landslide Debris	Holocene
Qo	Orcutt Sand	Early holocene/late pliestocene
Qoa	older quaternary alluvium	Early holocene/late pliestocene
Qog	Older Dissected surficial sediments	Pleistocene
Qos	Older Alluvium	Early holocene/late pliestocene
Qs	Surficial Sediments	Holocene
Qsb	Santa Barbara Formation	Pleistocene
QTp	Paso Robles Foundation	Pliestocene and Latest Pliocene
QTps	Paso Robles Foundation	Pliestocene
sp	Serpentinite	Cretaceaous
Ta	Alegria Formation	Oligocene
Tan	Anita Shale and Sierra Blanca Limestone	Eocene
Tcac	Careaga Sandstone	Late Pliocene/Early Pleistocene
Tcag	Careaga Sandstone	Late Pliocene/Early Pleistocene
Tcd	Cozy Dell Shale	Late Eocene
Tcdss	Cozy Dell Shale	Late Eocene
Tcw	Coldwater Sandstone	Early Oligocene/Late Eocene
Tcwsh	Coldwater Formation, shale	Late Eocene
Tecg	Unnamed Marine Strata	Eocene
Tesh	Unnamed Marine Strata	Eocene
Tess	Unnamed Marine Strata	Eocene

TABLE 3.5-5
SAMPLE OF GEOLOGIC UNITS IN PROJECT AREA

Geology Types	Formation/Unit Name	Geologic Period
Tf	Foxen Claystone	Pliocene
Tg	Gaviota Formation	Oligocene
Tg-sa	Gaviota-Sacate Formation	Late Eocene or Early Miocene
Tgss	Gaviota Formation	Oligocene
Tjsh	Juncal Formation	Eocene
Tjss	Juncal Formation	Eocene
Tm	Monterey Shale	Miocene
Tma	Matilija Sandstone	Eocene
Tmash	Matilija Sandstone	Eocene
Tmdo	Monterey Shale	Miocene
Tml	Monterey Shale	Miocene
Tmo	Morales Formation	Pliocene
Tms	Monterey Formation	Miocene
Tmss	Unnamed Sandstone (Temblor)	Miocene
Tr	Rincon Shale	Late Oligocene/Early Miocene
Tsash	Sacate Formation	Oligocene/Eocene
Tsass	Sacate Formation	Oligocene/Eocene
Tsb	Sierra Blanca Limestone	Eocene
Tsbs	Sierra Blanca Limestone	Eocene
Tsd	Santa Margarita Formation	Miocene
Tsi	Simmler Formation	Oligocene
Tsm	Santa Margarita Formation	Miocene
Tsp	Sespe Formation	Oligocene
Tspcg	Sespe Formation	Oligocene
Tspss	Sespe Formation	Oligocene
Tsq	Sisquoc Formation	Late Miocene/Early Pliocene
Tsqd	Sisquoc Formation	Late Miocene/Early Pliocene
Tss	Unnamed Marine Strata	Paleocene-Eocene
Ttb	Tranquillon volcanic Formation	Miocene
Tvl	Vaqueros Formation	Miocene
Tvq	Vaqueros Sandstone	Late Oligocene/Early Miocene
Tvs	Vaqueros and Sespe Formation Sandstone	Miocene and Oligocene

NOTE:
* Geologic maps covering the remaining 48 percent of the Project area were unavailable at the time of this analysis and, consequently, are not included in the geologic map review sensitivity analysis.

SOURCE: ESA 2025; Dibblee and Minch, 2005; Dibblee and Ehrenspeck,1986, 1987, 1988, 1989, 1993, 1994; Dibblee, Ehrenspeck, and Bartlett, 1994

TABLE 3.5-6
NATIONAL REGISTER OF HISTORIC PLACES RECORDED ARCHAEOLOGICAL RESOURCES

Resource ID #	Resource Name or Address	Zone	Community Plan Area
NR #78000783 ‡*▲	Thomas Hope House	-	Eastern Goleta Valley
NR #70000148 ‡*▲	Los Alamos Ranch House	AG-II-100	Los Alamos
NR #72000256 ‡	Painted Cave	-	Eastern Goleta Valley

NOTES:
‡ = Cross-listed on the CRHR
† = Cross-listed on the NRHP
^ = Site Contains Human Remains
▲= Cross-Listed on Built-environment and Archaeological Resource Tables
* = Cross-listed with In-House CCIC Data

California Register of Historic Resources

The California Register of Historical Resources (CRHR) includes buildings, sites, structures, objects, and districts significant to the State of California. ESA accessed the CRHR public online database on March 24, 2025 and reviewed its contents to identify archaeological resources that may be present within the Project Area. A list of resources listed in the CRHR approved by the State Historical Resources Commission includes eleven listed archaeological resources or resources with archaeological components in Santa Barbara County. Of these resources, six are zoned as AG-II. Listed CRHR resources are included in the following identified community plan areas: three in Eastern Goleta Valley, one in Los Alamos, and one in the Gaviota Coast. **Table 3.5-7**, *California Register of Historic Resources Recorded Archaeological Resources*, includes the archaeological resources identified within Santa Barbara County. Some archaeological resources identified as part of this review have also been identified as part of the historic resources review above in Tables 3.5-1 to 3.5-4. They are included here as resources, while predominantly belonging to the built environment, as they are likely to have an associated archaeological component that should be considered.

TABLE 3.5-7
CALIFORNIA REGISTER OF HISTORIC RESOURCES RECORDED ARCHAEOLOGICAL RESOURCES

Resource ID #	Resource Name or Address	Zone	Community Plan Area
CR Landmark 877 and P6 ^▲	Sisquoc Church And San Ramon Chapel Cemetery	AG-II	-
CR Landmark 248 ▲	Gaviota Pass	-	Gaviota Coast
CR Landmark N714 †▲	Thomas Hope House	-	Eastern Goleta Valley
CR Landmark N55 †▲	Los Alamos Ranch House	AG-II-100	Los Alamos
CR Landmark N194†	Painted Cave	-	Eastern Goleta Valley
CR Landmark N2185	Point Sal Ataje	AG-II-100	-
CR Landmark N767 ▲	San Marcos Rancho	AG-II-40	Eastern Goleta Valley
CR Landmark N817	San Miguel Island Archeological District	-	-
CR Landmark N818	Santa Barbara Island Archeological District	-	-
CR Landmark N856	Santa Cruz Island Archeological District	AG-II	-
CR Landmark 582 ▲	Well, Hill 4	AG-II	-

NOTES:
‡ = Cross-listed on the CRHR
† = Cross-listed on the NRHP
^ = Site Contains Human Remains
▲= Cross-Listed on Built-environment and Archaeological Resource Tables
* = Cross-listed with In-House CCIC Data

Archival Research

Archival research for the Project was conducted by ESA staff reviewing limited in-house cultural resource data set for Santa Barbara County obtained from the CCIC and on file at ESA (ESA 2025). Research entailed the review of cultural resources investigation reports, Department of Parks and Recreation Series 523 forms prepared for previously recorded cultural resources (archaeological and built environment), and associated GIS shapefiles within or intersecting Santa Barbara County. Archival research resulted in the identification of 293 studies that have been previously conducted within unincorporated Santa Barbara County. The results of the records search indicate that a total of 107 archaeological resources are found within unincorporated Santa Barbara County. Additionally, 25 archaeological resources are in the Gaviota Coast community plan area, six are in the Santa Ynez plan area, and one is in the Los Alamos community plan area.

Of the 107 total archaeological resources identified in the in-house archival search, 78 resources are located on AG-II zoned land, 12 resources are located on AG-I zoned land, two resources are on portions of both AG-II and AG-I, and one is located on M-1 zoned land. The resources consist of 70 precontact sites and isolates, 22 historic-period sites, isolates, and districts, and 13 multi-component sites and isolates. **Table 3.5-8**, *In-house Archival Search – Previously Recorded Archaeological Resources*, lists these identified resources.

TABLE 3.5-8
IN-HOUSE ARCHIVAL SEARCH PREVIOUSLY RECORDED ARCHAEOLOGICAL RESOURCES

Resource ID #	Resource Name or Address	Zone	Community Plan Area
P-42-000086 ‡^	Habitation Site	-	Gaviota Coast
P-42-000087	Village of Qasil	AG-II-320	Gaviota Coast
P-42-000089 ‡^	Habitation Site	-	Gaviota Coast
P-42-000090	Camp Site	AG-II-100	Gaviota Coast
P-42-000108 ‡^	Pre-Contact Cemetery	-	Gaviota Coast
P-42-000221 ‡^	Habitation Site	AG-II-100	-
P-42-000236	Unknown Pre-Contact Site	AG-I-10/AG-II-100	-
P-42-001187 ‡^	Village of Sh'ahuchu	AG-II-100	-
P-42-001188	Lithic Scatter	AG-II-100	-
P-42-001189 ‡^	Portion of Village of Sh'ahuchu	AG-II-100	-
P-42-001431	Homestead Ruins and Pre-Contact Site	AG-II-100	Gaviota Coast
P-42-001456	Pedro Romero Adobe	AG-II-100	Gaviota Coast
P-42-001490	Habitation Site	AG-II-100	Gaviota Coast
P-42-001516	Habitation Site and Historic Ranch	AG-I-40	-
P-42-001517	Possible Camp Site	AG-I-40	-
P-42-001518	Possible Pre-Contact Midden	AG-I-40	-
P-42-001519	Pre-Contact Midden Site	AG-I-40	-
P-42-001520	Pre-Contact Lithic Quarry	AG-I-40	-
P-42-001521	Pre-Contact Midden and Historic Foundation	AG-I-40	-
P-42-001531	Lithic Scatter	AG-I-20	-

TABLE 3.5-8
IN-HOUSE ARCHIVAL SEARCH PREVIOUSLY RECORDED ARCHAEOLOGICAL RESOURCES

Resource ID #	Resource Name or Address	Zone	Community Plan Area
P-42-001563	Lithic Scatter and Historic Dump	AG-II-100	-
P-42-001625	Rock Shelter and Pictograph Site	AG-II-100	-
P-42-001789	Lithic Scatter	AG-II-100	-
P-42-001790	Lithic Scatter	AG-II-100	-
P-42-001791	Lithic Scatter	AG-II-100	-
P-42-001792	Lithic Scatter	AG-II-100	-
P-42-001805	Lithic Scatter	AG-II-100	-
P-42-001857	Lithic Scatter	AG-II-100	-
P-42-001858	Lithic Isolate	AG-II-100	-
P-42-001859	Lithic Isolate	AG-II-100	-
P-42-001967	Pre-Contact Artifact Scatter	AG-II-100	Gaviota Coast
P-42-001974	Lithic Scatter	AG-II-100	-
P-42-001975	Lithic Scatter	AG-II-100	-
P-42-001976	Lithic Scatter and Historic Dump	AG-II-100	-
P-42-001988	Multi-Component Artifact Scatter	AG-II-100	Gaviota Coast
P-42-001989	Pre-Contact Artifact Scatter	AG-II-100	-
P-42-002009	Food Processing Site	AG-II-100	Gaviota Coast
P-42-002010	Probable Pre-Contact Habitation Site and Historic Ranch	AG-II-100	Gaviota Coast
P-42-002011	Lithic Scatter	AG-II-320	Gaviota Coast
P-42-002055	Lithic Scatter	AG-I-40	-
P-42-002094	Lithic Scatter	AG-II-100	-
P-42-002355	Multi-Component Artifact Scatter and Possible Corral	M-1	-
P-42-002476	Multi-Component Artifact Scatter	AG-II-100	-
P-42-002602	Lithic Scatter	AG-I-20	Santa Ynez
P-42-002603	Lithic Scatter	AG-I-20	Santa Ynez
P-42-002637	Lithic Scatter and Pond	AG-II-100	-
P-42-002639	Lithic Scatter	AG-II-100	-
P-42-002687	Lithic Scatter	AG-II-100	-
P-42-002706	Civilian Conservation Corps Refuse Scatter	AG-II-100	-
P-42-002709	Lithic Scatter	AG-II-100	-
P-42-002715	Historic Refuse Scatter	AG-II-100/M-1	-
P-42-003500	Possible Lithic Scatter	-	Santa Ynez
P-42-003501	Historic Refuse Scatter	-	Santa Ynez
P-42-003502	Historic Refuse Scatter	AG-II-100	-
P-42-003605	Pre-Contact Artifact Scatter	AG-I-20	Santa Ynez
P-42-003620	Highway 101	AG-II-320	Gaviota Coast

TABLE 3.5-8
IN-HOUSE ARCHIVAL SEARCH PREVIOUSLY RECORDED ARCHAEOLOGICAL RESOURCES

Resource ID #	Resource Name or Address	Zone	Community Plan Area
P-42-003623	Highway 246	AG-II-40/AG-I-5	Gaviota Coast
P-42-003625 ^	Possible Pre-Contact Habitation Site	AG-II-100	-
P-42-003639	Historic Artifact Scatter and Culverts	-	Gaviota Coast
P-42-003679	Lithic Scatter	AG-II-100	-
P-42-003804	Anza Trail	AG-II-320	
P-42-003855	Oil Well Site	-	-
P-42-004005	Shell and Lithic Scatter	-	Los Alamos
P-42-004110	Lithic Scatter	-	Gaviota Coast
P-42-004122	Shell and Lithic Scatter	-	Gaviota Coast
P-42-004123	Multi-Component Artifact Scatter	-	Gaviota Coast
P-42-004147	Juan Flores Adobe; Goodchild Adobe	AG-II-100	-
P-42-004238	Historic Refuse Scatter	-	Gaviota Coast
P-42-004239	Historic Farming Equipment and Refuse	AG-II-100	Gaviota Coast
P-42-038021	Isolated Lithic	AG-II-100	-
P-42-038022	Isolated Flake	AG-II-40	-
P-42-038301	Isolated Groundstone	AG-II-320	Gaviota Coast
P-42-038334	Isolated Flake	AG-II-100	-
P-42-038356	Isolated Flake	AG-II-100	-
P-42-038467	Isolated Lithic	AG-II-100	-
P-42-038531	Isolated Lithics	AG-II-100	-
P-42-038532	Isolated Groundstone	AG-II-100	-
P-42-038533	Isolated Flake	AG-II-100	-
P-42-038534	Isolated Lithic	AG-II-100	-
P-42-038538	Isolated Bottle Base	AG-II-100	-
P-42-038539	Isolated Lithic	AG-II-100	-
P-42-038540	Isolated Groundstone	AG-II-100	-
P-42-038542	Isolated Flake	AG-II-100	-
P-42-038543	Isolated Flake	AG-II-100	-
P-42-038544	Isolated Bottle	AG-II-100	-
P-42-038545	Isolated Flake	AG-II-100	-
P-42-038546	Isolated Flake	AG-II-100	-
P-42-038547	Multi-Component Isolate	AG-II-100	-
P-42-038548	Isolated Bottle Neck	AG-II-100	-
P-42-038550	Isolated Flake	AG-II-100	-
P-42-038551	Multi-Component Isolate	AG-II-100	-
P-42-038552	Isolated Groundstone	AG-II-100	-

TABLE 3.5-8
IN-HOUSE ARCHIVAL SEARCH PREVIOUSLY RECORDED ARCHAEOLOGICAL RESOURCES

Resource ID #	Resource Name or Address	Zone	Community Plan Area
P-42-038669	Isolated Flake	AG-II-100	-
P-42-039000	Isolated Flakes	AG-II-100	-
P-42-039006	Pre-Contact Habitation Site	AG-II-320	Gaviota Coast
P-42-039007	Pre-Contact Habitation Site	AG-II-320	Gaviota Coast
P-42-039743	Isolated Flakes	AG-II-100	Gaviota Coast
P-42-039750	Spaulding Cable Wheel	AG-II-100	-
P-42-040678	Corduroy Road (destroyed)	AG-II-100	-
P-42-040715	Historic Residence Ruins	AG-II-100	-
P-42-040716	Historic Residence Ruins	AG-II-100	-
P-42-040723	Isolated Historic Farm Machinery	AG-II-100	-
P-42-040729^	Town of Guadalupe	AG-II-40	-
P-42-040751	Cota Adobe	AG-II-100	-
P-42-040750	Historic Structure Foundation	AG-II-100	Cuyama Valley
P-42-041098	Multi-Component Artifact Scatter	AG-I-10	-
P-42-041199	Tajiguas Creek Dam Features	AG-II-100	Gaviota Coast

NOTES:
‡ = Cross-listed on the CRHR * = Cross-listed with In-House CCIC Data
† = Cross-listed on the NRHP ^ = Site Contains Human Remains

The precontact sites include the following: P-42-000087 (village site known as *Qasil,* recommended eligible for the National Register); P-42-000108 (a charcoal midden with a sparse flake scatter, eligibility unknown); P-42-000236 (site without description but presumed to be buried under roadway fill, unknown eligibility); P-42-001189 (midden site with lithic scatter, human bone fragments, faunal remains and historic pottery; recommended as potentially eligible for the National Register); P-42-001490 (described as containing manos, metates, flakes, and projectile points; eligibility unknown); P-42-002687 (lithic scatter, ineligible for the National Register); and P-42-003500 (originally described as flaked stone artifacts with faunal bone, but later revisited and described as not an archaeological due to absence of artifacts, eligibility unknown). The historic period site includes P-42-001431, a stone foundation and olive orchard with unknown eligibility. The multicomponent resources include P-42-001976 (scatter of fired clay tiles, glass, bone and chert flakes; eligibility unknown) and P-42-003625 (Monterey and Franciscan chert flakes and human burials, eligibility unknown). The historic districts include the Anza Trail. The Anza Trail was originally developed and used by the Chumash and later by Spanish explorers.

Archaeological Sensitivity Assessment

Archaeological sensitivity for the Project was based on a variety of factors in the bulleted list below as originally presented in Ehringer et al. 2018. Taking into account these factors, along with desktop review results for the aforementioned data sources, the Project area was assessed as having a high sensitivity for subsurface archaeological deposits.

- Number of known prehistoric archaeological resources within a 0.5-mile radius – Project areas where a large number of prehistoric resources have been documented within a 0.5-mile radius are considered more sensitive. Project areas where very few prehistoric resources have been documented within a 0.5-mile radius are considered less sensitive (assuming surveys have been conducted in the vicinity).
- Age/type of landform – Holocene-aged alluvium (<10,000 years ago) is generally more likely to contain subsurface evidence of previous human occupation. Pleistocene alluvium (10,000 years ago to 2.5 Mya) may contain subsurface evidence of human occupation dating the Late Pleistocene peopling of North American, but these deposits are sparser. Other landforms that pre-date human occupation of North America may contain surface evidence of human occupation (e.g., mortars/slicks on bedrock outcroppings, rock art), but are less likely to contain subsurface deposits. Based on the results of the paleontological resources assessment (provided below), archaeological sensitivity within Holocene-aged alluvium decreases at depths of 3 feet (the depth at which paleontological discoveries have been recovered from similar sediments in the Project vicinity), and while archaeological and paleontological resources can both be recovered from sediments dating to the Late Pleistocene and Middle Holocene, archaeological resources are less commonly associated with these sediments given the that human habitation of California was sparser during these time periods.
- Previous land uses – areas that have never been developed are considered more sensitive for prehistoric archaeological resources. In addition, previous land uses may be indicative of the likelihood for historic-period archaeological resources.
- Proximity of water sources and degree of slope – Meyer et al. (2010:141-151) have previously demonstrated elsewhere in California that the presence of buried archaeological sites is positively correlated with proximity to water as well as gently sloped landforms.
- Degree of surface visibility during survey – visible evidence of archaeological resources would be present in areas where surface deposits are more likely based on age/type of landform.
- Level of previous ground disturbance – areas that have been subject to higher levels of previously ground disturbance are considered less sensitive for archaeological resources, unless depth of proposed ground disturbance would exceed the depth of previous disturbance.
- Level of proposed ground disturbance – typically projects that require little or shallow ground disturbance are considered less likely to encounter subsurface resources, particularly in areas where there was good ground surface visibility during the survey.
- Input received from Consulting Tribes.

Identification of Tribal Cultural Resources

Preparation of the program-level study involved a California Native American Heritage Commission Sacred Lands Files Search, Native American Consultation, and a desktop review of readily available literature and in-house records to identify previously recorded archaeological resources that have the potential to be considered Tribal Cultural Resources pursuant to CEQA within and immediately surrounding the Project Area.

Sacred Lands Files Search

The NAHC maintains a confidential Sacred Lands File (SLF), which contains sites of traditional, cultural, or religious value to Native American communities. The NAHC was contacted on February 19, 2025, to request a search of the SLF for the Project. The NAHC responded to the request in a letter dated February 20, 2025. The letter indicated that the search of the SLF yielded positive results. The letter also

recommended that the following representatives from the Barbareño Band of Chumash Indians, the Barbareño/Ventureño Band of Mission Indians, the Chumash Council of Bakersfield, Coastal Band of the Chumash Nation, the Northern Chumash Tribal Council, and the Santa Ynez Band of Chumash Indians be consulted for additional information they may have regarding the presence of tribal cultural resources within the Project area:

- Barbara Lopez, Cultural Resource Chair, Barbareño Band of Chumash Indians
- Eleanor Fishburn, Chairperson, Barbareño Band of Chumash Indians
- Cultural Resource Committee, Barbareño/Ventureño Band of Mission Indians
- Julio Quair, Chairperson, Chumash Council of Bakersfield
- Gabe Frausto, Chairman, Coastal Band of the Chumash Nation
- Violet Walker, Chairperson, Northern Chumash Tribal Council
- Wendy Teeter, Cultural Resources Archaeologist, Santa Ynez Band of Chumash Indians
- Sam Cohen, Government & Legal Affairs Director, Santa Ynez Band of Chumash Indians
- Crystal Mendoza, Elders' Council Administrative Assistant, Santa Ynez Band of Chumash Indians
- Nakia Zavalla, Tribal Historic Preservation Officer, Santa Ynez Band of Chumash Indians

Native American Consultation

AB 52

On December 20, 2024, the County of Santa Barbara mailed letters to four representatives from the Barbareño/Ventureño Band of Mission Indians, the Coastal Band of the Chumash Nation, and the Santa Ynez Band of Chumash Indians inviting them to consult on the proposed project pursuant to AB 52. In particular, AB 52 letters were sent via certified mail with return receipt requested to the following four California Native American tribes and individuals:

- Julie Tumamait-Stenslie, Chair, Barbareño/Ventureño Band of Mission Indians
- Gabriel Frausto, Chairman, Coastal Band of the Chumash Nation
- Matthew Vestuto, Chair, Barbareño/Ventureño Band of Mission Indians
- Kenneth Kahn, Tribal Chairman, Santa Ynez Band of Chumash Indians

Copies of the County's AB 52 request to consult letters sent to the Tribal contacts above are provided in Appendix D of this Draft PEIR. None of the Tribal contacts responded to the County's request to consult under AB 52.

SB 18

On December 20, 2024, the County of Santa Barbara mailed letters to thirteen representatives from the Barbareño Band of Chumash Indians, the Barbareño/Ventureño Band of Mission Indians, the Chumash Council of Bakersfield, Coastal Band of the Chumash Nation, the Northern Chumash Tribal Council, yak tityu tityu yak tiłhini – Northern Chumash Tribe, the Xolon-Salinan Tribe, and the Santa Ynez Band of Chumash Indians inviting them to consult on the Project pursuant to SB 18. In particular, SB 18 letters were sent via electronic mail to the following thirteen California Native American tribes and individuals:

- Crystal Mendoza, Elders' Council Administrative Assistant, Santa Ynez Band of Chumash Indians
- Julio Quair, Chairperson, Chumash Council of Bakersfield
- Wendy Teeter, Cultural Resources Archaeologist, Santa Ynez Band of Chumash Indians
- Cultural Resource Committee, Barbareño/Ventureño Band of Mission Indians
- Eleanor Fishburn, Chairperson, Barbareño Band of Chumash Indians
- Penny Hurt, Cultural Preservation Administrator, Xolon-Salinan Tribe
- Karen White, Chairperson, Xolon-Salinan Tribe
- Gabe Frausto, Chairman, Coastal Band of the Chumash Nation
- Sam Cohen, Government & Legal Affairs Director, Santa Ynez Band of Chumash Indians
- Nakia Zavalla, Tribal Historic Preservation Officer, Santa Ynez Band of Chumash Indians
- Violet Walker, Chairperson, Northern Chumash Tribal Council
- Barbara Lopez, Cultural Resource Chair, Barbareño Band of Chumash Indians
- Mona Tucker, Chairperson, yak tityu tityu yak tiłhini – Northern Chumash Tribe

Copies of the County's SB 18 request to consult letters sent to the Tribal contacts above are provided in Appendix D of this Draft PEIR. None of the Tribal contacts responded to the County's request to consult under SB 18.

3.5.4 Regulatory Framework

This section includes a discussion of the applicable laws, ordinances, regulations, and standards governing cultural resources.

Federal

National Register of Historic Places

The National Register of Historic Places (NRHP) was established by the National Historic Preservation Act of 1966 as "an authoritative guide to be used by Federal, state, and local governments, private groups and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment" (36 Code of Federal Regulations 60.2). The NRHP recognizes properties that are significant at the national, state, and local levels. To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must also possess integrity of location, design, setting, materials, workmanship, feeling, and association. A property is eligible for the NRHP if it meets any one of the following criteria:

> **Criterion A:** Are associated with events that have made a significant contribution to the broad patterns of our history
>
> **Criterion B:** Are associated with the lives of persons significant in our past
>
> **Criterion C:** Embody the distinctive characteristics of a type, period, or method of installation, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction

Criterion D: Have yielded, or may be likely to yield, information important in prehistory or history

In addition to meeting at least one of the above designation criteria, resources must also retain integrity. The National Park Service recognizes seven aspects or qualities that, considered together, define historic integrity. To retain integrity, a property must possess several, if not all, of these seven qualities, defined in the following manner:

Location: The place where the historic property was constructed or the place where the historic event occurred

Design: The combination of elements that create the form, plan, space, structure, and style of a property

Setting: The physical environment of a historic property

Materials: Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property

Workmanship: The physical evidence of the crafts of a particular culture or people during any given period in history or prehistory

Feeling: A property's expression of the aesthetic or historic sense of a particular period of time

Association: The direct link between an important historic event or person and a historic property

State

California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires that a lead agency determine whether a project could have a significant effect on historical resources and tribal cultural resources (Public Resources Code [PRC] Section 21074 [a][1][A]-[B]). A historical resource is a resource listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR) (Section 21084.1), a resource included in a local register of historical resources (Section 15064.5[a][2]), or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (Section 15064.5[a][3]).

PRC Section 5024.1 requires an evaluation of historical resources to determine their eligibility for listing in the CRHR. The purpose of the register is to maintain listings of the state's historical resources and to indicate which properties are to be protected from substantial adverse change. The criteria for listing resources in the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP, as enumerated according to CEQA and quoted below.

> **15064.5(a)(3)** […] Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (PRC, § 5024.1, Title 14 California Code of Regulations, Section 4852) including the following:
>
> 1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage
> 2) Is associated with the lives of persons important in our past

3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values

4) Has yielded, or may be likely to yield, information important in prehistory or history

15064.5(a)(4) The fact that a resource is not listed in or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the PRC), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the PRC) does not preclude a lead agency from determining that the resource may be an historical resource as defined in PRC sections 5020.1(j) or 5024.1.

15064.5(b) A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

In addition, if a project can be demonstrated to cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC, Section 21083.2[a], [b], and [c]).

PRC Section 21083.2(g) defines a unique archaeological resource as an artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it does one or more of the following:

a. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information

b. Has a special and particular quality such as being the oldest of its type or the best available example of its type

c. Is directly associated with a scientifically recognized important prehistoric or historic event or person

Impacts to significant cultural resources that affect the characteristics of any resource that qualify it for the NRHP or adversely alter the significance of a resource listed in or eligible for listing in the CRHR are considered a significant effect on the environment. These impacts could result from physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired (State CEQA Guidelines Section 15064.5 [b][1]). Material impairment is defined as demolition or alteration in an adverse manner [of] those characteristics of an historical resource that convey its historical significance and that justify its inclusion or eligibility for inclusion in the CRHR (State CEQA Guidelines Section 15064.5[b][2][A]).

Codes Governing Human Remains

The disposition of human remains is governed by Health and Safety Code Section 7050.5 and PRC Sections 5097.94 and 5097.98 and falls within the jurisdiction of the NAHC. If human remains are discovered, the County Coroner must be notified within 48 hours and there should be no further disturbance to the site where the remains were found. If the remains are determined by the coroner to be Native American, the coroner is responsible for contacting the NAHC within 24 hours. The NAHC, pursuant to PRC Section 5097.98, will immediately notify those persons it believes to be most likely descended from the deceased Native Americans so they can inspect the burial site and make recommendations for treatment or disposal.

The State CEQA Guidelines (Title 14, Chapter 3 of the California Code of Regulations, Section 15000 *et seq*.), define the procedures, types of activities, individuals, and public agencies required to comply with CEQA. As part of CEQA the lead agency must determine whether the proposed project directly or indirectly would destroy a unique paleontological resource or site or unique geologic feature (State CEQA Guidelines, Appendix G, Section VII, Part f).

Codes Governing Paleontological Resources

The loss of a significant paleontological resources, which includes any identifiable fossil that is unique, unusual, rare, uncommon, diagnostically or stratigraphically important, and/or those that add to an existing body of knowledge in specific areas – stratigraphically, taxonomically, and/or regionally, would be a significant environmental impact. Direct impacts to paleontological resources primarily concern the potential destruction of nonrenewable paleontological resources and the loss of information associated with these resources. This includes the unauthorized collection of fossil remains. If potentially fossiliferous bedrock or surficial sediments are disturbed, the disturbance could result in the destruction of paleontological resources and subsequent loss of information.

The CEQA threshold of significance for a significant impact to paleontological resources is reached when a project is determined to "directly or indirectly destroy a significant paleontological resource or unique geologic feature" (State CEQA Guidelines Appendix G, Section VII, Part f). In general, for project sites that are underlain by paleontologically sensitive geologic units, the greater the amount of ground disturbance, the higher the potential for significant impacts to paleontological resources.

Public Resources Code Section 5097.5 and Section 30244

Other state requirements for paleontological resource management are included in PRC Section 5097.5 and Section 30244. These statutes prohibit the removal of any paleontological site or feature from public lands without permission of the jurisdictional agency, define the removal of paleontological sites or features as a misdemeanor, and require reasonable mitigation of adverse impacts to paleontological resources from developments on public (state, county, city, district) lands.

Native American Heritage Commission

Public Resources Code (PRC) Section 5097.91 established the Native American Heritage Commission (NAHC), the duties of which include inventorying places of religious or social significance to Native Americans and identifying known graves and cemeteries of Native Americans on private lands. PRC Section 5097.98 specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a county coroner.

Assembly Bill 52

AB 52, which went into effect July 1, 2015, expanded CEQA by defining a new resource category, "tribal cultural resources." AB 52 establishes that "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (Public Resources Code [PRC] Section 21084.2). AB 52 further states when feasible, the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource (PRC Section 21084.3). PRC Section 21074 (a)(1)(A) and (B) defines tribal

cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe," and meets either of the following criteria:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k).

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

In recognition of California Native American tribal sovereignty and the unique relationship of California local governments and public agencies with California Native American tribal governments and with respect to the interests and roles of project proponents, it is the intent AB 52 to accomplish all of the following:

1. Recognize that California Native American prehistoric, historic, archaeological, cultural, and sacred places are essential elements in tribal cultural traditions, heritages, and identities.
2. Establish a new category of resources in CEQA called "tribal cultural resources" that considers the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigation.
3. Establish examples of mitigation measures for tribal cultural resources that uphold the existing mitigation preference for historical and archaeological resources of preservation in place, if feasible.
4. Recognize that California Native American tribes may have expertise with regard to their tribal history and practices, which concern the tribal cultural resources with which they are traditionally and culturally affiliated (because CEQA calls for a sufficient degree of analysis, tribal knowledge about the land and tribal cultural resources at issue should be included in environmental assessments for projects that may have a significant impact on those resources).
5. In recognition of their governmental status, establish a meaningful consultation process between California Native American tribal governments and lead agencies, respecting the interests and roles of all California Native American tribes and project proponents, and the level of required confidentiality concerning tribal cultural resources, early in the CEQA environmental review process, so that tribal cultural resources can be identified, and culturally appropriate mitigation and mitigation monitoring programs can be considered by the decision-making body of the lead agency.
6. Recognize the unique history of California Native American tribes and uphold existing rights of all California Native American tribes to participate in, and contribute their knowledge to, the environmental review process pursuant to CEQA.
7. Ensure that local and tribal governments, public agencies, and project proponents have information available, early in CEQA environmental review process, for purposes of identifying and addressing potential adverse impacts to tribal cultural resources and to reduce the potential for delay and conflicts in the environmental review process.
8. Enable California Native American tribes to manage and accept conveyances of, and act as caretakers of, tribal cultural resources.
9. Establish that a substantial adverse change to a tribal cultural resource has a significant effect on the environment.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified or adopted. AB 52 requires that lead agencies "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed in the jurisdiction of the lead agency.

Senate Bill 18

Senate Bill 18 (SB 18) (Statutes of 2004, Chapter 905), which went into effect January 1, 2005, requires local governments (city and county) to consult with Native American tribes before making certain planning decisions and to provide notice to tribes at certain key points in the planning process. The intent is to "provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places" [Governor's Office of Land Use and Climate Innovation (formerly the Governor's Office of Planning and Research), 2005].

The purpose of involving tribes at these early planning stages is to allow consideration of cultural places in the context of broad local land use policy, before individual site-specific, project-level, land use designations are made by a local government. The consultation requirements of SB 18 apply to general plan or specific plan processes proposed on or after March 1, 2005.

According to the *Tribal Consultation Guidelines: Supplement to General Plan Guidelines* (Governor's Office of Planning and Research, 2005), the following are the contact and notification responsibilities of local governments:

- Prior to the adoption or any amendment of a general plan or specific plan, a local government must notify the appropriate tribes (on the contact list maintained by the NAHC) of the opportunity to conduct consultations for the purpose of preserving, or mitigating impacts to, cultural places located on land within the local government's jurisdiction that is affected by the proposed plan adoption or amendment. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code Section 65352.3).
- Prior to the adoption or substantial amendment of a general plan or specific plan, a local government must refer the proposed action to those tribes that are on the NAHC contact list and have traditional lands located within the city or county's jurisdiction. The referral must allow a 45-day comment period (Government Code Section 65352). Notice must be sent regardless of whether prior consultation has taken place. Such notice does not initiate a new consultation process.
- Local government must send a notice of a public hearing, at least 10 days prior to the hearing, to tribes who have filed a written request for such notice (Government Code Section 65092).

Paleontological Resources Significance Criteria

The Society of Vertebrate Paleontology (SVP) Guidelines (SVP 2010) outline professional protocols and practices for conducting paleontological resource assessments and surveys, monitoring and mitigation, data and fossil recovery, sampling procedures, specimen preparation, identification, analysis, and curation. Most practicing professional vertebrate paleontologists adhere closely to the SVP's assessment, mitigation, and monitoring requirements as specifically provided in its standard guidelines. Most state

regulatory agencies with paleontological resource-specific Laws, Ordinances, Regulations, and Standards (LORS) accept and use the professional standards set forth by the SVP (2010) in order to meet impact levels as required by CEQA.

As defined by the SVP (2010:11), significant nonrenewable paleontological resources are:

> *Fossils and fossiliferous deposits, here defined as consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are considered to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years).*

Numerous paleontological studies have further developed criteria for the assessment of significance for fossil discoveries (e.g., Eisenstraut and Cooper 2002; Murphey and Daitch 2007; Scott and Springer 2003, etc.). In general, these studies assess fossils as significant if one or more of the following criteria apply:

1. The fossils provide information on the evolutionary relationships and developmental trends among organisms, living or extinct;
2. The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein;
3. The fossils provide data regarding the development of biological communities or interaction between paleobotanical and paleozoological biotas;
4. The fossils demonstrate unusual or spectacular circumstances in the history of life; or
5. The fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.

In summary, significant paleontological resources are determined to be fossils or assemblages of fossils that are unique, unusual, rare, uncommon, or diagnostically important (Eisenstraut and Cooper 2002; Murphey and Daitch 2007; Scott and Springer 2003). Significant fossils can include remains of large to very small aquatic and terrestrial vertebrates or remains of plants and animals previously not represented in certain portions of the stratigraphy. Assemblages of fossils that might aid stratigraphic correlation, particularly those offering data for the interpretation of tectonic events, geomorphologic evolution, and paleoclimatology are also critically important (Scott and Springer 2003; Scott et al. 2004).

Paleontological Potential

Paleontological potential is defined as the potential for a geologic unit to produce scientifically significant fossils. This is determined by rock type, the past history of the geologic unit in producing significant fossils, and the fossil localities recorded from that unit. Paleontological potential is derived from the known fossil data collected from the entire geologic unit and not just from one specific survey. In its "Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources," the SVP (2010) defines four categories of paleontological sensitivity (potential) for rock units: high, low, undetermined, and no potential.

- **High Potential.** Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered are considered to have a high potential for containing additional significant

paleontological resources. Rocks units classified as having high potential for producing paleontological resources include, but are not limited to, sedimentary formations and some volcaniclastic formations (e. g., ashes or tephras), and some low-grade metamorphic rocks which contain significant paleontological resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils (e. g., middle Holocene and older, fine-grained fluvial sandstones, argillaceous and carbonate-rich paleosols, cross-bedded point bar sandstones, fine-grained marine sandstones, etc.).

- **Low Potential.** Reports in the paleontological literature or field surveys by a qualified professional paleontologist may allow determination that some rock units have low potential for yielding significant fossils. Such rock units will be poorly represented by fossil specimens in institutional collections, or based on general scientific consensus only preserve fossils in rare circumstances and the presence of fossils is the exception not the rule, e. g. basalt flows or Recent colluvium. Rock units with low potential typically will not require impact mitigation measures to protect fossils.
- **Undetermined Potential.** Rock units for which little information is available concerning their paleontological content, geologic age, and depositional environment are considered to have undetermined potential. Further study is necessary to determine if these rock units have high or low potential to contain significant paleontological resources. A field survey by a qualified professional paleontologist to specifically determine the paleontological resource potential of these rock units is required before a paleontological resource impact mitigation program can be developed. In cases where no subsurface data are available, paleontological potential can sometimes be determined by strategically located excavations into subsurface stratigraphy.
- **No Potential.** Some rock units have no potential to contain significant paleontological resources, for instance high-grade metamorphic rocks (such as gneisses and schists) and plutonic igneous rocks (such as granites and diorites). Rock units with no potential require no protection nor impact mitigation measures relative to paleontological resources. [SVP 2010; 1-2].

For geologic units with high potential, full-time monitoring is generally recommended during any project-related ground disturbance. For geologic units with low potential, monitoring will not generally be required. For geologic units with undetermined potential, field surveys by a qualified vertebrate paleontologist should be conducted to specifically determine the paleontological potential of the rock units present within the study area.

Local

County of Santa Barbara Comprehensive Plan Conservation Element

The County of Santa Barbara Comprehensive Plan Conservation Element, adopted in 1979 and amended in 2010, includes recommendations for ways in which archaeological sites may be incorporated into projects (County of Santa Barbara 2010). They are:

- Archaeological sites may be incorporated into parks or landscaped area in such a way that no damage will be done to the archaeological materials.
- Areas with archaeological sites may also be designated as limited use areas where they can be protected from vandalism. For either of these first two alternatives, a preliminary survey and surface collection by a competent archaeologist must be carried out prior to any action. Buffer zones adjacent to these sites may be necessary, but the extent of such a zone must be determined for each site.

- Outdoor museums are a feasible alternative to destruction when the nature of the archaeological remains is such that their careful excavation and preservation by professionals would prove attractive to the public. This alternative would be of value to the public relations of many private firms and would serve to increase the awareness of the County's prehistory among both residents and tourists. A museum of this sort might consist of a simple tin roof and fence protecting ongoing or completed excavations and appropriate displays of artifacts. Painted Cave is an example of how this approach has been implemented in Santa Barbara County.
- One method of preserving sites for future archaeological investigation is through the use of extensive land fill. If sites scheduled for possibly damaging use could be covered with sufficient clean fill to avoid damage, such sites would be preserved.
- Salvage excavation is a last resort in the "preservation" of archaeological information. Such short notice excavations destroy relevant information which might be more effectively excavated with future improved archaeological methods and techniques. In salvage archaeology, it frequently is impossible to generate an adequate research design before excavation is commenced. Considering these factors, the loss of valuable information is inevitable. In addition, salvage operations are expensive undertakings. Consequently, every effort should be made to preserve, rather than excavate, endangered archaeological sites.

Other recommended approaches from the County of Santa Barbara Comprehensive Plan Conservation Element include:

- Public purchase and protection of representative sites from each topographic class (King, Moratto, and Leonard n.d.).
- Granting of tax relief to private owners protecting archaeological resources (King, Moratto, and Leonard n.d.). Protection should include no alteration of the ground surface of any archaeological site, and no surface or subsurface collecting by private owners or the public. If this approach is implemented, specific guidelines for private protection of sites can be obtained from archaeologists at the University of California, Santa Barbara.
- Action by the County to preserve and protect known historic cemetery sites (less than 200 years old). Such a policy has been legislated by the State, but initiative taken by County officials would ensure enforcement of the law.
- Designation of high-density archaeological resource areas as Historical Monuments. Applications for placing such areas on the National Register of Historic Places presently are pending in Santa Barbara County.
- Development of public education programs which would include general information on the prehistory of Santa Barbara County, with emphasis on the importance of archaeological sites as a database for further understanding of the aboriginal inhabitants. Such a program might decrease the rate at which archaeological resources are destroyed by vandalism.

Santa Barbara County Zoning Ordinances

The County's zoning ordinances implement the Comprehensive Plan. Section 35.60.040 (Archaeological Resources) of the Land Use and Development Code (LUDC) and Section 35.450.030 of the Montecito LUDC (MLUDC), contain the following requirements:

A. Development proposed on a lot where archaeological or other cultural sites are located shall be designed to avoid impacts to the cultural sites if possible.

B. When sufficient planning flexibility does not permit avoiding construction on an archaeological or other cultural site, adequate mitigation shall be required. Mitigation shall be designed in compliance with the guidelines of the State Office of Historic Preservation and the State of California Native American Heritage Commission.

C. Native Americans shall be consulted when development proposals are submitted that impact significant archaeological or cultural sites.

D. All available measures, including purchase of the site, tax relief, purchase of development rights, etc., shall be explored to avoid development on significant historic, prehistoric, archaeological and other classes of cultural sites.

Section 35-65 (Archaeology) of the Article II Coastal Zoning Ordinance requires:

1. When developments are proposed for lots where archaeological or other cultural sites are located, project design shall be required which avoids impacts to such cultural sites if possible.
2. When sufficient planning flexibility does not permit avoiding construction on archaeological or other types of cultural sites, adequate mitigation shall be required. Mitigation shall be designed in accord with guidelines of the State Office of Historic Preservation and the State of California Native American Heritage Commission.
3. Native Americans shall be consulted when development proposals are submitted which impact significant archaeological or cultural sites.

Gaviota Coast Plan

The Gaviota Coast Plan designates and regulates land uses in the Gaviota Coast Plan area which is approximately 158 square miles located in southern Santa Barbara County and bounded by the Goleta Community Plan, Vandenberg Space Force Base, the Santa Ynez Mountain ridgeline, the Gaviota Creek watershed, and the Pacific Ocean to the south. The plan was adopted in 2016 by the County and later approved by the California Coastal Commission in 2018.

The Gaviota Coast Plan contains the following policies, actions, and development standards relevant to cultural resources (i.e., archaeological, Tribal, and historic) as well as actions addressing renewable energy generation, including solar:

a. Cultural Resources Stewardship Policies

Policy CS-1*: *Cultural Resources Preservation & Protection. Preserve and protect significant cultural, archaeological, and historical resources to the maximum extent feasible.

Policy CS-2*: *Properties of Concern. Significant cultural resources including historic structures, Rural Historic Landscapes, archaeological sites, Traditional Cultural Properties, and Tribal Cultural Resources shall be protected and preserved to the maximum extent feasible.

Policy CS-3*: *Cultural Resources Education. The County shall encourage and support measures to educate residents and visitors about the Gaviota Coast's cultural resources.

b. Cultural Resources Stewardship Implementing Actions

Action CS-1*: *Landmarking Buildings, Structures & Places. The County and the community should continue to work with willing landowners to identify buildings, structures, and places, including Rural Historic Landscapes, Traditional Cultural Properties, and Tribal Cultural

Resources that qualify for listing as a County Landmark or Place of Historical Merit and forward these nominations to the County Historic Landmarks Advisory Commission (HLAC).

Action CS-2*: *New Development and Rehabilitation Projects. Development resulting in increased building size or demolition of buildings/structures included in a list of historic resources, or buildings and structures over 50 years of age and evaluated as significant at the local, state, or national level, shall be reviewed by Planning & Development for consistency with historic resource preservation policies.

Action CS-3*: *Community Cultural Center. The County and Gaviota Coast residents shall investigate, consider and pursue options to develop a community cultural center and/or other community cultural research and education opportunities including Native American culture.

Action CS-4*: *Native American Consultation. The County shall continue its consultations with the tribes identified by the Native American Heritage Commission (NAHC) pursuant to Assembly Bill 52 and Senate Bill 18 to ensure that cultural resources of concern to Native Americans are identified and taken into account in future development planning.

Action CS-5*: *Confidential Site Locations. The County shall maintain as confidential information about the location of prehistoric cultural resources, including Traditional Cultural Properties and Tribal Cultural Resources.

Action CS-6*: *Tribal Access. The County, Native American representatives and willing landowners should work together to ensure appropriate tribal access to Traditional Cultural Properties and Tribal Cultural Resources, while still respecting the rights and privileges of property owners.

c. Cultural Resources Stewardship Development Standards

***Dev Std CS-1*: *Phase 1 Archaeological Surveys*.** A Phase 1 archaeological survey shall be performed when identified as necessary by a County archaeologist or contract archaeologist. The survey shall include all areas of the project that would result in ground disturbance. The content, format, and length of the Phase 1 survey report shall be consistent with the nature and size of the project and findings of the survey.

***Dev Std CS-2*: *Phase 2 and 3 Archaeological Studies*.** If archaeological remains are identified and cannot be avoided through project redesign, the proponent shall fund a Phase 2 study to determine the significance of the resource prior to issuance of any permit for development. All feasible mitigation recommendations resulting from the Phase 1 or Phase 2 work, including completion of additional archaeological analysis (Phase 3) and/or project redesign shall be incorporated into any permit issued for development.

***Dev Std CS-3*: *Identification of Traditional Cultural, Historical, and Spiritual Sites*.** Native Americans shall be consulted when development proposals are submitted that impact significant archaeological or cultural sites. Cultural sites may include Traditional Cultural Properties and Tribal Cultural Resources, as identified through consultation with Native Americans.

***Dev Std CS-4*: *Native American Contact List*.** When existing documentation or a Phase 1 survey indicates that significant prehistoric cultural resources may be affected by a proposed project, the County shall obtain a Native American Contact List from the NAHC and consult with Native Americans in accordance with Assembly Bill 52 during each stage of cultural resources review.

***Dev Std CS-5: Integrity of Historic Resources*.** No permits shall be issued for any development or activity that would adversely affect the integrity of officially designated County Landmarks

and Places of Historical Merit or those eligible for such designation, historical resources eligible for the California Register of Historical Resources, or identified historical resources unless a professional evaluation of the proposed project has been performed by a qualified Architectural Historian pursuant to the County's most current Regulations Governing Archaeological and Historical Projects. All such professional studies shall be reviewed and approved by the HLAC and Planning and Development and all feasible mitigation measures shall be incorporated into any permit issued for development.

Dev Std CS-6*: *Historical Resources Studies. A Phase 1, and if required Phase 2, historical resources investigation and report shall be completed when identified as necessary by the Director of Planning and Development. The investigation shall include areas of the project that could result in direct or indirect impacts to historic-age buildings, structures, rural historic landscapes, or districts or that could change the integrity of the setting and context for such resources on adjacent parcels. The content, format, and length of the Phase 1, and if required Phase 2, historic report shall be consistent with the nature and size of the project and findings of the investigation. The investigation shall be performed by a qualified Architectural Historian pursuant to the County's most current regulations governing archaeological and historical projects. All such professional studies shall be reviewed by the HLAC and approved by the Planning and Development. All feasible recommendations resulting from the Phase 1, and if required Phase 2, shall be incorporated into any permit approved for development.

County Landmarks and Places of Historic Merit Lists

In addition to the CRHR, a resource listed in or eligible for listing in a local register also qualifies as a significant historical resource. CEQA Statute Section 21074(a)(1)(B) and CEQA Guidelines Section 15064.5(a)(2) indicate that resources included in a local register of historical resources are presumed to be significant historical resources.

Santa Barbara County has two such local registers: the Santa Barbara County Landmarks list and Places of Historic Merit list. Both are maintained by the Historic Landmarks Advisory Commission (HLAC). Any resource listed in one of these registers is presumed to be a significant historical resource pursuant to CEQA. The review process for a property to become a County Landmark includes different criteria and reporting requirements for landmark designation than those used in CEQA review. A Landmark is any place, site, building, structure, or object having historical, aesthetic or other special character or interest and designated as a Landmark under the provisions of County Code Chapter 18A. A place, site, building, structure, or object is eligible for designation as a County Landmark if any of the following criteria are met:

a. It exemplifies or reflects special elements of the County's cultural, social, economic, political, archaeological, aesthetic, engineering, architectural or natural history;
b. It is identified with persons or events significant in local, state or national history;
c. It embodies distinctive characteristics of a style, type, period or method of construction or is a valuable example of the use of indigenous materials or craftsmanship;
d. It is representative of the work of a notable builder, designer, or architect;
e. It contributes to the significance of a historic area, being a geographically definable area possessing a concentration of historic, prehistoric, archaeological, or scenic properties, or thematically related grouping of properties, which contribute to each other and are unified aesthetically by plan or physical development;

f. It has a location with unique physical characteristics or is a view or vista representing an established and familiar visual feature of a neighborhood, community, or the County of Santa Barbara;

g. It embodies elements of architectural design, detail, materials, or craftsmanship that represent a significant structural or architectural achievement or innovation;

h. It reflects significant geographical patterns, including those associated with different eras of settlement and growth, particularly transportation modes or distinctive examples of park or community planning;

i. It is one of the few remaining examples in the County, region, state, or nation possessing distinguishing characteristics of an architectural or historical type or specimen.

A designated County Landmark is preserved and protected by conditions restricting its demolition, removal, alteration, or use. The specific conditions for each landmarked property are spelled out in the Board Resolution that finalized the property's Landmark status. Plans for alterations to Landmarks are required to be reviewed by the HLAC for approval. Designation as a Place of Historic Merit officially recognizes the building or site as having historic, aesthetic or cultural value. A Place of Historic Merit, as opposed to a Landmark, is not protected by restrictions as to demolition, removal, alteration or use, but it would usually qualify as a historical resource in the context of CEQA environmental review. Designation as a Landmark recognizes the building or site at a higher level of historic, aesthetic, or cultural significance.

3.5.5 Project Impact Analysis

Thresholds of Significance

CEQA Guidelines

Pursuant to Appendix G of the CEQA Guidelines potentially significant impacts to cultural resources would result if the Project would:

1) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5;

2) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5;

3) Disturb any human remains, including those interred outside of dedicated cemeteries;

4) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

   a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

   b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

5) Results in a cumulatively considerable impact to historical, archaeological, unique archaeological tribal cultural, or paleontological resources; or

6) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

County of Santa Barbara Environmental Thresholds

The County Cultural Resources (Archaeological, Historic, and Tribal Cultural Resources) Impact Guidelines in the County's Environmental Thresholds and Guidelines Manual (Thresholds Manual) provides information to address the criteria specified in the CEQA Guidelines (County of Santa Barbara 2024). A project may result in a significant environmental impact if it would result in:

Cultural Resources

1) Disruption, alteration, destruction, or adverse effect on a recorded prehistoric or historic archaeological site.

2) Disruption or removal of human remains.

3) Increased potential for trespassing, vandalizing, or sabotaging cultural resources

Historic Resources

1) Adverse physical or aesthetic impacts on a structure or property at least 50 years old and/or of historic or cultural significance to the community, state, or nation.

2) Reduction of significance of a historic resource.

Methodology

As described in Chapter 2, *Project Description*, the County proposes to amend several zoning ordinances and regulations to allow the development of utility-scale and community-scale solar energy facilities on land in unincorporated Santa Barbara County. The amendments also clarify and streamline permitting for solar energy systems, which are already allowed under the County's existing ordinances. However, future project-level siting and design details as well as the timing of potential future solar development is unknown at this time. As such, the impact analysis does not evaluate potential impacts to cultural, tribal cultural, and paleontological resources on a project- or site-specific level. Instead, the analysis evaluates potential impacts to these resource categories broadly at the Program level and focuses on general impacts resulting from the construction, operation, maintenance, and decommissioning of solar energy systems and facilities.

For the purposes of this discussion, the term cultural resource broadly includes historic and archaeological resources. The significance of a cultural resource impact is determined by whether that resource meets the criteria discussed above. Where the significance of a site is unknown, it is presumed to be a significant resource for the purpose of identifying potential areas of disturbance associated with development, operation, maintenance, and decommissioning of solar energy systems and facilities proposed for the Project.

Project Impacts

This section identifies and discusses potential impacts to cultural resources, paleontological resources, and tribal cultural resources that would occur as a result of the Project. **Table 3.5-9** provides a summary of the Project's potentially significant impacts related to cultural, paleontological and tribal cultural resources. A detailed discussion of each impact follows.

TABLE 3.5-9
SUMMARY OF CULTURAL, TRIBAL CULTURAL, AND PALEONTOLOGICAL RESOURCES IMPACTS

Resources Impacts	Impact Classification	Mitigation Measures	Residual Impact
Impact CR-1: Future solar energy systems and facilities enabled under the Project could potentially result in an adverse change in the significance of a historical resource pursuant to Section 15064.5.	Potentially Significant	MM CR-1: Historical Resources Impact Minimization	Insignificant with mitigation
Impact CR-2: Future solar energy systems and facilities enabled under the Project could potentially result in an adverse change in the significance of an archaeological or unique archaeological resource pursuant to Section 15064.5.	Potentially Significant	MM CR-2: Stop Work at Encounter MM CR-3: Cul Phases 1, 2, and 3 MM CR-4: Cultural Resource Monitor MM CR-5: Cultural Resource Buffer	Significant and unavoidable
Impact CR-3: Future solar energy systems and facilities enabled under the Project could potentially disturb human remains, including those interred outside of dedicated cemeteries.	Potentially Significant	MM CR-6: Encountering Human Remains	Insignificant with mitigation
Impact CR-4: Future solar energy systems and facilities enabled under the Project could potentially result in an adverse change in the significance of a Tribal Cultural Resource pursuant to Section 15064.5.	Potentially Significant	MM TCR-1: Retention of a Native American Representative MM TCR-2: Native American Monitor MM TCT-3: Tribal Cultural Resource Buffer	Significant and unavoidable
Impact CR-5: Future solar energy systems and facilities enabled under the Project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	Potentially Significant	MM PR-1: Paleontological Resources MM PR-2: Paleontological Monitoring MM PR-3: Procedures for Paleontological Resource Recovery MM PR-4: Paleontological Resource Monitoring Report	Significant and unavoidable
Cumulative			
Cultural Resources	Potentially Significant	MMs CR-1 through CR-6	Significant and unavoidable
Tribal Cultural Resources	Potentially Significant	MMs TCR-1 through TCR-3	Significant and unavoidable
Paleontological Resources	Potentially Significant	MMs PR-1 through PR-4	Significant and unavoidable

Threshold a) The Project would have a significant impact if the Project would result in a significant adverse effect on a historical resource.

Impact CR-1: Future solar energy systems and facilities enabled under the Project could potentially result in an adverse change in the significance of a historical resource pursuant to PCR Section 15064.5.

Construction and Decommissioning

Section 3.5.3.7, *Identification of Cultural Resources*, demonstrates that the Project area contains built environment resources listed in the NRHP and CRHR as well as on local registers (see Tables 3.5-1 to 3.5-4). Significant portions of unincorporated Santa Barbara County are reflective of less-dense, lower-scale, rural development. As such, these properties may include landscape or setting elements that contribute to the historic significance of a resource (i.e., historic ranching or agricultural operations, homesteads or commercial properties, schoolhouses, and roadways or cultural landscapes). Future Tier 1 and 2 solar energy systems that could be developed as a result of the Project are limited to rooftop solar and small (i.e., less than 0.5 acres) and large ground-mounted systems (i.e., 0.5 to 5.0 acres), respectively. Both systems are inclusive of solar canopies and solar carports and are notably established by, minimally, being attached to the ground by a pole or other support structure specifically intended to hold solar panels. Accordingly, depending on future locations of solar energy systems, Tier 1 and Tier 2 solar energy systems have the potential to be located at, within, or in proximity to listed and/or potentially eligible historic resources. This may include effects from ground preparation, construction/erection, and decommissioning/removal, resulting in vibrations and visual obstructions to the character-defining features that comprise historic resources. These construction and decommissioning activities associated with Tier 1 and 2 solar energy systems have the potential to significantly impact historic resources present within the Project area.

Future Tier 3 and 4 solar energy facilities would be permissible within specific zones as shown in Figure 2-2 of this Program EIR. In addition to the types of anticipated activities for Tier 1 and Tier 2 solar energy systems presented above, Tier 3 and 4 solar energy facilities may require additional construction and decommissioning activities that have the potential to impact historic resources. These activities may include excavation activities associated with the construction of substations, switching stations, maintenance and storage buildings, water wells, septic systems, and storm water retention and detention basins. Grading, trenching, and boring for the establishment or removal of solar energy facility components may also occur, which could cause vibrational or aesthetic impacts to historic resources and their associated sites. Effects from ground preparation and construction/erection could result in vibrations and visual obstructions to the character-defining features that comprise historic resources and their sites. These vibrations and visual obstructions, as well as staging activities conducted on undeveloped or unpaved land, may further include disturbances to ingress/egress roads, fencing, piles, and signage, which may be considered contributing features to historic resources. Depending on siting locations, future Tier 3 and Tier 4 solar energy facilities have the potential to be located at, within, or in proximity to listed and/or potentially eligible historic resources. As such, construction and decommissioning activities associated with Tier 3 and Tier 4 solar energy facilities have the potential to significantly impact historic resources present within the Project area. Should this occur, the County's existing development standards regarding any potential changes to resources listed in the County and local registers would continue to apply. If avoidance of known or previously unidentified historic resources is not feasible, implementation of MM CR-1 is required to reduce Project-related impacts to insignificant levels.

Operation and Maintenance

As previously indicated, the Project area contains numerous built environment resources, particularly those listed in the NRHP and CRHR as well as local registers in unincorporated Santa Barbara County. Significant portions of unincorporated Santa Barbara County are reflective of less-dense, lower-scale, rural development. As such, these properties may include landscape or setting elements that contribute to the historic significance of a resource (i.e., historic ranching or agricultural operations, homesteads or commercial properties, schoolhouses, and roadways or cultural landscapes).

Operation and maintenance activities for Tier 1 and Tier 2 solar energy systems are anticipated to include, but are not limited to, the repair or replacement of ground-mounting structures for solar arrays; repair or replacement of electrical conduit and panels; cleaning, repair, and replacement of photovoltaic solar arrays and panels; vehicle and pedestrian ingress/egress and allied staging activities. As such, depending on siting locations, future operations and maintenance activities to Tier 1 and Tier 2 solar energy systems have the potential to be located at, within, or in proximity to historic resources, which have the potential to impact historic resources present within the Project area. Should this occur, the County's existing development standards regarding any potential changes to resources listed in the County and local registers would continue to apply. Consequently, potential impacts to resources falling into these categories are potentially significant and mitigation measures below are required. are required.

Operation and maintenance activities for Tier 3 and Tier 4 solar energy facilities are anticipated to include, but are not limited to, the repair or replacement of facility components and structures; cleaning, repair, and replacement of photovoltaic solar arrays and panels; landscaping; and allied staging activities. Specifically, operational and maintenance activities may include ground disturbance, such as grading, trenching, and boring for the repair or replacement of facility components and structures; landscaping; and vehicle and pedestrian ingress/egress, which may result in vibrations and visual obstructions to the character-defining features that comprise historic resources and their sites. Accordingly, operation and maintenance activities associated with Tier 3 and Tier 4 solar energy facilities have the potential to impact historic resources located within the solar energy facility area. If avoidance of known or previously unidentified historic resources is not feasible, implementation of MM CR-1 is required to reduce impacts to insignificant levels for built environment resources.

Mitigation Measure

MM CR-1: Historical Resources. The County's Standard Conditions of Approval require that a County P&D-qualified architectural historian be retained to perform significance assessments, identify appropriate preservation treatments, and document historic buildings as appropriate (CulRes-10 and CulRes-11). A County P&D-qualified architectural historian should be retained in order to implement MM CR-1. Qualified architectural historians meet or exceed the *Secretary of the Interior's Professional Qualification Standards* in architectural history and/or history and are listed on the County's Pre-Approved Consultant List.

***Tier 1 and 2*:** Prior to issuance of a building permit for a Tier 1 or Tier 2 solar energy system, County P&D staff shall identify properties with structures or features that are 50 years in age or older for review as follows:

- Should a property be determined to be listed on the National Register of Historic Places, California Register of Historical Resources, as a County Landmark or Place of Historic Merit,

alterations should follow the County's Standard Conditions of Approval CulRes-10 and CulRes-11 as appropriate.

- Should a property over 50 years in age not have been previously identified as a historic resource, unless waived by the Director, a Phase 1 historic resources evaluation shall be prepared by a P&D-qualified architectural historian to determine if the property meets the eligibility standards as a historic resource, pursuant to CEQA in accordance with the County's Environmental Thresholds process for significance determination of historic sites/resources. If a property is determined not to be a historic resource as part of the historic resources evaluation, a Building Permit may be issued.
- Should a property be determined eligible as a historic resource, then a Phase 2 assessment shall be prepared by a P&D-qualified architectural historian to ensure that proposed Tier 1 and Tier 2 modifications will not impact the historic integrity of the building and would be in conformance with the County's Environmental Thresholds and Guidelines Manual process for significance determination of historic sites/resources (including Appendix B to the Manual regarding Fieldwork and Reporting Guidelines for Cultural Resources). A Phase 2 study for Tier 1 and 2 installations may be waived by the P&D Director based upon the Phase 1 evaluation conclusions.

***Tier 3 and 4*:** As part of the permit review process for Tier 3 or Tier 4 solar energy facility projects, properties should be reviewed to determine if a listed historic resource, or a potentially eligible historic resource is present within a 0.50-mile radius of the property for proposed Tier 3 and Tier 4 solar energy facilities. Based on the applicant/owner prepared site plan available databases and repositories shall be reviewed in order to determine whether known historic resources and/or potential historic districts are located within a 0.50-mile radius of the proposed site. Listed historic resources in the Project area include those as on the National Register of Historic Places, California Register of Historical Resources, or are a County Landmark or Place of Historic Merit. Additional recorded built environment databases, including the BERD, County database, and CCIC data should be consulted to determine if a property has previously been identified as an eligible or potentially eligible historic resource at the project level.

- Should a property with structures or features over 50 years in age not have been previously identified as a historic resource, a Phase 1 historic resources evaluation shall be prepared by a P&D-qualified architectural historian to determine if the property meets the eligibility standards as a historic resource, pursuant to CEQA. Should a property be determined eligible as a historic resource, be listed as on the National Register of Historic Places, California Register of Historical Resources, as a County Landmark or Place of Historic Merit, or be located within a 0.5-mile radius of an identified historical resource and be subject to Project impacts, then a Phase 2 letter report shall be prepared by a P&D-qualified architectural historian to ensure that proposed Tier 3 and Tier 4 solar energy facilities will not impact the historic integrity of the resource and would be in conformance with the County's Environmental Thresholds process for significance determination of historic sites/resources after the following are analyzed:
  - Realign or redesign the proposed solar energy facility to avoid impacts on known historic resources where possible. The solar energy facility shall be designed in such a way that disturbance to the building and/or site will be minimally intrusive to historic resources. When possible, new solar facilities should be sited in such a manner as to avoid visual intrusion from the property's public right-of-way. New facilities proposed to be located within or adjacent to historic resources (including buildings, structures, landscapes, districts, and sites) should be constructed, operated, and maintained in such a way that will be minimally intrusive to the historic resource and will not damage or destroy the

resource's character-defining features. Further, when installing solar energy facilities within a 0.50-mile radius of historic properties, historic resource avoidance and installation guidance from the National Park Service's technical guidance entitled "Solar Panels on Historic Properties" should be followed and the Secretary of the Interior's Standards for the Treatment of Historic Properties (Standards) are encouraged to be reviewed to ensure that proposed -installations are consistent with Standards 9 and 10.

- If avoidance of a significant architectural/built environment resource is not feasible, Phase 3 mitigation for historic resources shall be implemented, in conformance with the County's Environmental Thresholds process for significance determination of historic sites/resources. Additional mitigation options may include, but are not limited to, documentation of the resource, specific design and siting plans for historical resources and historic districts, or in the case of Tier 3 and 4 solar energy facilities, plans for alteration or adaptive re-use of a historical resource that are in conformance with County Standard Conditions of Approval CulRes-10 and CulRes-11.

Residual Impacts

With the implementation of MM CR-1, impacts related to potential and identified historic resources would be insignificant.

Threshold b) The Project would have a significant impact if the Project would result in a significant adverse effect on an archaeological or unique archaeological resource.

Impact CR-2: Future solar energy systems and facilities enabled under the Project could potentially result in an adverse change in the significance of an archaeological resource or unique archaeological resource pursuant to PCR Section 15064.5.

Construction and Decommissioning

While ground disturbance is not anticipated for Tier 1 solar energy system construction and decommission activities, should such disturbance occur, it would likely be limited to paved and unpaved roads and previously graded surfaces, giving it a low potential to significantly impact archaeological and unique archaeological resources present within the project.

Ground disturbance associated with Tier 2 construction and decommission activities would involve limited excavations to install solar energy systems and related activities at associated staging/storage areas. However, given Tier 2 solar energy systems are restricted to improved and developed areas within the unincorporated County such as parking lots and playgrounds, the potential for impacts to archaeological and unique archaeological resources would be minimal and activities within staging/storage areas would be limited to developed or previously disturbed areas in a way that potential impacts to this category of resources at these locations are reduced.

The Project would allow Tier 3 (community-scale) and Tier 4 (utility-scale) solar energy facilities to be located within AG-I, AG-II; PI; M-1, M-2, M-RP, M-CR; and PU zoned land within Inland and Coastal Zone areas of the unincorporated County. Ground disturbance for Tier 3 and 4 solar energy facility construction and decommissioning activities has the potential to significantly impact archaeological and unique archeological resources present throughout the unincorporated County. Ground disturbance for

Tier 3 and 4 solar energy facilities is anticipated to include excavation activities associated with the construction of substations, switching stations, maintenance and storage buildings, water wells, septic systems, and storm water retention and detention basins as well as grading, trenching, and boring for the establishment or removal of solar energy facility components. Ground disturbance would also occur for the establishment and removal of ingress/egress roads, fencing, and signage, as well as staging activities conducted on undeveloped or unpaved land.

As discussed in Section 3.5.3.7, *Identification of Cultural Resources*, the Project area contains scores of cultural resources either listed, or eligible for listing, in the NRHP and CRHR as well as local registers, lists, and databases of significance and merit (see Tables 3.5-6 to 3.5-8). Precontact sites include eligible village sites (e.g., P-42-000087 and P-42-001189) as well as resource procurement and tool manufacturing sites (e.g., P-42-001967 and P-42-001989) and sites known to have human remains (e.g., P-42-000086). Additionally, based on the review of a sample of relevant geologic maps for the unincorporated County, Late Pleistocene and Holocene geologic formations, known for their sensitivity for buried archaeological deposits, are present within portions of the Project area. The NAHC's response to the request for a search of their SLF for the Project area indicated a positive result. Together these data points imply the archaeological sensitivity of the Project area is very high. Accordingly, depending on siting locations within the Project area, future Tier 2 solar energy systems and Tier 3 and Tier 4 solar energy facilities have the potential to be located at, within, or in proximity to archaeological resources or unique archaeological resources or on sediments that are sensitive for buried archaeological deposits. Moreover, due to their comparatively larger size (i.e., between 0.5 and up to and including 30 acres for Tier 3 facilities; and greater than 30 acres for Tier 4 facilities), this may occur with greater frequency than their Tier 2 solar energy system counterpart.

For Tier 2 solar energy system projects occurring at developed locations, if previously unidentified archaeological or unique archaeological resources are encountered, then implementation of MM CR-2 is required to reduce impacts to insignificant levels. For Tier 2 solar energy system projects proposing ground disturbance in previously undeveloped areas, and for Tier 3 and 4 solar energy facility projects, if avoidance of known or previously unidentified archaeological or unique archaeological resources is not feasible, then implementation of MMs CR-3 through CR-5 is required to reduce impacts to insignificant levels.

Operation and Maintenance

Operation and maintenance activities for Tier 2 solar energy systems are anticipated to include, but are not limited to, the repair or replacement of ground-mounting structures for solar arrays; repair or replacement of electrical conduit and panels; cleaning, repair, and replacement of photovoltaic solar arrays and panels; and allied staging activities. Operation and maintenance activities for Tier 3 and Tier 4 solar energy facilities are anticipated to include, but are not limited to, the repair or replacement of facility components and structures; cleaning, repair, and replacement of photovoltaic solar arrays and panels; landscaping; employee use; emergency use (e.g., fire suppression, etc.); and allied staging activities.

As previously indicated, the archaeological sensitivity of the Project area is very high and, depending on siting locations within the Project area, future Tier 2 solar energy systems and Tier 3 and Tier 4 solar energy facilities have the potential to be located at, within, or in proximity to archaeological resources or unique archaeological resources or on sediments that are sensitive for buried archaeological deposits. Maintenance-related ground disturbance for Tier 1 solar energy systems is anticipated to be negligible and likely limited to staging activities on paved and unpaved roads and previously graded surfaces.

Maintenance-related ground disturbance for Tier 2 solar energy systems is anticipated to involve limited excavation activities in improved and developed areas within the unincorporated County such as parking lots. If construction-related activities for a Tier 2 project, such as parking or equipment staging, are proposed in previously undeveloped areas, then MM CR-3 would require a Phase 1 archaeology survey to ensure that sensitive resources would be identified and avoided. As such, potential impacts to archaeological and unique archaeological resources for maintenance-related ground disturbance would be minimal and activities within staging/storage areas would be controlled in such a way that potential impacts to this category of resources at these locations are reduced.

Operational and maintenance-related ground disturbance for Tier 3 and Tier 4 solar energy facilities is anticipated to include excavation activities such as grading, trenching, and boring for the repair or replacement of facility components and structures and emergency (e.g., fire suppression, etc.) support services; employee use; landscaping; and vehicle and pedestrian ingress/egress, staging activities, or emergency support services conducted on undeveloped or unpaved roads and surfaces. While operational and maintenance-related ground disturbance (including excavations) would likely occur in areas previously disturbed during construction phases, it is unlikely to occur at the exact locations and depths of previous ground disturbances, and ground disturbance also has the potential to occur at previously undisturbed locations. Together, this results in the operational and maintenance-related ground disturbance having a potentially significant impact to known or previously unidentified archaeological and unique archaeological resources.

For Tier 2 solar energy system projects occurring at developed locations, if previously unidentified archaeological or unique archaeological resources are encountered, implementation of MM CR-2 is required to reduce impacts to insignificant levels. For Tier 2 solar energy system projects proposing ground disturbance in previously undeveloped areas, and for Tier 3 and 4 solar energy facility projects, if avoidance of known or previously unidentified archaeological or unique archaeological resources is not feasible, implementation of MMs CR-3 through CR-5 is required to reduce impacts to insignificant levels.

Mitigation Measures

MM CR-2: Stop Work at Encounter. The applicant/owner or contractors shall stop or redirect work immediately in the event archaeological remains are encountered during grading, construction, landscaping or other construction-related activity. The applicant/owner shall immediately contact P&D staff and retain a P&D-approved archaeologist and Native American representative to evaluate the significance of the find in compliance with the provisions of the County Archaeological Guidelines and conduct appropriate mitigation funded by the applicant/owner.

MM CR-3: Cul Phases 1, 2, and 3. For proposed Tier 2 projects proposing ground disturbance in previously undeveloped areas, and for all Tier 3 and 4 solar energy projects, all ground disturbances shall be subject to a Phase 1 archaeological survey in compliance with the provisions of the County Archaeological Guidelines. If significant resources are encountered and potential impacts are unavoidable, the applicant/owner shall have a P&D approved archaeologist prepare and complete a Phase 2 subsurface testing program in coordination with P&D. If the Phase 2 program finds that one is warranted, the applicant/owner shall have a P&D approved archaeologist prepare and complete a Phase 3 data recovery excavation consistent with County Archaeological Guidelines. All work shall be funded by the applicant/owner. The applicant/owner shall submit the required archaeological studies for P&D review and approval. The applicant/owner shall include as

notes or depictions all plan components, graphically depicting all those related to earth movement, construction, and temporarily and/or permanently installed protection measures. Any required archaeological studies shall be submitted to P&D prior to the issuance of grading/building permits. The applicant/owner shall install any required resource protection measures or carry out required recovery onsite prior to issuance of grading/building permits and the pre-construction meeting.

MM CR-4: Cultural Resource Monitor. If warranted, based on the results of the Phase 1 and 2 cultural resource investigations, for proposed Tier 3 and Tier 4 solar energy projects, the applicant/owner shall have all earth disturbances including scarification and placement of fill within the archaeological site area monitored by a P&D approved archaeologist and a Native American consultant in compliance with the provisions of the County Archaeological Guidelines. Prior to the issuance of grading/building permits, the applicant/owner shall submit for P&D review and approval, a contract or Letter of Commitment between the Owner/Applicant and the archaeologist, consisting of a project description and scope of work, and once approved, shall execute the contract. The Owner/Applicant shall provide P&D compliance monitoring staff with the name and contact information for the assigned onsite monitor(s) prior to grading/building permit issuance and pre-construction meeting. P&D compliance monitoring staff shall confirm monitoring by archaeologist and Native American consultant and P&D grading inspectors shall spot check field work.

MM CR-5: Cultural Resource Buffer. If the Phase 1 and 2 cultural resource investigations identify the presence of an archaeological site in the project vicinity, the applicant/owner shall temporarily fence the archaeological site and 50 foot buffer area with chain link fencing flagged with color or other material authorized by P&D where ground disturbance is proposed within 100 feet of the site and a buffer. P&D compliance monitoring staff shall verify installation of fencing by reviewing photo documentation or by site inspection prior to approval of grading permits and ensure fencing remains in place throughout grading and construction through site inspections.

Residual Impacts

Implementation of MMs CR-2 through CR-5 would reduce many of the potential direct and indirect adverse effects to archaeological and unique archaeological resources associated with the Project. However, given the high cultural sensitivity of the Project area, there is the potential for unintended impacts to unknown resources. Further because the specific locations and designs for future projects are unknown at this time, impacts are considered significant and unavoidable.

Threshold c) The Project would have a significant impact if the Project would result in the disturbance, disruption, or removal of human remains.

Impact CR-3: Future solar energy systems and facilities enabled under the Project could potentially disturb, disrupt, or remove human remains, including those interred outside of dedicated cemeteries.

Construction and Decommissioning

As discussed in Section 3.5.3.7, *Identification of Cultural Resources* several precontact archaeological sites with documented evidence of human bone or human burials (e.g., P-42-000086 and P-42-000108), a CRHR-and-SBCL cross listed cemetery (Sisquoc Church and San Ramon Chapel Cemetery - CR Landmark 877 and SBCL #01), and one cemetery listed exclusively in the SBCL (Pine Grove

Cemetery - SBCL #09) are present within the Project area and accordingly evidences its sensitivity for buried human remains (see Tables 3.5-2 – 3.5-8**)**. Since the Project would involve construction and decommission-related ground-disturbing activities for future solar energy systems and facilities in methods detailed above, it is possible that such actions could unearth, expose, or disturb human remains. If such remains were to be encountered, they would be protected under applicable regulations.

California PRC Section 5097.98, as amended by Assembly Bill 2641, protects cultural resources on public lands and provides procedures in the event human remains of Native American origin are discovered during project implementation and are required to address the Project's potential impacts to human remains. PRC Section 5097.98 requires notification of the County Coroner in the event of the unanticipated discovery of human remains and a prescribed protocol for their disposition in accordance with applicable regulations, notification of the NAHC and subsequent tribal coordination if remains are determined to be of Native American descent.

Operation and Maintenance

Operation and maintenance activities for future solar energy systems are anticipated to include, but are not limited to, the repair or replacement of ground-mounting structures for solar arrays; repair or replacement of electrical conduit and panels; cleaning, repair, and replacement of photovoltaic solar arrays and panels; and allied staging activities. Similarly, operation and maintenance activities for future solar energy facilities are anticipated to include, but are not limited to, the repair or replacement of facility components and structures; cleaning, repair, and replacement of photovoltaic solar arrays and panels; landscaping; employee use; emergency use (e.g., fire suppression, etc.); and allied staging activities. With the Project established as being sensitive for buried human remains, any operation and maintenance activity for Tier 2 solar energy systems and Tier 3 and 4 solar energy facilities involving ground disturbance employing methods detailed above has the potential to unearth, expose, or disturb human remains. If such remains were to be encountered, they would be protected under applicable regulations.

California PRC Section 5097.98, as amended by Assembly Bill 2641, protects cultural resources on public lands and provides procedures in the event human remains of Native American origin are discovered during project implementation and are required to address the Project's potential impacts to human remains. PRC Section 5097.98 requires notification of the County Coroner in the event of the unanticipated discovery of human remains and a prescribed protocol for their disposition in accordance with applicable regulations, notification of the NAHC and subsequent tribal coordination if remains are determined to be of Native American descent.

Since Tier 2 solar energy system and Tiers 3 and 4 solar energy facility projects would involve ground-disturbing activities, it is possible that such actions could unearth, expose, or disturb human remains. Should this occur, implementation of MM CR-6 is required to reduce impacts to an insignificant level.

Mitigation Measures

> **MM CR-6: Encountering Human Remains.** For proposed Tier 2, 3, and 4 solar energy projects, the applicant/owner or contractors shall stop or redirect work immediately in the event human remains are encountered during earthwork, grading, construction or other construction-related activity. If human remains are discovered, the County Coroner must be notified within 48 hours, and no further disturbance to the site shall take place where the remains were found. If the

remains are determined by the coroner to be Native American, the coroner is responsible for contacting the California Native Heritage Commission (NAHC) within 24 hours. The NAHC, pursuant to PRC Section 5097.98, will immediately notify those persons it believes to be most likely descended from the deceased Native Americans so they can inspect the burial site and make recommendations for treatment or disposal.

Residual Impacts

Implementation of MM CR-6 would reduce impacts to a level of insignificance.

Threshold d) The Project would have a significant impact if the Project would result in a significant adverse effect of tribal cultural resources.

Impact CR-4: Future solar energy systems and facilities enabled under the Project could potentially result in an adverse change in the significance of a Tribal Cultural Resource pursuant to PCR section 21074.

Despite the lack of respondents to the County's AB 52 and SB 18 request to consult notifications, this does not preclude the possibly of sites, features, places, cultural landscapes, sacred places, and objects with cultural value to California Native American Tribe that are, or qualify as, tribal cultural resources being present within the unincorporated County. Moreover, the positive SLFS result from the NACH for the Project and the aforementioned archival research demonstrate that the Project area is highly sensitive to tribal cultural resources. This is particularly true for the Project area located within the Gaviota Community Plan Area where numerous archaeological sites (including precontact village sites) are present that may qualify as tribal cultural resources.

Construction and Decommissioning

As previously stated, construction and decommission-related ground disturbance is not anticipated for Tier 1 solar energy system projects and would be limited to improved and developed areas within the unincorporated County for similar projects classified as Tier 2. Given this, and as with archaeological and unique archaeological resources, potential impacts to tribal cultural resources as a result of Tier 2 construction and decommission-related ground disturbance would be minimal and may be controlled in such a way that potential impacts to this category of resource at improved and developed areas would be reduced. Given their scale, ground disturbance for Tier 3 and 4 solar energy facility construction and decommission activities, as well as the resulting alterations to the landscape viewshed from the presence of these facilities, have the potential to significantly impact tribal cultural resources present within the unincorporated County.

For Tier 2 solar energy system projects, if previously unidentified tribal cultural resources are encountered, implementation of MM TCR-1 is required to reduce impacts. For Tier 3 and 4 solar energy facility projects, if avoidance of known or previously unidentified tribal cultural resources is not feasible, implementation of MMs TCR-1 through TCR-3 is required to reduce impacts. Additionally, for Tier 3 and 4 solar energy facility projects, for archaeological and unique archaeological resources that could also meet the definition of tribal cultural resources, implementation of MMs CR-2 through CR-5 would further reduce impacts. However, even with implementation of these mitigation measures, impacts to tribal cultural resources as a result of Tier 2-4 Projects would be significant and unavoidable.

Operation and Maintenance

Operation and maintenance activities for Tier 2 solar energy systems are anticipated to include, but are not limited to, the repair or replacement of ground-mounting structures for solar arrays; repair or replacement of electrical conduit and panels; cleaning, repair, and replacement of photovoltaic solar arrays and panels. Operation and maintenance activities for Tier 3 and Tier 4 solar energy facilities are anticipated to include, but are not limited to, the repair or replacement of facility components and structures; cleaning, repair, and replacement of photovoltaic solar arrays and panels; landscaping; employee use; and emergency use (e.g., fire suppression, etc.).

As previously indicated, the sensitivity of the Project area for tribal cultural resources is very high and, depending on siting locations, future Tier 2 solar energy systems and Tier 3 and Tier 4 solar energy facilities have the potential to be located at, within, or in proximity to tribal cultural resources. Operations and maintenance-related ground disturbance for Tier 1 solar energy systems is anticipated to be negligible and likely limited to staging activities on paved and unpaved roads and previously graded surfaces. Operations and maintenance-related ground disturbance for Tier 2 solar energy systems is anticipated to involve limited excavation activities in improved and developed areas within the unincorporated County such as parking lots and staging/storage areas. As such, potential impacts to tribal cultural resources from Tier 2 maintenance-related ground disturbance would be minimal and activities within staging/storage areas may be controlled in such a way that potential impacts to this category of resources at these locations are reduced.

Operational and maintenance-related ground disturbance for Tier 3 and Tier 4 solar energy facilities is anticipated to include excavation activities such as grading, trenching, and boring for the repair or replacement of facility components and structures and emergency (e.g., fire suppression, etc.) support services; employee use; landscaping; and vehicle and pedestrian ingress/egress, staging activities, or emergency support services conducted on undeveloped or unpaved roads and surfaces. While operational and maintenance-related ground disturbance (including excavations) would likely occur in areas previously disturbed during Project construction phases, it is unlikely to occur at the exact locations and depths of previous ground disturbances, and ground disturbance also has the potential to occur at previously undisturbed locations. Together, this results in operational and maintenance-related ground disturbance having a potentially significant impact on known and previously unidentified tribal cultural resources.

For Tier 2 solar energy system projects, if previously unidentified tribal cultural resources are encountered, implementation of MM TCR-1 is required to reduce impacts. For Tier 3 and 4 solar energy facility projects, if avoidance of known or previously unidentified tribal cultural resources is not feasible, then implementation of MMs TCR-1 through TCR-3 is required to reduce impacts. Additionally, for Tier 3 and 4 solar energy facility projects, for archaeological and unique archaeological resources that could also meet the definition of tribal cultural resources, implementation of MMs CR-2 through CR-5 would further reduce impacts. However, even with implementation of these mitigation measures, impacts to tribal cultural resources as a result of Tier 2-4 solar energy projects would be significant and unavoidable.

Mitigation Measures

MM TCR-1: Retention of a Native American Representative. The applicant/owner shall retain a P&D-approved Native American Representative to carry out all mitigation related to tribal cultural resources as required for proposed Tier 2, 3 and 4 solar energy projects in accordance

with MMs CR-2 through CR-5. For Tier 2 solar energy system projects, this is limited to the circumstances in which MM CR-2 is applicable (i.e., unanticipated discovery of an archaeological or unique archaeological resource that may qualify as tribal cultural resource as well as known tribal cultural resources) and shall be conducted pursuant to the language therein. For Tier 3 and 4 solar energy facility projects, this shall occur prior to the commencement of ground-disturbing activities, and a tribal cultural resources sensitivity training session shall be held for those construction personnel who will be directly involved in the ground disturbing activities. The training session shall be carried out by the P&D-approved Native American Representative or their appointee and shall focus on how to identify tribal cultural resources that may be encountered during ground disturbing activities and the procedures to be followed in such an event.

MM TCR-2: Native American Monitor. For Tier 3 and 4 solar energy facility projects, the Native American Representative or their appointee shall conduct Native American monitoring during project-related ground disturbance in accordance with MM CR-4 above. Native American monitoring shall include the completion of daily monitoring logs that provide descriptions of the relevant ground-disturbing activities observed by the monitor; the types of construction activities performed; locations of ground-disturbing activities; soil types; cultural-related materials; and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs shall identify and describe any discovered tribal cultural resources, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs shall be provided to the County upon written request to the Tribe.

MM TCR-3: Tribal Cultural Resource Buffer. For Tier 3 and 4 solar energy facility projects**,** in the event of a discovery of potential tribal cultural resources, the County P&D-approved Archaeologist identified in MMs CR-2 and CR-3 [after consultation with the Native American Monitor] shall have the authority to temporarily divert, redirect, or halt ground-disturbance activities to allow identification, evaluation, and potential recovery of such potential resources. After consulting with the Native American Monitor and the County, the P&D-approved Archaeologist shall establish an appropriate buffer area in accordance with industry standards, reasonable assumptions regarding the potential for additional discoveries in the vicinity, and safety considerations for those making an evaluation and potential recovery of the discovery. This buffer area shall be established around the find where ground-disturbing activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area.

Within three (3) business days of such discovery, a meeting shall take place between the Qualified Archaeologist, the Tribe, and the County to discuss the significance of the find and whether it qualifies as a tribal cultural resource pursuant to Public Resources Code Section 21074(a). If, as a result of the meeting and after consultation with the Tribe and the P&D-approved Archaeologist, the County determines, based on substantial evidence, that the resource is in fact a tribal cultural resource, the P&D-approved Archaeologist shall develop a reasonable and feasible treatment plan, with input from the Tribe as necessary, and with the concurrence of the County. The treatment measures in the treatment plan shall be in compliance with any applicable federal, State, or local laws, rules or regulations. The treatment plan shall also include measures regarding the curation of the recovered resources.

The applicant/owner or contractor may recommence ground disturbance activities inside of the specified radius of the discovery site only after it has complied with all of the recommendations developed and approved pursuant to the process set forth in the above paragraphs.

The recovered tribal cultural resources may be placed in the custody of the Tribe, who may choose to use them for their educational purposes or they may be curated at a public, non-profit

institution with a research interest in the materials. If neither the Tribe nor an institution accepts the resources, they may be donated to a local school or historical society in the area for educational purposes.

Notwithstanding the above paragraph, any information determined to be confidential in nature by the County, shall be excluded from submission to the CCIC or the general public under the applicable provisions of the California Public Records Act, Sections 7927.000 and 7929.005.

Residual Impacts

Implementation of MMs TCR-1 through TCR-3 would feasibly reduce direct and indirect adverse effects to tribal cultural resources associated with an individual Tier 2 solar energy system and individual Tiers 3 and 4 solar energy facility projects to an insignificant level. However, given the high sensitivity of the Project area, there is the potential for unintended impacts to unknown tribal cultural resources. Further, because the specific locations and designs for future projects are unknown at this time, impacts are considered significant and unavoidable.

Paleontological Resources

Threshold e) The Project would have a significant impact if the Project would result in a significant adverse effect of a unique paleontological resource or site or unique geologic feature.

Impact CR-5: Future solar energy systems and facilities enabled under the Project could impact scientifically significant paleontological resources resulting in a potentially significant impact.

Construction and Decommissioning

As mentioned above, significant ground disturbance is not anticipated for Tier 1 solar energy system construction and decommission activities. Should such disturbance occur, it would likely be limited to paved and unpaved roads and previously graded surfaces giving it a low potential to significantly impact paleontological resources present within the Project.

Ground disturbance associated with Tier 2 solar energy system construction and decommission activities is generally small scale and with Project locations being limited to previously developed land, any resulting potential impact to paleontological resources would be negligible. Ground disturbance for Tier 3 and Tier 4 activities is anticipated to include excavation activities such as grading, trenching, and boring for the establishment or removal of solar energy system components, ingress/egress roads, fencing, piles, and signage as well as staging activities conducted on undeveloped or unpaved land. Because of the potential for deeper excavation with the installation of Tier 3 and 4 solar energy facilities, there is a greater risk to paleontological resources.

As noted above in Section 3.5.2.1., the complicated geological history of unincorporated Santa Barbara County is particularly noteworthy for the rich Miocene and Pleistocene faunas. Future Tier 3 and Tier 4 solar energy components located atop these units or where excavation may reach these units at depth should be further analyzed at a higher resolution to minimize negative effects. However, Pliocene and Oligocene units also may locally host significant fossil deposits so any project component located on

geological formations of these ages should also be evaluated at higher resolution. Therefore, impacts would be potentially significant.

Operation and Maintenance

Operation and maintenance activities for all types of project components (Tiers 1 through 4) are anticipated to include, but are not limited to, the repair or replacement of ground-mounting structures for solar arrays; repair or replacement of electrical conduit and panels; cleaning, repair, and replacement of photovoltaic solar arrays and panels; and allied staging activities. As these activities do not involve new and significant excavation into native bedrock, there is no anticipated risk to paleontological resources.

Mitigation Measures

MM PR-1: Paleontological Resources. Prior to permit issuance for proposed Tier 3 and 4 solar energy projects, if paleontological resources are predicted using the standards of the Society of Vertebrate Paleontology (2010) in locations in which the solar energy facilities would be located, recommendations shall be implemented, which may include, but would not be limited to, the following:

- The Applicant shall retain a paleontologist who meets the Society of Vertebrate Paleontology's (SVP, 2010) definition for qualified professional paleontologist (Qualified Paleontologist) to carry out all mitigation related to paleontological resources.
- Prior to the start of ground-disturbing activities, the Qualified Paleontologist or their designee shall conduct construction worker paleontological resources sensitivity training for all construction personnel. Construction personnel shall be informed on how to identify the types of paleontological resources that may be specifically encountered in the rock units in the construction area, the proper procedures to be enacted in the event of an inadvertent discovery of paleontological resources, and safety precautions to be taken when working with paleontological monitors.

MM PR-2: Paleontological Monitoring. If necessary, for proposed Tier 3 and 4 solar energy projects, paleontological monitoring shall be conducted during ground-disturbing activities in those regions identified has having a high potential to host significant paleontological resources. Monitoring shall be conducted by a qualified paleontological monitor (SVP, 2010) working under the direct supervision of the Qualified Paleontologist. Monitoring shall consist of visually inspecting fresh exposures of rock for larger fossil remains and, where appropriate, collecting sediment samples to wet or dry screen to test promising horizons for smaller fossil remains. If the Qualified Paleontologist determines that full-time monitoring is no longer warranted, based on the specific geologic conditions at the surface or at depth, the Qualified Paleontologist may recommend that monitoring be reduced to periodic spot-checking or cease entirely.

MM PR-3: Procedures for Paleontological Resource Recovery. If a potential fossil is found, the paleontological monitor shall be allowed to temporarily divert or redirect grading and excavation activities in the area of the exposed fossil to facilitate evaluation of the discovery. A buffer area pf 50-foot radius shall be established around the find where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. If a fossil is determined to be significant, the Qualified Paleontologist shall implement a paleontological salvage program to remove the resources from their location, following the guidelines of the SVP (2010). Any fossils encountered and recovered shall be prepared to the point of identification, catalogued, and curated at a public, non-profit institution with a research interest in the material and with retrievable storage, such as the Santa Barbara Museum of Natural History or the Natural

History Museum of Los Angeles County, if such an institution agrees to accept the fossils. If no institution accepts the fossil collection, they shall be donated to a local school in the area for educational purposes. Accompanying notes, maps, and photographs shall also be filed at the repository and/or school.

If construction personnel discover any potential fossils during construction while the paleontological monitor is not present, regardless of the depth of work or location, work at the discovery location shall cease in a 50-foot radius of the discovery until the Qualified Paleontologist has assessed the discovery and recommended and implemented appropriate treatment as described earlier in this measure.

MM PR-4: Paleontological Resource Monitoring Report. At the conclusion of paleontological monitoring, the Qualified Paleontologist shall prepare a report summarizing the results of the monitoring and salvage efforts, the methodology used in these efforts, as well as a description of the fossils collected and their significance. The report shall be submitted by the implementing agency to the relevant repository, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the project and required mitigation measures.

Residual Impacts

With implementation of MMs PR-1 though PR-4, many of the potential direct and indirect adverse effects to paleontological resources associated with Tier 3 (Community-Scale) and Tier 4 (Utility-Scale) solar energy facilities would be reduced. However, because the specific locations and designs for future projects are unknown at this time, even with implementation of these mitigation measures potentially significant and unavoidable impacts could result.

3.5.6 Cumulative Impacts Analysis

Cultural Resources

For the purposes of this analysis of cumulative impacts to cultural resources, the geographic area of consideration consists of unincorporated Santa Barbara County. This geographic scope of analysis is appropriate for the analysis of cultural resources because the types of resources within this area are similar in nature and origin and share a common heritage.

As demonstrated above, prior to mitigation, future solar energy systems and facilities enabled under the Project would have a potentially significant impact on cultural resources. This significant impact finding is due to the potential to impact historical built environment directly or indirectly, and to encounter archaeological resources on the surface and at depth during construction. This potential derives from the existence of known built environment resources, known archaeological sites, and a high sensitivity for buried archaeological deposits within the unincorporated area of the County. In addition, the Project would also have the potential to intersect cultural resources during their construction, operations, maintenance, and decommission phases. Similarly, as with the Project, each cumulative project would also be required to identify any cultural resources that could potentially be impacted and to address potentially significant impacts, if identified. The related projects may require mitigation similar to that applicable to this Project, especially if those related projects are in areas of heightened sensitivity similar to the solar energy projects enabled under the Project.

Accordingly, with implementation of MMs CR-1 through CR-5 and similar anticipated mitigation requirements for related projects in areas of heightened sensitivity within unincorporated Santa Barbara County, the Project may still result in a cumulatively considerable contribution to cultural resource impacts, specifically to archaeological and unique archaeological resources.

Human Remains

As indicated in the analysis above, Project impacts on human remains, if they were to occur, would be addressed and reduced to insignificant through implementation of MM CR-6. In addition, in the event human remains are encountered with development of cumulative projects, California PRC Section 5097.98, as amended, would apply which includes procedures in the event of discovery during project implementation. However, the Project may still result in a cumulatively considerable contribution to human remains.

Tribal Cultural Resources

As demonstrated above, prior to mitigation, the Project would have a potentially significant impact on tribal cultural resources due to the potential to encounter tribal cultural resources at depth during construction. This potential exists due to the existence of several documented archaeological sites within the unincorporated County, including within the Gaviota Community Plan Area. In addition, future Tier 3 and 4 projects would also have the potential to intersect tribal cultural resources during construction. Similarly, as with the Project, each related project would also be required to engage in AB 52 consultation with Native American tribes in order to identify any tribal cultural resources that could potentially be impacted by the related project and to address potentially significant impacts, if identified. The related projects may require mitigation similar to that applicable to the Project, especially if those related projects are in areas of heightened sensitivity for tribal cultural resources.

Accordingly, with implementation of MMs TCR-1 through TCR-3 and similar anticipated mitigation requirements for related Projects in areas of heightened sensitivity within unincorporated Santa Barbara County, the Project may still result in a cumulatively considerable contribution to tribal cultural resource impacts.

Paleontological Resources

As described above, the potential exists for deeper excavations, primarily in Tiers 3 and 4 construction and decommission activities, to affect unique paleontological resources or sites. The surficial sediments of the project area are unlikely to have preserved fossils; however, there is a potential for increased sensitivity with depth.

The incremental impact of the future solar energy facilities enabled by the Project, combined with those of the cumulative projects, could result in a cumulative impact on paleontological resources. Although, implementation of MMs PR-1 through PR-4 would lessen the Project's contribution toward cumulative effects on paleontological resources, impacts could be cumulatively considerable, and the impact would be significant.

3.6 Energy

3.6.1 Introduction

This section discusses the potential energy impacts of implementing the Project, following the guidance for evaluation of energy impacts in Section 15126.2(b) and Appendix G of the CEQA Guidelines. This section describes the physical environmental and regulatory setting, the criteria and thresholds used to evaluate the significance of impacts, the methods used in evaluating these impacts, and the results of the impact assessment.

3.6.2 Environmental Setting

Energy relates directly to environmental quality. Energy use can adversely affect air quality and other natural resources. The vast majority of California's air pollution is caused by burning fossil fuels. Consumption of fossil fuels for the transportation sector is linked to changes in global climate and depletion of stratospheric ozone. Development of future solar energy facilities that would occur as a result of the Project would primarily consume fossil fuels, gasoline and diesel, during construction. The Project would stimulate local renewable energy generation by allowing solar energy development in various areas of the County and by establishing a streamlined permitting process to promote utility-scale and smaller scale solar development to reach this potential. The Project would expand the potential for permitted solar systems and facilities, encouraging sustainable energy generation within the County. Once in place, the solar energy components would generally operate passively, with minimal employee trips, occasional maintenance, and periodic solar panel washing. Operational activities would generate minimal vehicle trips for any given solar energy system or facility, which would consume minimal transportation energy resources. The Project would promote sustainable solar energy generation for both local and utility-scale use.

Electricity, a consumptive utility, is a human-made resource. The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, natural gas, coal, solar, geothermal, and nuclear resources, into energy. The delivery of electricity involves a number of system components, for distribution and use. The electricity generated is distributed through a network of transmission and distribution lines commonly called a power grid. The Warren-Alquist Act established the California Energy Commission (CEC) in 1974. The CEC serves as California's primary energy policy and planning agency and is committed to reducing energy costs, curtailing greenhouse gas emissions, and ensuring a safe, resilient, and reliable supply of energy.

Energy capacity, or electrical power, is generally measured in watts (W) while energy use is measured in watt-hours (Wh). For example, if a light bulb has a capacity rating of 100 W, the energy required to keep the bulb on for 1 hour would be 100 watt-hours. If ten 100 W bulbs were on for 1 hour, the energy required would be 1,000 Wh or 1 kilowatt-hour (kWh). On a utility scale, a generator's capacity is typically rated in megawatts (MW), which is 1 million watts, while energy usage is measured in megawatt-hours (MWh) or gigawatt-hours (GWh), which is 1 billion Wh.

Southern California Edison

Southern California Edison (SCE) provides electrical services to approximately 15 million people, 15 counties (including a portion of Santa Barbara County), and 180 incorporated cities, throughout its 50,000-square-mile service area across central, coastal and southern California. The SCE service area is bounded by Mono County to the north, Ventura County to the west, San Bernardino County to the east, and Orange County to the south (SCE 2024a). SCE produces and purchases energy from a mix of conventional and renewable generating sources. In Santa Barbara County (County), SCE serves Carpinteria, Gaviota, Goleta, Isla Vista, Montecito, Santa Barbara, and Summerland (SCE 2024b).

SCE generates power from a variety of energy sources, including large hydropower (greater than 30 MW), natural gas, nuclear sources, and renewable resources, such as wind, solar, small hydropower (less than 30 MW), and geothermal sources. In 2023, the SCE power system experienced a peak demand of 21,254 MW (the most recent year for which data are available) (SCE 2024c). Approximately 52 percent of the SCE 2023 electricity purchases were from renewable sources, which is higher than the approximate 36 percent statewide percentage of electricity purchases from renewable sources in 2022 (the latest data available) (SCE 2024d, CEC 2023a). The annual electricity sale to customers in 2023 was approximately 79,256 GWh (SCE 2024c).

Pacific Gas & Electric Company

Pacific Gas & Electric Corporation (PG&E) provides natural gas and electrical services to approximately 16 million people throughout a 70,000 square mile service area in northern and central California. PG&E's services area stretches from Eureka in the north to Bakersfield in the south, and from the Pacific Ocean to the Sierra Nevada in the east (PG&E 2024a). In Santa Barbara County, PG&E services the communities of Ballard, Buellton, Casmalia, Cuyama, Guadalupe, Los Alamos, Los Olivos, New Cuyama, Orcutt, Santa Maria, Santa Ynez, and Solvang (County of Santa Barbara 2025).

PG&E generates power from a variety of energy sources, including nuclear, large hydropower, natural gas, and renewable resources, such as wind, solar, small hydropower, and geothermal sources. Approximately 37 percent of the PG&E 2023 electricity purchases were from renewable sources (PG&E 2024b). The annual electricity sale to customers in 2023 was approximately 72,933 GWh (PG&E 2024b).

Central Coast Community Energy

Central Coast Community Energy (3CE) is a Community Choice Aggregator, which is a public agency that sources renewable electricity. 3CE serves the unincorporated Santa Barbara County and some of its cities, including Carpinteria, Goleta, Buellton, Guadalupe, and Santa Maria. 3CE assumes responsibility for electric power procurement (electric generation services) and purchases renewable electricity for homes and businesses. However, the local utility provider is responsible for electricity delivery. Customers can opt out of 3CE and return to the investor-owned utility (e.g., SCE, PG&E, or local utility) electricity service at any time.

Natural Gas

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs but relies upon out-of-state imports for nearly 90 percent of its natural gas supply (CEC 2024a). A majority of

natural gas consumed in California is for electricity generation, along with the industrial, residential, and commercial sections (CEC 2024a). Among energy commodities consumed in California, natural gas accounts for approximately 31 percent of total energy consumption (CEC 2024b). Natural gas is typically measured in terms of cubic feet (cf) or British thermal units (BTU).

Southern California Gas (SoCalGas) is the principal distributor of natural gas in Southern California, serving residential, commercial, and industrial markets. SoCalGas serves approximately 21.1 million customers in more than 500 communities encompassing approximately 24,000 square miles throughout central and southern California, from the city of Visalia to the Mexican border (SoCalGas 2024). In Santa Barbara County, SoCalGas serves Ballard, Betteravia, Buellton, Carpinteria, Casmalia, Cuyama, Ellwood, Goleta, Guadalupe, Isla Vista, Las Cruces, Lompoc, Los Alamos, Los Olivos, Montecito, New Cuyama, Orcutt, Santa Barbara, Santa Maria, Santa Ynez, Sisquoc, Solvang, Summerland, Vandenberg AFB, and Vandenberg Village (SoCalGas 2009).

SoCalGas receives gas supplies from several sedimentary basins in the western U.S. and Canada, including supply basins located in New Mexico (San Juan Basin), West Texas (Permian Basin), the Rocky Mountains, and Western Canada as well as local California supplies (CGEU 2023). The traditional, southwestern U.S. sources of natural gas will continue to supply most of SoCalGas' natural gas demand. The Rocky Mountain supply is available but is used as an alternative supplementary supply source, and the use of Canadian sources provide only a small share of SoCalGas supplies due to the high cost of transport (CGEU 2023). The annual natural gas sale to customers in 2022 was approximately 897 billion cf (CGEU 2023).[1]

Transportation Energy

According to the CEC, natural gas accounted for approximately 31 percent of California's total energy consumption in 2021, based on a carbon dioxide equivalent basis (CEC 2024b). In 2023 (the most recent year for which data are available), Santa Barbara County consumed approximately 166 million gallons of gasoline and 29 million gallons of diesel fuel (CEC 2023b).[2] Petroleum-based fuels account for 89 percent of California's transportation fuel use (CEC 2021). California has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and greenhouse gases (GHGs) from the transportation sector, and reduce vehicle miles traveled (VMT). Additionally, California is transitioning to zero-carbon, renewable sources of power while rapidly electrifying large segments of the economy. The CEC predicts that the demand for gasoline and transportation fossil fuels in general will continue to decline as the sales of electric vehicles increases. New zero-emission vehicle sales grew from less than 8 percent in 2020 to more than 25 percent in the third quarter of 2023 (CEC 2024b).

[1] Daily natural gas usage in 2022 was 2,458 million cf; annual value derived by multiplying daily values by 365 days.

[2] Non-Retail diesel sales, which comprise approximately 34.6% of all diesel sales, are not reported in this data. The data is adjusted to include the non-retail diesel sales.

3.6.3 Regulatory Framework

Federal

Energy Policy Act of 2005

The Energy Policy Act of 2005 includes provisions for renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy. The Renewable Fuel Standard (RFS) program was created under the Energy Policy Act of 2005 and established the first renewable fuel volume mandate in the United States.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act, enacted by Congress in 2007, is designed to improve vehicle fuel economy and help reduce U.S. dependence on foreign oil. It expands the production of renewable fuels, reducing dependence on oil, and confronting global climate change. Specifically, it does the following:

- Increases the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard, requiring fuel producers to use at least 36 billion gallons of biofuel in 2022, which represents a nearly five-fold increase over current levels.
- Reduces U.S. demand for oil by setting a national fuel economy standard of 35 miles per gallon by 2020 – an increase in fuel economy standards of 40 percent.

Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 (EPCA) is a United States Act of Congress that responded to the 1973 oil crisis by creating a comprehensive approach to federal energy policy. The primary goals of EPCA are to increase energy production and supply, reduce energy demand, provide energy efficiency, and give the executive branch additional powers to respond to disruptions in energy supply. Most notably, EPCA established the Strategic Petroleum Reserve, the Energy Conservation Program for Consumer Products, and Corporate Average Fuel Economy (CAFE) regulations.

United States Department of Transportation, United States Department of Energy, United States Environmental Protection Agency, and National Highway Traffic Safety Administration (NHTSA)

At the federal level, the United States Department of Transportation (USDOT), United States Department of Energy (USDOE), and United States Environmental Protection Agency (USEPA) are three agencies with substantial influence over national energy policies related to transportation fuels consumption. Generally, federal agencies influence transportation energy consumption through establishment and enforcement of fuel economy standards for automobiles and light trucks, through funding energy-related research and development projects, and through funding for transportation infrastructure projects.

Established by the U.S. Congress in 1975, the CAFE Standards (49 CFR Parts 531 and 533) reduce energy consumption by increasing the fuel economy of cars and light trucks. The National Highway

Traffic Safety Administration (NHTSA) and USEPA jointly administer the CAFE standards. When these standards are raised, automakers respond by creating a more fuel-efficient fleet.

In March 2020, USDOT and USEPA issued the final Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule, which amended the CAFE standards and tailpipe carbon dioxide emissions standards for passenger cars and light trucks and establishes new standards covering model years 2021 through 2026 (USEPA 2020). On January 20, 2021, the President issued Executive Order 13990 "Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis" directing USEPA to consider whether to propose suspending, revising, or rescinding the standards previously revised under the SAFE Vehicles Rule for Model Years 2021 through2026. In February 2022, USEPA issued the Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards, which revises the GHG standards beginning for vehicles in model year 2023 through model year 2026 and establishes the most stringent GHG standards ever set for the light-duty vehicle sector that are expected to result in average fuel economy label values of 40 mpg, while the standards they replace (the SAFE rule standards) would achieve only 32 mpg in model year 2026 vehicles (USEPA 2020).

On June 7, 2024, the NHTSA announced the "Final Rule for CAFE Standards for Model Years 2027 through 2031 and Heavy-Duty Pickup Trucks and Vans (HDPUV) Fuel Efficiency Standards for Model Years 2030 through 2035." The final rule establishes standards that would require an industry-wide fleet average of approximately 50.4 mpg in model year 2031 for passenger cars and light trucks, and an industry fleet-wide average for HDPUVs of roughly 2.851 gallons per 100 miles in model year 2035 (NHTSA 2024). The final CAFE standards increase at a rate of 2 percent per year for passenger cars in model year 2027 through 2031 and 2 percent per year for light trucks in model years 2029 through 2031 (NHTSA 2024). The final HDPUV fuel efficiency standards increase at a rate of 10 percent per year for model years 2030 - 2032 and 8 percent per year for model years 2033 through 2035 (NHTSA 2024).

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011 USEPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014 through 2018. Building on the first phase of standards, in August 2016, USEPA and NHTSA finalized Phase 2 standards for medium and heavy-duty vehicles through model year 2027 that will improve fuel efficiency, a 5 to 25 percent reduction over 2017 baseline, and cut carbon pollution. The Phase 2 standards are expected to lower CO_2 emissions by approximately 1.1 billion metric tons (USEPA 2016).

State

California Building Standards Code (Title 24, Parts 6 and 11)

The California Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6) were adopted to ensure that building construction and system design and installation achieve energy efficiency and preserve outdoor and indoor environmental quality. The current California Building Energy Efficiency Standards (Title 24 standards) are the 2022 Title 24 standards, which became effective January 1, 2023. The 2022 Title 24 standards include efficiency improvements to the residential standards for attics, walls, water heating, and lighting; and efficiency improvements to the non-residential standards include alignment with the American Society of Heating and Air-Conditioning Engineers (ASHRAE) 90.1-2019 national standards (CEC 2022b).

The California Green Building Standards Code (CCR, Title 24, Part 11), commonly referred to as the CALGreen Code, became effective in 2023. The 2022 CALGreen Code includes mandatory measures for non-residential development related to site development, energy efficiency, water efficiency and conservation; material conservation and resource efficiency; and environmental quality (CBSC 2022). For example, the 2022 standards encourage efficient electric heat pumps, establish electric-ready requirements for new homes, expand solar photovoltaic and battery storage standards, strengthen ventilation standards, and more.

In September 2024, the CEC approved the 2025 California Building Energy Efficiency Standards, which would go into effect on January 1, 2026. The 2025 standards build on the 2022 standards by aiming to decarbonize buildings by encouraging energy efficiency, solar and battery storage, and shifting times of energy use by expanding heat pump requirements for space and water heating in more building types, including low-rise multifamily units. They also introduce stronger electric-ready mandates to ease future transitions to electric appliances. Updates to solar and battery storage standards now align with revised net billing policies for high-rise multifamily and nonresidential buildings. Additionally, nonresidential buildings face new space conditioning controls, while multifamily buildings must meet stricter ventilation requirements for better indoor air quality. These updates enhance energy efficiency, reduce emissions, and will save Californians an estimated $4.8 billion in energy costs over 30 years (CEC 2025).

Renewables Portfolio Standard

The State has adopted regulations to increase the proportion of electricity from renewable sources. SB 350 (Chapter 547, Statues of 2015) set the Renewables Portfolio Standard (RPS) to 50 percent by 2030, including interim targets of 40 percent by 2024 and 45 percent by 2027. In 2018, SB 100 further increased California's RPS and requires retail sellers and publicly owned utilities to procure eligible renewable electricity for 44 percent of retail sales by the end of 2024, 52 percent by the end of 2027, and 60 percent by the end of 2030; and requires CARB to plan for 100 percent eligible renewable energy resources and zero-carbon resources by the end of 2045.

Senate Bill 1389

SB 1389 (Public Resources Code Sections 25300–25323; SB 1389) requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the State's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the State's economy; and protect public health and safety (Public Resources Code Section 25301(a)). The Integrated Energy Policy Report provides the results of the CEC's assessments related to energy sector trends, building decarbonization and energy efficiency, zero-emissions vehicles, energy equity, climate change adaptation, electricity reliability in the Southern California region, natural gas assessment, and electricity, natural gas, and transportation energy demand forecasts.

Greenhouse Gas Emissions Legislation

In 2006, the California State Legislature adopted AB 32 (codified in the California Health and Safety Code [HSC], Division 25.5 – California Global Warming Solutions Act of 2006), which focuses on reducing GHG emissions in California to 1990 levels by 2020. In 2016, the California State Legislature adopted SB 32 and its companion bill, AB 197, which amended HSC Division 25.5 and established a new

climate pollution reduction target of 40 percent below 1990 levels by 2030 and included provisions to ensure that the benefits of state climate policies reach into disadvantaged communities. The Legislature enacted Assembly Bill (AB) 1279, The California Climate Crisis Act, on September 16, 2022 (CLI 2022). AB 1279 establishes the policy of the State of California to achieve net zero GHG emissions as soon as possible but no later than 2045, and to achieve and maintain net negative GHG emissions thereafter. Additionally, AB 1279 mandates that by 2045, statewide anthropogenic GHG emissions are to be reduced at least 85 percent below 1990 levels. SB 350, signed October 7, 2015, is the Clean Energy and Pollution Reduction Act of 2015. SB 350 established California's 2030 GHG reduction target of 40 percent below 1990 levels and requires the State to double statewide energy efficiency savings in electricity and natural gas end uses by 2030

While these legislative bills focus on reducing statewide GHG emissions, they have co-benefits of improving energy and transportation fuel efficiency and reducing energy and fuel demands. Refer to Section 3.5, *Greenhouse Gas Emissions and Global Climate Change*, for additional information regarding these legislative bills.

Mobile Sources

Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling

In 2004, CARB adopted an Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling in order to reduce public exposure to diesel particulate matter emissions (Title 13 CCR Section 2485 and Title 17 CCR Section 93115). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure does not allow diesel-fueled commercial vehicles to idle for more than 5 minutes at any given location. While the goal of this measure is primarily to reduce public health impacts from diesel emissions, compliance with the regulation also results in energy savings in the form of reduced fuel consumption from unnecessary idling.

In-Use Off-Road Diesel-Fueled Fleets Regulation

In 2007, CARB approved the "In-Use Off-Road Diesel Fueled Fleets Regulation" to reduce emissions from existing (in-use) off-road diesel vehicles that are used in construction and other industries. Under this regulation, equipment fleets must demonstrate that it has either met the fleet average target for each compliance year or has completed the Best Available Control Technology requirements (BACT). Large fleets have compliance deadlines each year from 2014 through 2023, medium fleets each year from 2017 through 2023, and small fleets each year from 2019 through 2028. While the goal of this regulation is primarily to reduce public health impacts from diesel emissions, compliance with the regulation also results in energy savings in the form of reduced fuel consumption from the use of more fuel-efficient engines.

Truck and Bus Regulation

In 2008, CARB approved the Truck and Bus regulation to reduce particulate matter and nitrogen oxide emissions from existing diesel vehicles operating in California (13 CCR, Section 2025, subsection (h)). The regulation aims to reduce emissions by installation of diesel soot filters, and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models. While these regulations primarily target reductions in criteria air pollutant emission, they have co-benefits of minimizing transportation fuel consumption due to improved engine efficiencies.

CARB's Advanced Clean Car Program

The Advanced Clean Cars emissions-control program was approved by CARB in 2012 (CARB 2024a). The program requires a greater number of zero-emission vehicle models for years 2015 through 2025 to control smog, soot and GHG emissions. This program includes the Low-Emissions Vehicle (LEV) regulations to reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles; and the zero-emission vehicle (ZEV) regulations to require manufacturers to produce an increasing number of pure ZEVs (meaning battery and fuel cell electric vehicles) with the provision to produce plug-in hybrid electric vehicles (PHEV) between 2018 and 2025.

In addition, Governor Gavin Newsom signed an executive order (Executive Order No. N-79-20) on September 23, 2020, that would phase out sales of new gas-powered passenger cars by 2035 in California with an additional 10-year transition period for heavy vehicles.

The primary mechanism for achieving the ZEV target for passenger cars and light trucks is CARB's Advanced Clean Cars II (ACC II) Program. The ACC II regulations focus on post-2025 model year light-duty vehicles, as requirements are already in place for new vehicles through the 2025 model year. A rulemaking package was presented to the Board in June 2022 and was adopted on November 30, 2022. Implementation of the ZEV and PHEV regulations reduce transportation fuel consumption by increasing the number of vehicles that are partially or fully electric-powered.

CARB's Advanced Clean Trucks Program

The Advanced Clean Trucks (ACT) regulations were approved on June 25, 2020, and require that manufacturers sell zero-emissions or near-zero-emissions trucks as an increasing percentage of their annual California sales beginning in 2024. The goal of this proposed strategy is to achieve nitrogen oxide (NOx) and GHG emission reductions through advanced clean technology, and to increase the penetration of the first wave of zero-emissions heavy-duty technology into applications that are well suited to its use (CARB 2024b). The percentage of zero-emissions truck sales is required to increase every year until 2035 when sales would need to be 55 percent of Classes 2b–3 (light/medium- and medium-duty trucks) truck sales, 75 percent of Classes 4–8 (medium- to heavy-duty trucks) straight truck sales, and 40 percent of truck tractor (heavy-duty trucks weighing 33,001 pounds or greater) sales. Additionally, large fleet operators (of 50 or more trucks) would be required to report information about shipments and services and their existing fleet operations.

Land Use and Transportation Planning

SB 375 (Chapter 728, Statutes of 2008), which establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG, was adopted by the state on September 30, 2008. In March 2018, CARB adopted per capita GHG emissions reduction targets of 13 percent by 2020 and 17 percent by 2035 relative to 2005 GHG emissions for the Santa Barbara County Association of Governments (SBCAG), which is the Metropolitan Planning Organization (MPO) for the region in which the Project is located (CARB 2018). While SB 375 focuses on per capita GHG emissions reductions, it would also reduce per capita transportation fuel demand. Under SB 375, the reduction target must be incorporated within each region's Regional Transportation Plan (RTP), which is used for long-term transportation planning, in a Sustainable Communities Strategy (SCS). Certain transportation planning and programming activities would then need to be consistent with the SCS; however, SB 375 expressly provides that the SCS does not regulate the use of land, and further provides that local land use plans and

policies (e.g., general plans and zoning codes) are not required to be consistent with either the RTP or SCS. See discussion of SBCAG's latest RTP/SCS below.

Regional

SBCAG serves as the MPO for Santa Barbara County as is responsible for developing and maintaining a long-range transportation plan for the region. SBCAG was established in 1966 as a voluntary council of governments and is recognized as an independent public agency under a joint powers agreement executed by Santa Barbara County and each of the eight general purpose city governments in the county. The governing board consists of all five, county board of supervisors plus one representative from each city council. SBCAG is designated as the Regional Transportation Planning Agency (RTPA), Airport and Land Use Commission (ALUC), and Local Transportation Authority (LTA) for the county. Pursuant to SB 375, SBCAG is responsible for developing the RTP and SCS for the region. In general, the SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce vehicle miles traveled from automobiles and light duty trucks and thereby reduce GHG emissions from these sources. For the SBCAG region, Connected 2050, adopted in August 2021, is the current RTP/SCS. Connected 2050 focuses on the continued efforts of the previous RTP/SCS plans for an integrated approach in transportation and land use strategies in development of the SBCAG region through horizon year 2050. Connected 2050 projects that the SBCAG region will meet the GHG per capita reduction targets established for the SBCAG region of 17 percent by 2035.

Local

County of Santa Barbara Comprehensive Plan

The County of Santa Barbara Comprehensive Plan includes an Energy Element (County of Santa Barbara 2015) and was adopted in 1994, republished June 2015, and amended in August 2024. The Comprehensive Plan is a long-range planning document that is applicable to the unincorporated communities within the County where the Project would be implemented. The Energy Element contains long-range planning guidelines and mechanisms to encourage energy efficiency and alternative energies in Santa Barbara County. The Energy Element contains the following goals and policies that address energy consumption that are applicable to the Project:

> **Goal 4: Water Use and Solid Waste.** Increase the efficiency of water and resource use to reduce energy consumption associated with various phases of using resources (pumping, distribution, treatment, heating, etc.).
>
> > ***Policy 4.1: Construction*.** Encourage recycling and reuse of construction waste to reduce energy consumption associated with extracting and manufacturing virgin materials.
> >
> > ***Policy 4.3: Reuse of Asphalt*.** Promote reuse of asphalt removed from roads and paved structures within the county and use of recycled materials in roadway and paved surface construction.
>
> **Goal 5: Alternative Energy.** Encourage the use of alternative energy for environmental and economic benefits and encourage opportunities for businesses that develop or market alternative energy technologies.
>
> > ***Policy 5.1: Environmental Analysis*.** In the consideration of alternative energy, the County shall consider the full life-cycle environmental effects and embedded energy requirements to provide

such alternative energy. The County shall encourage the use of those alternatives determined to present sufficient environmental benefits.

Policy 5.2: Alternative Energy Technologies. The County shall encourage the use of alternative energy technology in appropriate new and existing development.

Policy 5.4: Solar Photovoltaic Equipment. The County shall use solar photovoltaic equipment in county applications when it is cost-effective on a life-cycle cost basis.

Policy 5.13: Alternative energy Technology Businesses. Among broader county-wide efforts to attract businesses, the County shall initiate planning efforts to pursue desired businesses that develop or market alternative energy technologies.

County of Santa Barbara Energy and Climate Action Plan (ECAP)

The County's 2015 Energy & Climate Action Plan (County of Santa Barbara 2020) sunseted in 2020. The goal of the ECAP was to reduce GHG emissions by 15 percent (below 2007 levels by 2020) through the implementation of 53 measures. Results of the ECAP were that 41 out of 53 measures were either initiated or completed by 2020, five measures were not started, and seven measures were discontinued (County of Santa Barbara 2020). An estimated 100,754 out of 226,760 (44 percent) metric tons of carbon dioxide equivalent ($MTCO_2e$) were reduced or avoided from ECAP implementation (County of Santa Barbara 2020). Additional measures from two other programs (Community Choice Energy and the Tajiguas Landfill ReSource Center) achieved an estimated reduction of 156,768 $MTCO_2e$ (County of Santa Barbara 2020). The total reductions allowed the County of Santa Barbara to reach 69 percent of the ECAP's reduction target, reflecting a three percent decline from 2016. However, the County remained 11 percent above 2007 baseline levels (County of Santa Barbara 2020). The reduction of GHG emissions generally has co-benefits of increasing energy and fuel efficiency and reducing energy and fuel consumption.

County of Santa Barbara 2030 Climate Action Plan

The 2030 Climate Action Plan (CAP) (County of Santa Barbara 2023b) has set a goal to achieve a 50 percent reduction of communitywide greenhouse gas emissions from 2018 levels by 2030. The measures laid out in the 2030 CAP provide a foundation that aligns with the State of California's goals to reduce GHG emissions to 40 percent below 1990 levels and achieve carbon neutrality by 2045. The CAP's six focus areas are: 1) Housing and Transportation; 2) Clean Energy; 3) Waste, Water, and Wastewater; 4) Nature-Based Solutions; 5) Low-Carbon Economy; and 6) Municipal Operations (County of Santa Barbara 2023b). General measures that apply to the Project include Clean Energy Action CE-1.9 Electrification Permitting, which would implement best practices and streamline permitting for projects with associated renewable energy and energy storage systems. Additionally, Action CE-1.10 Utility Scale Solar, aims to expand opportunities for solar development on various land types and is implemented by the proposed Project. The 2030 CAP was adopted by the County Board of Supervisors on August 27, 2024.

Santa Barbara County Energy Assurance Plan

The Santa Barbara Energy Assurance Plan (EAP) is a strategic planning document developed to enhance energy reliability, resilience, and sustainability through 2030 (County of Santa Barbara 2024). It focuses on a just transition to a cleaner, more community-powered electricity system, especially for populations most vulnerable to climate impacts and grid disruptions. The plan sets goals to achieve by 2030, including increasing the County's total renewable energy capacity to 700 MW (250 MW from utility-scale and

450 MW from distributed sources) and increasing energy storage capacity to 245 MW (200 MW utility-scale and 45 MW distributed). Additionally, the plan sets objectives to enhance participation in demand response programs and establish 10 county-wide community resilience hubs that would store backup power.

To meet these objectives, the County will pursue a combination of distributed and utility-scale energy solutions. This includes promoting solar and battery storage systems at homes and businesses, enabling large-scale renewable energy projects, and ensuring critical buildings can maintain operations during outages. Community engagement is central to the plan—resilience hubs and widespread demand response participation will support local preparedness. The EAP also incorporates an Energy Assurance Map, which shows existing infrastructure, climate hazards, and social vulnerability to prioritize equitable investment.

Santa Barbara County Strategic Energy Plan

The Santa Barbara County Strategic Energy Plan (SEP), published in August 2019, provides a comprehensive strategy to reduce greenhouse gas emissions, strengthen local energy resilience, and expand renewable energy use throughout the County. The SEP addresses the County's vulnerability to energy disruptions—due in part to its unique location at the end of the PG&E and SCE service areas, respectively, and the exposure to wildfire, earthquake, and extreme weather risks. The SEP focuses on goals to increase local renewable energy generation, improve energy efficiency, and protect critical facilities from grid outages. The plan identifies significant local potential for solar systems, both rooftop and utility-scale. Strategies outlined in the SEP to achieve increased renewable energy and reliability include streamlining permitting, modernizing the grid to support distributed energy, creating financial incentives to offset initial investment costs, and boosting public outreach and education on the benefits of renewable energy. The Project seeks to remove identified barriers to permitting of solar energy systems and facilities.

Santa Barbara County Code

Santa Barbara County Code Article VI adopts the California Energy Code, 2022 Edition as the Primary Energy Code of the County. The California Energy Code has specific requirements for building design to reduce energy consumption, including the use of certain building materials to ensure a greater degree of energy efficiency during building operation and construction and energy efficiency standards for appliances, lighting amenities, and water fixtures, among other project components.

3.6.4 Project Impact Analysis

Thresholds of Significance

CEQA Appendix G Significance Thresholds

Pursuant to the *CEQA Guidelines*, potentially significant energy impacts would result if the project would:

a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

County of Santa Barbara Environmental Thresholds

The County's Environmental Thresholds and Guidelines Manual (August 2024) does not have a specific energy section, thresholds, or guidelines.

Methodology

Energy consumption is analyzed herein in terms of construction and operational energy. Energy consumption associated with decommissioning would be similar to or less than for construction as decommissioning would involve the use of similar types of heavy-duty equipment and vehicles, but at a lesser intensity, reduced numbers of equipment, and/or reduced duration. Therefore, energy consumption associated with decommissioning is assessed within the construction assessment.

Construction of future solar energy systems and facilities enabled under the Project would result in energy consumption (i.e., gasoline and diesel transportation fuels) from the use of heavy-duty construction equipment, on-road trucks, and construction workers commuting to and from the future solar energy project areas. Natural gas is not anticipated to be used during construction activities. Electricity may be consumed during construction activities for some electric-powered equipment, from temporary construction office trailers during construction, or from the conveyance of water used for dust control, if required.

For the purposes of this Program EIR and to provide for a conservative and environmentally protective analysis, the future projects are modeled based on the proposed tier category of solar energy systems and facilities as described in Chapter 2, *Project Description*, Table 2, *Proposed Solar Energy System and Facility Tiers*. The table shows that future solar development would fall into four tiers, ranging from rooftop or small ground-mounted systems to utility-scale solar energy facilities. Specific projects are not proposed in this Program-level EIR. Thus, for the purposes of this program-level assessment, solar facilities were grouped into two categories for modeling purposes, consisting of Tier 1 and Tier 2 projects (individual and large-scale solar projects) and Tier 3 and Tier 4 projects (community and utility-scale solar projects). While no project-level information is available at the time of this program-level assessment, the nature and intensity of future solar energy systems and facilities enabled under the Project could be represented by the two modeling scenarios analyzed. As such, for the purposes of analysis in this CEQA document, construction activities and methods employed for the model projects have been quantitatively analyzed and are estimated to be reasonably comparable to those activities that would occur for the installation of future projects in the County.

Heavy-duty construction equipment would be primarily diesel-fueled. The assumption that diesel fuel would be used for most equipment represents a conservative scenario for maximum potential energy use during construction. The California Emissions Estimator Model (CalEEMod), which was used for the air quality and GHG emissions analyses, was used to determine energy consumption from equipment. On-road fuel consumption was calculated based on CARB's on-road vehicle emissions model, EMFAC2021 (which is a model that is also incorporated into CalEEMod). The number of construction workers, haul trucks, and vendor trucks that would be required would vary based on the phase of construction and activity taking place. This analysis takes into consideration the equipment and processes employed during construction of future solar energy systems and facilities enabled under the Project to

quantitatively determine whether energy consumed during construction would be wasteful, inefficient, or unnecessary.

As described in Chapter 2, *Project Description*, Tier 1 projects are those up to and including 0.5 acres in size and Tier 2 projects are those on existing developed lands that are greater than 0.5 acres and up to and including 5.0 acres. For the purposes of providing a conservative modeling assessment, Tier 1 and Tier 2 projects are modeled as a 5 -acre project size with the following general assumptions described below (see Appendix B). Projects less than 5.0 acres in size would typically result in lesser impacts than those disclosed herein for a 5-acre project. Construction phases would typically include site preparation, grading, and solar facility installation and construction, potentially lasting up to approximately 34 months (about three years) of construction based on conservative assumptions, although most Tier 1 and Tier 2 projects would likely be closer to one to two years of construction. Tier 1 and Tier 2 projects are assumed to have a daily round-trip maximum of up to 60 worker trips, 12 vendor truck trips, and 20 haul truck trips. It is assumed on-site construction equipment would be required throughout the construction duration, and may include and is not limited to graders, forklifts, backhoes, and cranes. Model assumptions for Tier 1 and Tier 2 projects are summarized in Table 3.3-3 in Section 3.3, *Air Quality*.

As described in Chapter 2, *Project Description*, Tier 3 projects are those on developed or undeveloped lands greater than 0.5 acres and up to and including 30.0 acres and Tier 4 projects are those greater than 30.0 acres. For the purposes of providing a conservative modeling assessment, Tier 3 and Tier 4 projects are modeled as a 600-acre project size with the following general assumptions described below (see Appendix B). Projects less than 600 acres in size would typically result in less impacts than those disclosed herein for a 600-acre project. Construction phases would typically include site preparation, grading, and solar facility installation and construction, potentially lasting up to approximately 53 months (about four and a half years) of construction based on conservative assumptions, although most Tier 3 and Tier 4 projects would likely be closer to one to three years of construction. Tier 3 and Tier 4 projects are assumed to have a daily maximum of up to 120 worker trips, 100 vendor truck trips, and 50 haul truck trips. It is assumed on-site construction equipment would be required throughout the construction duration, and may include and is not limited to graders, forklifts, backhoes, and cranes. Model assumptions for Tier 3 and Tier 4 projects are summarized in Table 3.3-4 in Section 3.3, *Air Quality*.

Once constructed, the solar components would generally operate passively, with minimal employee trips, occasional maintenance, and periodic solar panel washing. Operational activities that would generate mobile source emissions for any given solar generation site and associated facilities would consume minimal energy resources. The Project would promote sustainable solar energy generation for both local and utility-scale use. Thus, operational energy is analyzed qualitatively.

Project Impacts

This section identifies and discusses potential energy impacts associated with the Project. **Table 3.6-1** provides a summary of the Project's potentially significant energy impacts. A detailed discussion of each impact follows.

TABLE 3.6-1
SUMMARY OF ENERGY IMPACTS

Energy Impacts	Impact Classification	Mitigation Measures	Residual Impact
Impact ENG 1: Implementation of the Project could result in a potentially significant environmental impact if energy (electricity, natural gas, or transportation) used during construction or operation results in the wasteful, inefficient, or unnecessary consumption of energy resources	Insignificant	No mitigation required	Insignificant
Impact ENG 2: Implementation of the Project could conflict with or obstruct a state or local plan for renewable energy or energy efficiency if, during construction or operation, the Project doesn't comply with applicable rules or regulations, resulting in a significant impact	Insignificant	No mitigation required	Insignificant
Cumulative Impacts	Insignificant	No mitigation required	Insignificant

This section describes generalized energy impacts associated with the future solar energy systems and facilities enabled by the Project. The two categories of solar projects analyzed in this Program EIR would be representative of future projects of similar size and scale located in other areas of the County. In general, implementation of future individual projects envisioned by the Project could result in energy impacts as described in the following sections.

Threshold a) The Project would result in a potentially significant environmental impact if the Project would result in wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

Impact ENG 1: Implementation of the Project could result in a potentially significant environmental impact if energy (electricity, natural gas, or transportation) used during construction or operation results in the wasteful, inefficient, or unnecessary consumption of energy resources.

Construction and Decommissioning

Construction of future solar energy systems and facilities enabled under the Project would result in energy consumption primarily from the use of heavy-duty construction equipment, on-road trucks, and construction workers commuting to and from the future development sites. Natural gas is not anticipated to be used during construction activities. The number of construction workers, haul trucks and vendor trucks that would be required would vary based on the phase of construction and activity taking place. The estimated total energy consumed during construction for the two categories of solar projects is shown in **Table 3.6-2**, *Representative Project Construction Energy Use*. Calculation details are provided in Appendix E of this Draft PEIR. The annual average fuel usage for Tier 1 and Tier 2 projects, as modeled based on the representative program-level assumptions described in the Methodology section, would represent less than 0.01 percent of the 2023 annual on-road gasoline-related energy consumption and 0.20 percent of the 2023 annual diesel fuel-related energy consumption in Santa Barbara County. The annual average fuel

usage for Tier 3 and Tier 4 projects, as modeled based on the representative program-level assumptions described in the Methodology section, would represent less than 0.01 percent of the 2023 annual on-road gasoline-related energy consumption and 0.74 percent of the 2023 annual diesel fuel-related energy consumption in Santa Barbara County.

TABLE 3.6-2
REPRESENTATIVE PROJECT CONSTRUCTION ENERGY USE

Energy Type	Total Quantity	Annual Average Quantity During Construction	Annual Average Percentage of County
TIER 1 AND TIER 2 PROJECTS			
Electricity			
Construction Office	116 MWh	40.9 MWh	<0.01%
Electricity from Water (Dust Control)	79.9 MWh	28.2 MWh	<0.01%
Total Electricity	**195.9 MWh**	**69.1 MWh**	**<0.01%**
Gasoline			
On-Road Construction workers	13,918 gallons	4,913 gallons	<0.01%
Total Gasoline	**13,918 gallons**	**4,913 gallons**	**<0.01%**
Diesel			
On-Road Construction Equipment	25,763 gallons	9,094 gallons	<0.01%
Off-Road Construction Equipment	135,361 gallons	47,782 gallons	0.20%
Total Diesel	**161,124 gallons**	**56,876 gallons**	**0.20%**
TIER 3 AND TIER 4 PROJECTS			
Electricity			
Construction Office	180.7 MWh	40.9 MWh	<0.01%
Electricity from Water (Dust Control)	159.9 MWh	36.2 MWh	<0.01%
Total Electricity	**340.6 MWh**	**77.2 MWh**	**<0.01%**
Gasoline			
On-Road Construction workers	42,170 gallons	9,554 gallons	<0.01%
Total Gasoline	**42,170 gallons**	**9,554 gallons**	**<0.01%**
Diesel			
On-Road Construction Equipment	79,729 gallons	18,064 gallons	0.06%
Off-Road Construction Equipment	866,664 gallons	196,358 gallons	**0.68%**
Total Diesel	**946,394 gallons**	**214,422 gallons**	**0.74%**

NOTES: kWh = kilowatt-hours
a. Detailed calculations are provided in Appendix E of this PEIR.
SOURCE: ESA, 2025.

At the end of the operational life of the solar systems, the process of decommissioning would occur. This process involves several steps that may include site assessment, system disconnection, removal of panels and associated equipment (inverters, wiring, racking), transportation of materials, and proper recycling or disposal. Decommissioning may also include land restoration for ground-mounted systems. This process may involve the use of on-site heavy-duty equipment and generate off-site vehicle trips similar to or less than those assumed under Project construction. Therefore, the process of decommissioning would have similar or less energy use as assessed for construction.

Construction and decommissioning of the future solar energy facilities would utilize fuel-efficient trucks and equipment consistent with federal and State regulations, such as fuel efficiency regulations in accordance with CARB's Advanced Clean Cars I and II standards, the anti-idling regulation in accordance with CCR, Title 13, Section 2485, and fuel requirements in accordance with CCR, Title 17, Section 93115, as well as the In-Use Off-Road Diesel-Fueled Fleets regulation (CARB 2024c). As such, the Project would comply with State measures to reduce the inefficient, wasteful, and unnecessary consumption of energy, such as petroleum-based transportation fuels. While these regulations are intended to reduce construction-related air pollutant emissions, compliance with the anti-idling and emissions regulations discussed above would also result in fuel savings from the use of more fuel-efficient engines. Diversion of construction and decommissioning debris would reduce truck trips to landfills and increase the amount of waste recovered (e.g., recycled, reused, etc.) at material recovery facilities, thereby further reducing transportation fuel consumption.

During construction and decommissioning of future solar energy systems and facilities enabled under the Project, electricity would be used for the construction office (lights, electronic equipment, and heating and cooling), water conveyance for dust control during earthmoving activities associated with trenching and installation phase, and other construction and decommissioning activities. Electricity would be delivered to project sites by either utility PG&E or SCE. As shown in Table 3.6-2, annual average construction electricity usage would be approximately 196 MWh over the approximately 34-month (about three years based on conservative assumptions, as previously discussed) construction duration for the Tier 1 and Tier 2 projects and approximately 341 MWh over the approximately 53-month (about four and a half years based on conservative assumptions, as previously discussed) construction duration for Tier 3 and Tier 4 projects. The electricity demand would be within the supply and infrastructure capabilities of both SCE (which reported 79,256 GWh of total energy sales in 2023) and PG&E (which reported 72,933 GWh of total energy sales in 2023). As discussed above, the process of decommissioning would have similar or less energy use as assessed for construction. The electricity demand at any given time would vary throughout the construction and decommissioning periods based on the activities being performed and would cease upon completion of construction and decommissioning. Electricity use from construction and decommissioning would be short-term, limited to working hours, and used for necessary construction-related activities.

Energy would be consumed in the form of gasoline and diesel fuel to power construction equipment and worker commute vehicles. However, this energy use would be inherently short-term, not substantial, and would be a necessary energy expenditure to facilitate the development of solar facilities on various land types, which could ultimately displace fossil fuel-based electricity generation. Since the Project would encourage greater potential for renewable solar generation within the County, energy impacts from Project implementation would be insignificant. Therefore, the Project would not result in wasteful, inefficient, and unnecessary consumption of energy use for construction and decommissioning.

Operation

Solar components that would operate as a result of future solar energy systems and facilities enabled under the Project would generally operate passively, with minimal employee trips, occasional maintenance, and periodic solar panel washing. Operational activities would require a limited amount of vehicle trips for any given solar generation site and associated facilities would consume minimal energy resources. The Project would promote sustainable solar energy generation for both local and utility-scale use.

Future solar projects that would be developed with the adoption of the amendments may include battery energy storage system (battery ESS) facilities. Battery ESS facilities are commonly integrated with solar facilities to store excess solar energy generated during the day and discharge it later, improving grid reliability and allowing solar power to meet demand during non-solar hours. These systems are typically co-located with solar facilities and use battery technology connected through shared inverters. However, battery ESS are not 100 percent efficient since electricity is lost in the charge/discharge cycle. This is measured by round-trip efficiency, which averages approximately 82 percent for U.S. utility-scale batteries (TEF, 2025).

The Project would stimulate local renewable energy generation by allowing solar development in various areas of the unincorporated County and by establishing a streamlined permitting process to promote individual solar, large-scale solar, and community and utility-scale solar developments to reach this potential. The Project would expand the potential for permitted solar areas, encouraging sustainable energy generation within the County. For illustrative purposes, the potential electricity generated was estimated for a 1 MW system (representative of Tier 1 and Tier 2 projects) and a 50 MW system (representative for Tier 3 and Tier 4 projects). For a 1 MW system, approximately 1,756 MWh would be generated annually (National Renewable Energy Laboratory 2025). For a 50 MW system, approximately 87,776 MWh would be generated annually (National Renewable Energy Laboratory 2025). These estimates would be representative of the renewable energy generation that may occur from future solar energy systems and facilities enabled under the Project. With the addition of the battery ESS facilities, it is expected that some inefficiencies may occur. Battery ESS facilities have inherent energy loss from multiple factors, including battery chemical degradation, particularly from charge-discharge cycles, and external environmental conditions, particularly temperature and humidity, that can accelerate degradation. As such, due to efficiency losses in the system, the amount of potential renewable solar electricity generated by future solar energy systems and facilities enabled under the Project may be less than that described above.

Thus, since operation of the Project would only use the necessary fuel and electricity to provide maintenance activities and would not induce new substantial energy demand, the Project would not result in the wasteful, inefficient, and unnecessary use of energy. As described, the Project would provide a source of renewable energy generation and storage within the County. Therefore, Projects impacts would be insignificant.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be insignificant.

Threshold b) The Project would result in a significant impact if the project would conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Impact ENG 2: Future solar energy systems and facilities enabled under the Project could conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Construction and Decommissioning

Construction and decommissioning equipment would be required to comply with federal, state, and regional requirements where applicable. With respect to truck fleet operators, USEPA and NHSTA have adopted fuel-efficiency standards for medium- and heavy-duty trucks that will be phased in over time. Phase 2 heavy-duty truck standards, which cover model years 2021 through 2027, require the phase-in of a 5 to 25 percent reduction in fuel consumption over the 2017 baseline depending on the compliance year and vehicle type (USEPA 2024). These regulations would have an overall beneficial effect on reducing fuel consumption from trucks over time as older trucks are replaced with newer models that meet the standards. The Project would also comply with Goal 4, Policies 4.1, Construction, and 4.3, Reuse of Asphalt, by reusing and recycling construction and decommissioning waste to reduce energy consumption and by reusing asphalt where applicable.

In addition, construction and decommissioning equipment and trucks are required to comply with CARB regulations regarding heavy-duty truck idling limits of five minutes at a location. Additionally, off-road emissions standards will increase equipment efficiencies as they are phased in over time and less-efficient equipment is phased out of construction equipment fleets. These limitations would result in an increase in energy savings in the form of reduced fuel consumption from more fuel-efficient engines. Although these requirements are intended to reduce criteria pollutant emissions, compliance with the anti-idling and emissions regulations would also result in the efficient use of construction-related energy. Thus, based on the information above, construction of the future solar energy facilities enabled by the Project would comply with existing energy standards.

It is anticipated that future solar energy systems and facilities enabled under the Project would be of similar or smaller size and scale, with comparable or smaller construction and decommissioning efforts in terms of overall intensity, would employ a similar or smaller mix of construction and decommissioning methods and equipment, and would result in similar or smaller construction and decommissioning durations as those analyzed in this document. Construction and decommissioning equipment used for the development of future solar energy systems and facilities enabled under the Project would be consistent with the energy standards applicable to construction equipment including limiting idling fuel consumption and using contractors that comply with applicable CARB regulatory standards that affect energy efficiency. Thus, future solar projects would be expected to use approximately the same or smaller amount of energy for construction and decommissioning. Therefore, the Project would comply with existing energy standards and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and construction and decommissioning impacts would be insignificant.

Operation

Future solar energy systems and facilities enabled under the Project would generally occur passively, with only occasional vehicle trips for maintenance activities, solar panel washing activities, and minimal on-

site employee trips. The Project would support renewable energy generation within the County, which supports various Countywide policy documents and associated measures. Additionally, it is expected that future solar energy systems and facilities enabled under the Project may include battery ESS facilities, which would store excess solar energy with abilities to discharge it later. The integration of solar with associated battery ESS systems would help expand renewable energy sources and improve grid reliability in the County.

Solar systems and facilities under the Project would be designed in a manner that is consistent with relevant energy conservation plans designed to encourage development that results in the efficient use of energy resources. With respect to operational transportation-related fuel usage, the Project would support statewide efforts to improve transportation energy efficiency and reduce transportation energy consumption with respect to private automobiles. The Project would comply with the Advanced Clean Cars I and II Standards, which are designed to result in more efficient use of transportation fuels. The Project would only require occasional trips for maintenance activities and minimal on-site employee trips and would not induce growth.

The Project would stimulate local renewable energy generation by allowing solar development in various areas of the County and by establishing a streamlined permitting process to promote solar energy system and facility development, thereby encouraging sustainable energy generation within the unincorporated areas of the County. Thus, the Project would support the 2030 CAP Action CE-1.9 Electrification Permitting, which would implement best practices and streamline permitting for projects with associated renewable energy and energy storage systems. In addition, the Project would fulfill Action CE-1.10 Utility Scale Solar, which aims to update the County's ordinances in order to expand opportunity for solar development on various land types. These actions have been identified by the County as methods to help clean energy initiatives within the County. The Project would support Goal 5: Alternative Energy which encourages the use of renewable energies, including solar photovoltaic systems. Through Policy 5.13, the County aims to initiate planning efforts to encourage alternative energy technologies and businesses (County of Santa Barbara 2015). The Project also aligns with the goals outlined in the County's EAP and the SEP because the Project would encourage solar energy systems and facilities, the associated storage of the generated energy, and promote reliability for the grid. In the SEP, streamlining permitting processes is explicitly identified as a recommended action to overcome challenges to renewable energy development. The plan notes that "regulatory and permitting hurdles can be a deterrent to investment and project development," particularly for distributed solar energy (Santa Barbara County 2019). The Project would facilitate the process of developing local solar energy projects in the unincorporated areas of the County, thereby increasing renewable energy generation, improving energy efficiency, and improving grid reliability—all core goals of the SEP.

Similarly, the EAP sets a goal of installing 450 MW of distributed renewable energy by 2030 and emphasizes the development of solar and battery storage systems as a strategy to enhance energy resilience and increase local energy supply and storage (County of Santa Barbara 2024). The Project would directly support the goals and strategies in the EAP by expanding areas in which community-scale and utility-scale solar energy systems can be located and clarifying and streamlining the process, thereby reducing cost barriers to solar development and encouraging more residents and businesses to adopt solar and storage systems. Therefore, the Project would contribute to the realization of the goals stated within the EAP and would increase local energy resilience and renewable energy in the County.

The Project would support a variety of solar developments, including utility-scale solar facilities, in the unincorporated portions of the County, which would help the County increase its use of renewable energy.

Thus, operation of future solar energy systems and facilities enabled under the Project would comply with existing energy standards and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, Project operation impacts would be insignificant**.**

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be insignificant.

3.6.5 Cumulative Impacts Analysis

As discussed above, construction, decommissioning, and operation of future solar energy facilities enabled under the Project would not induce new substantial energy demand. Future solar energy systems and facilities enabled under the Project would provide renewable energy for development as well as electricity providers, improving grid reliability and facilitating regional renewable energy efforts. All past, present, and future projects in the County would also comply with CARB and/or the USEPA mandated mobile source emissions regulations related to on-road vehicle emissions standards, off-road equipment fleet standards, and fuel sulfur standards. Thus, the Project along with past, present, and future projects would not result in the wasteful, inefficient, and unnecessary use of energy and impacts would be insignificant.

In addition, construction, decommissioning, and operation of future solar energy systems and facilities enabled under the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency during construction or operation. All past, present, and future projects in the County would also comply with CARB and/or the USEPA-mandated mobile source emissions regulations related to on-road vehicle emissions standards, off-road equipment fleet standards, and fuel sulfur standards.

As previously mentioned, the Project would stimulate local renewable energy generation by allowing solar development in various areas of the unincorporated County and by establishing a streamlined permitting process to promote individual solar, large-scale solar, and community and utility-scale solar developments to reach this potential. The Project would expand the potential for permitted solar areas, encouraging sustainable energy generation within the County that would facilitate the County’s goals related to renewable energy and storage. Furthermore, all past, present, and future projects would have to comply with rules and regulations for renewable energy and energy efficiency. Therefore, construction, decommissioning, and operation of future solar energy systems and facilities enabled under the Project along with past, present, and future cumulative projects would comply with existing energy standards and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and impacts would be insignificant.

3.7 Greenhouse Gas Emissions

3.7.1 Introduction

This section discusses potential impacts related to greenhouse gas emissions and climate change related to future development of solar energy facilities enabled under the Project. This section describes the physical environmental and regulatory setting, the criteria and thresholds used to evaluate the significance of impacts, the methods used in evaluating these impacts, and the results of the impact assessment. Air quality impacts are discussed in Section 3.3, *Air Quality*.

3.7.2 Environmental Setting

Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period. The term "climate change" is often used interchangeably with the term "global warming," but climate change is preferred because it conveys that other changes are happening in addition to rising temperatures. One identified cause of global warming is an increase of Greenhouse Gases (GHGs) in the atmosphere. GHGs are those compounds in Earth's atmosphere that play a critical role in determining Earth's surface temperature.

When energy from the sun reaches the Earth, the planet absorbs some of this energy and radiates the rest back to space as heat. The Earth's surface temperature depends on this balance between incoming and outgoing energy. Average conditions tend to remain stable unless the Earth experiences a force that shifts the energy balance. A shift in the energy balance causes the Earth's average temperature to become warmer or cooler. Earth's natural warming process is known as the "greenhouse effect." It is called the greenhouse effect because Earth and the atmosphere surrounding it are similar to a greenhouse with glass panes in that the glass allows solar radiation (sunlight) into Earth's atmosphere but prevents radiative heat from escaping, thus warming Earth's atmosphere. However, as GHGs from human activities increase, they build up in the atmosphere and warm the climate, leading to many other changes around the world - in the atmosphere, on land, and in the oceans, with associated adverse climatic and ecological consequences (USEPA 2025c). Scientists studying the particularly rapid rise in global temperatures have determined that human activity has resulted in rapidly increased emissions of GHGs, primarily from the burning of fossil fuels (from motor vehicle travel, electricity generation, consumption of natural gas, industrial activity, manufacturing, etc.), deforestation, agricultural activity, and the decomposition of solid waste.

Gases that absorb and re-emit infrared radiation in the atmosphere are called GHGs. GHGs are emitted by natural processes and human activities. The gases widely seen as the principal contributors to human-induced climate change are shown in **Table 3.7-1**, *Description of Identified GHGs*, and include carbon dioxide (CO_2), methane (CH_4), nitrous oxides (N_2O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere, and natural processes, such as oceanic evaporation, largely determine its atmospheric concentrations. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are usually by-products of fossil fuel combustion, and emissions of CH_4 result from off-gassing associated with agricultural

practices. Human-made GHGs, many of which have greater heat-absorption potential than CO_2, include fluorinated gases, SF_6, and NF_3 (USEPA 2025c).

TABLE 3.7-1
DESCRIPTION OF IDENTIFIED GHGS

GHG	General Description
Carbon Dioxide (CO_2)	An odorless, colorless GHG, which has both natural and anthropogenic sources. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungi; evaporation from oceans; and volcanic outgassing. Anthropogenic (human-caused) sources of CO_2 include the combustion of coal, oil, natural gas, and wood and cement production.
Methane (CH_4)	A flammable gas and the main component of natural gas. When one molecule of CH_4 is burned in the presence of oxygen, one molecule of CO_2 and two molecules of water are released. A natural source of CH_4 is the anaerobic decay of organic matter. Geological deposits, known as natural gas fields, also contain CH_4, which is extracted for fuel. Other sources are from landfills, fermentation of manure, and cattle.
Nitrous Oxide (N_2O)	A colorless GHG. High concentrations can cause dizziness, euphoria, and sometimes slight hallucinations. N_2O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used in rocket engines, race cars, and as an aerosol spray propellant.
Hydrofluorocarbons (HFCs)	Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in CH_4 or ethane (C_2H_6) with chlorine and/or fluorine atoms. CFCs are non-toxic, non-flammable, insoluble, and chemically unreactive in the troposphere (the level of air at Earth's surface). CFCs were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. Because they destroy stratospheric ozone, the production of CFCs was stopped as required by the Montreal Protocol in 1987. HFCs are synthetic man-made chemicals that are used as a substitute for CFCs as refrigerants. HFCs deplete stratospheric ozone, but to a much lesser extent than CFCs.
Perfluorocarbons (PFCs)	PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface are able to destroy the compounds. PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane and hexafluoroethane. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing.
Sulfur Hexafluoride (SF_6)	An inorganic, odorless, colorless, non-toxic, and non-flammable gas. SF_6 is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.
Nitrogen Trifluoride (NF_3)	An inorganic, non-toxic, colorless, odorless, non-flammable gas. NF_3 is used in the manufacture of semiconductors, as an oxidizer of high-energy fuels, for the preparation of tetrafluorohydrazine, as an etchant gas in the electronic industry, and as a fluorine source in high-power chemical lasers.

NOTE: GHGs identified in this table are ones identified in the Kyoto Protocol and other synthetic gases recently added to the IPCC's Fifth Assessment Report.

SOURCES:

Association of Environmental Professionals, 2007. Alternative Approaches to Analyze Greenhouse Gas Emissions and Global Climate Change in CEQA Documents, Final, June 29, 2007. https://www.counties.org/sites/main/files/file-attachments/aep_global_climate_change_june_29_final1.pdf. Accessed April 2025.

USEPA, 2009. Acute Exposure Guideline Levels (AEGLs) for Nitrogen Trifluoride Interim; September. https://www.epa.gov/sites/default/files/2014-09/documents/nitrogentrifluoride_interim_ornl_sep09_c.pdf. Accessed April 2025.

Not all GHGs possess the same ability to induce climate change. CO_2 is the most abundant GHG in Earth's atmosphere. Other GHGs are less abundant but have higher global warming potential (GWP) than CO_2. Thus, emissions of other GHGs are commonly quantified in the units of equivalent mass of carbon dioxide (CO_2e). Mass emissions are calculated by converting pollutant-specific emissions to CO_2e emissions by applying the proper global warming potential (GWP) value. The larger the GWP, the more

that a given gas warms the Earth compared to CO_2 over that time.[1] These GWP ratios are available from the Intergovernmental Panel on Climate Change (IPCC). Historically, GHG emission inventories have been calculated using the GWPs from the IPCC's Second Assessment Report (SAR) (IPCC 1995). GWP is based on several factors, including the radiative efficiency (heat-absorbing ability) of each gas relative to that of CO_2, as well as the decay rate of each gas (the amount removed from the atmosphere over a given number of years otherwise referred to as atmospheric lifetime) relative to that of CO_2. The IPCC updated the GWP values based on the science in its Fourth Assessment Report (AR4) (IPCC 2007). The California Air Resources Board (CARB) reports GHG emission inventories for California using the GWP values from the IPCC AR4, which is consistent with international reporting standards. By applying the GWP ratios, Project-related CO_2e emissions can be tabulated in metric tons of carbon dioxide equivalents ($MTCO_2e$) per year. Typically, the GWP ratio corresponding to the warming potential of CO_2 over a 100-year period is used as a baseline. The GWP and atmospheric lifetimes for key regulated GHGs are provided in **Table 3.7-2**, *Atmospheric Lifetimes and GWPs*.

TABLE 3.7-2
ATMOSPHERIC LIFETIMES AND GWPS

Gas	Atmospheric Lifetime (Years)	GWP (100-YearTime Horizon)
Carbon Dioxide (CO_2)	50-200	1
Methane (CH_4)	12 (+/-3)	25
Nitrous Oxide (N_2O)	114	298
HFC-23: Fluoroform (CHF_3)	270	14,800
HFC-134a: 1,1,1,2-Tetrafluoroethane (CH_2FCF_3)	14	1,430
HFC-152a: 1,1-Difluoroethane ($C_2H_4F_2$)	1.4	124
PFC-14: Tetrafluoromethane (CF_4)	50,000	7,390
PFC-116: Hexafluoroethane (C_2F_6)	10,000	12,200
Sulfur Hexafluoride (SF_6)	3,200	22,800
Nitrogen Trifluoride (NF_3)	740	17,200

SOURCE: IPCC, 2007.

Greenhouse Gas Emissions Inventories

Global Emissions Inventory

Global GHG emissions due to human activities have grown since pre-industrial times. As reported by the United States Environmental Protection Agency (USEPA), global carbon emissions from human activities increased by about 43 percent between 1990 and 2015 with CO_2 emissions (which account for about three-fourths of total global GHG emissions) increasing approximately 51 percent over this same period (USEPA 2025c). In addition, in the Global Carbon Budget 2023 report, published in December 2023, atmospheric CO_2 concentrations in 2022 were found to be approximately 51 percent above their

[1] GWPs and associated CO_2e values were developed by the Intergovernmental Panel on Climate Change (IPCC) and published in its Second Assessment Report (SAR) in 1996. Historically, GHG emission inventories have been calculated using the GWPs from the IPCC's SAR. The IPCC updated the GWP values based on the Fourth Assessment Report (AR4). CARB reports GHG emission inventories for California using the GWP values from the IPCC AR4.

concentrations at the start of the Industrial Revolution (P. Friedlingstein et. al. 2023). Historical measurements show that the current global atmospheric concentrations of carbon dioxide, methane, and nitrous oxide are unprecedented compared with the past 800,000 years (USEPA 2025a). Global increases in CO_2 concentrations are due primarily to fossil fuel use, with land use change providing another significant but smaller contribution. Regarding emissions of non-CO_2 GHGs, these have also increased significantly since 1990 (USEPA 2025a; USEPA 2025b). Studies have concluded that it is very likely that the observed increase in methane (CH_4) concentration is predominantly due to agriculture and fossil fuel use (USEPA 2025a; USEPA 2025b).

Worldwide anthropogenic emissions of GHGs were approximately 59,000 million metric tons (MMT) of CO_2e in 2019 (IPCC 2023). In 2019, approximately 79 percent of global GHG emissions came from the sectors of energy, industry, transport, and buildings together, and 22 percent came from agriculture, forestry, and other land use (IPCC 2023).

United States Emissions Inventory

Total United States GHG emissions in 2022 were 6,343 $MMTCO_2e$ and, after accounting for sequestration from the land sector, they were 5,489 $MMTCO_2e$ (USEPA 2025d). Emissions increased in 2022 by one percent (after accounting for sequestration from the land sector) compared to the previous year, driven largely by an increase in CO_2 emissions from fossil fuel combustion (USEPA 2025e). In 2022, GHG emissions were 17 percent below 2005 levels after accounting for sequestration from the land sector (USEPA 2025e). In 2022, the transportation and industrial end-use sectors accounted for 29 percent and 30 percent, respectively, of nationwide GHG emissions while the residential and commercial end-use sectors accounted for 31 percent of nationwide GHG emissions, and agriculture accounted for 10 percent of nationwide GHG emissions with electricity emissions distributed among the various sectors (USEPA 2025e).

California Emissions Inventory

Based on the CARB's California Greenhouse Gas Inventory for 2000-2022, California produced 371.1 MMT of CO_2e in 2022, which is approximately 5.9 percent of the United States inventory (CARB2024a; USEPA 2025e). The major source of GHG emissions in California is the transportation sector, which comprises 39 percent of the state's total GHG emissions. The industrial sector is the second largest source, comprising 23 percent of the state's GHG emissions, while electric power accounts for approximately 11 percent (CARB 2024a). The magnitude of California's total GHG emissions is due in part to its large size and large population compared to other states. However, a factor that reduces California's per capita fuel use and GHG emissions as compared to other states is its relatively mild climate. In 2016, the State of California achieved its 2020 GHG emission reduction target of reducing emissions to 1990 levels as emissions fell below 431 $MMTCO_2e$ (CARB 2023). The 2030 statewide target emissions level is 260 $MMTCO_2e$ (CARB 2017).

Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. Each of the past three decades has been

warmer than all the previous decades in the instrumental record, and the decade from 2000 through 2010 has been the warmest. The observed global mean surface temperature (GMST) from 2011 to 2020 was approximately 1.1 degree Celsius (°C) higher than the average GMST over the period from 1850 to 1900, with larger increases over land (1.59°C) than over the ocean (0.88°C) (IPCC 2023). In addition to these findings, there are identifiable signs that global warming is currently taking place, including observed changes in extremes such as heatwaves, heavy precipitation, droughts, and tropical cyclones. Human influence was very likely the main driver of these increases since at least 1971 (IPCC 2023).

According to *California's Fourth Climate Change Assessment*, statewide temperatures from 1986 to 2016 were approximately 0.6 to 1.1°C higher than those recorded from 1901 to 1960. Potential impacts of climate change in California may include reduced water supply from snowpack, sea level rise, more extreme heat days per year, more large forest fires, and more drought years (State of California 2019). In addition to statewide projections, *California's Fourth Climate Change Assessment* includes regional reports that summarize climate impacts and adaptation solutions for nine regions of the state and regionally specific climate change case studies (State of California 2019). However, while there is growing scientific consensus about the possible effects of climate change at a global and statewide level, current scientific modeling tools are unable to predict what local impacts may occur with a similar degree of accuracy. A summary follows of some of the potential effects that could be experienced in California and the Santa Barbara County region as a result of climate change.

The California Energy Commission (CEC) has a geospatial data tool (Cal-Adapt) that provides a view of how the state could be impacted by climate change. Below is a summary of some of the potential climate change effects and relevant Cal-Adapt data, reported by an array of studies that could be experienced in California as a result of global warming and climate change.

Hydrology and Sea Level Rise

Climate change could affect the intensity and frequency of storms and flooding (State of California 2019). Furthermore, climate change could induce substantial sea level rise in the coming century. Sea level rise is defined as the rising of the level of the sea as a result of global warming. Rising sea level increases the likelihood of and risk from flooding. Sea levels are rising faster now than in the previous two millennia, and the rise will probably accelerate, even with robust global GHG emission control measures. Global mean sea level increased by 0.20 meters (m) between 1901 and 2018 (IPCC 2023). The average rate of sea level rise was 1.3 millimeters per year (mm/yr) between 1901 and 1971, increasing to 1.9 mm/yr between 1971 and 2006, and further increasing to 3.7 mm/yr between 2006 and 2018 (IPCC 2023). The most recent IPCC report predicts a conservative mean sea level rise of 0.63 to 1.01 meters by 2100 relative to 1995-2014 levels (IPCC 2023). A rise in sea levels could erode 31 to 67 percent of southern California beaches and cause flooding of approximately 370 miles of coastal highways during 100-year storm events. This would also jeopardize California's water supply due to saltwater intrusion and induce groundwater flooding and/or exposure of buried infrastructure (State of California 2019). Furthermore, increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

Erosion is a natural process which alters existing geomorphic features. Erosion can occur due to a number of factors, including winter storms, tidal action, wind-generated high surf, wave action, and rising sea levels. The Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan (County of Santa Barbara

2023a) identifies high-hazard areas within the County related to flood and coastal surge vulnerability. Storm waves that coincide with very high tides will continue to be a threat to the Santa Barbara County coastline, including the Cities of Goleta, Santa Barbara, and Carpinteria, in the next several decades. The impacts of sea-level rise will likely begin to increase and become more noticeable during the second half of the twenty-first century than they have been in the recent past, particularly when combined with large El Niño-driven storm waves and high tides. A continuing rise in sea level will produce a range of hazards and impacts, including increasingly frequent coastal flooding, gradual inundation of low-lying beach and shoreline areas, continued and likely increased erosion of coastal cliffs and bluffs, and flooding at stream mouths, with associated damage to development.

Air Quality

Scientists project that the annual average maximum daily temperatures in California could rise by 2.4 to 3.2°C in the next 50 years and by 3.1 to 4.9°C in the next century (State of California 2019). Higher temperatures are conducive to air pollution formation, and rising temperatures could therefore result in worsened air quality in California. As a result, climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore its indirect effects, are uncertain. In addition, as temperatures have increased in recent years, the area burned by wildfires throughout the state has increased, and wildfires have occurred at higher elevations in the Sierra Nevada Mountains (State of California 2019). If higher temperatures continue to be accompanied by an increase in the incidence and extent of large wildfires, air quality could worsen. Severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state. However, if higher temperatures are accompanied by wetter, rather than drier, conditions, the rains could tend to temporarily clear the air of particulate pollution, which would effectively reduce the number of large wildfires and thereby ameliorate the pollution associated with them, although it would not eliminate all effects of increased temperatures (CNRA 2009).

According to the Cal-Adapt website's "Local Climate Change Snapshot" database, the County of Santa Barbara could see an average annual increase in maximum temperature to 71.9 to 72.7°F in the mid-century (2035–2064) and 72.9 to 75.6°F at the end of the century (2070–2099), compared to 68.7°F for the study's baseline period (1961–1990) (CalAdapt 2024). The average annual number of extreme heat days also could increase to 10 to 13 days in the mid-century (2035–2064) and 14 to 26 days at the end of the century (2070–2099), compared to 3 days for the baseline period (1961–1990) (CalAdapt 2024).

Water Supply

Analysis of paleoclimatic data (such as tree-ring reconstructions of stream flow and precipitation) indicates a history of naturally and widely varying hydrologic conditions in California and the west, including a pattern of recurring and extended droughts. Uncertainty remains with respect to the overall impact of climate change on future precipitation trends and water supplies in California. With warmer temperatures and lower precipitation volumes, drought conditions continue in the state. Year-to-year variability in statewide precipitation levels has increased since 1980, meaning that wet and dry precipitation extremes have become more common (CDWR 2022). The years 2000 to 2021 have been the driest 22-year period in the last millennium in California and the rest of the southwestern United States (CDWR 2022). This uncertainty regarding future precipitation trends complicates the analysis of future water demand, especially where the relationship between climate change and its potential effect on water

demand is not well understood. In recent years, the fraction of precipitation that falls as rain instead of snow has increased in the Sierra Nevada and Southern Cascades, reducing the water stored in the snowpack that provides most of California's water supply (CDWR 2022). California has also seen a change in the timing of precipitation consistent with climate change projections. A comparison of historical and current precipitation (1960–1989 vs 1990–2019) averaged over the entire state shows a change in the monthly distribution of precipitation; a progressively delayed and shorter, sharper rainy season in California (CDWR 2022). Warming temperatures and their influence on a rising snowline (the altitude above which snow remains on the ground) make winter precipitation more likely to fall as rain instead of snow and run off into the ocean instead of being stored in reservoirs (CDWR 2022). Projections indicate that average spring snowpack in the Sierra Nevada and other mountain catchments in central and northern California will decline by approximately 66 percent from its historical average by 2050 (State of California 2018).

Water supply in Santa Barbara County has diversified sources, including the Santa Ynez River watershed, State Water Project, groundwater, and recycled water, along with a strong water conservation program. Future temperature and weather pattern changes could result in more variable or reduced supplies from the Santa Ynez River watershed and State Water Project, and potentially more saltwater intrusion issues for groundwater. Studies and planning to address water supply issues, including climate change effects, are ongoing by the State (Department of Water Resources), regional agencies (e.g., Cachuma Operation and Maintenance Board, Santa Barbara County's Integrated Regional Water Management Program), and local agencies.

According to the Cal-Adapt website's "Local Climate Change Snapshot" database, the County of Santa Barbara could see an average annual length of dry spells of 154 to 155 days in the mid-century (2035–2064) and 154 to 162 days at the end of the century (2070–2099), compared to 146 days for the baseline period (1961–1990). The average annual precipitation could decrease to 18.3 to 18.4 inches in the mid-century (2035–2064) and potentially increase to 18.7 to 18.8 inches at the end of the century (2070–2099), compared to 18.6 inches for the baseline period (1961–1990) (CalAdapt 2024).

Agriculture

California has an over $59 billion annual agricultural industry that produces over a third of the country's vegetables and three-quarters of the country's fruits and nuts (CDFA 2024). Higher CO_2 levels can stimulate plant production and increase plant water-use efficiency. When plant water demand exceeds the amount available in the soil, vegetation becomes stressed, and more easily succumbs to attacks by pests and pathogens. Hot and dry conditions increase the water deficit and make dead vegetation easier to burn, heightening wildfire risk (CDWR 2022). In parts of the Central Valley, certain fruits and nuts are maturing more quickly with warming temperatures, leading to earlier harvests (CDWR 2022). Shorter maturation times generally lead to smaller fruits and nuts. Additionally, the risk of crop damage has increased as certain insects multiply faster with warmer temperatures. Temperature increases could also change the time of year certain crops, such as wine grapes, bloom or ripen, and thereby affect their quality.

Ecosystems and Wildlife

Climate change and the potential resultant changes in weather patterns could have ecological effects on the global and local scales. Soil moisture is likely to decline in many regions as a result of higher

temperatures, and intense rainstorms are likely to become more frequent. Rising temperatures and precipitation change could impact ecosystems and wildlife by causing population declines, shifting in their geographic distributions or ranges to track suitable climates, and facilitating the spread of invasive species, pests, pathogens, and diseases. Certain birds and mammals are found at different elevations in the Sierra Nevada compared to a century ago and range shifts were observed in almost 75 percent of small mammal species and over 80 percent of bird species surveyed (CDWR 2022). In the Mojave Desert, which became warmer and drier, widespread collapse of bird communities occurred due to dehydration (CDWR 2022). Additionally, climate-influenced changes in freshwater and ocean conditions are threatening the survival of Chinook salmon in Northern California rivers (CDWR 2022). Due to changing ocean conditions, fewer California sea lion pup births, higher pup mortality, and poor pup conditions at San Miguel Island off Santa Barbara County occur during years when sea surface temperatures are unusually warm in their breeding area (CDWR 2022). In these years, the fish they feed on are less abundant and the nursing mothers must either travel farther to obtain food or eat less nutritious prey.

Wildfire

Wildfires in California over the past two decades are shown to be increasing in size, severity, and adverse impacts (CARB 2020a). Warming temperatures as a result of climate change influence the length of both the fire and growing seasons and consequently affect the amount of time and intensity fires burn at and the amount of available fuels. Higher temperatures lead to drought, which decreases the fuel moisture and increases the likelihood of ignitions. The lack of moisture available to plants has also been associated with changes in the structure and composition of California's forests and woodlands—changes that have been accelerated by wildfires (CDWR 2022). Dead or dying vegetation increases the risk of wildfires: for example, the unusually high tree mortality seen during the 2012-2016 drought, which was caused by water stress, created a massive fuel load (CDWR 2022). The total area burned annually since 1950 ranged from a low in 1963 of 32,000 acres to a record high in 2020 of 4.2 million acres – more than 4 percent of the state's roughly 100 million acres of land (CDWR 2022).

According to the Cal-Adapt website's "Local Climate Change Snapshot" database, the County of Santa Barbara could see an average annual area burned of approximately 24,189.7 to 17,681.5 acres in the mid-century (2035–2064) to 24,189.7 to 24,330.4 acres by the end of the century (2070–2099), compared to 17,791.6 to 17,681.5 acres for the baseline period (1961–1990) (CalAdapt 2024). Increased wildfire activity could lead to more GHG emissions from sources that would otherwise sequester carbon (CARB 2020a). Between 2000 and 2019, emissions from wildfires ranged from a low of 1.2 $MMTCO_2e$ in 2010 to a high of 39 MMTCO2e in 2018, with an annual average of 14 $MMTCO_2e$ (CARB 2020a). Further, CARB estimates that wildfire emissions increased dramatically in 2020, totaling 112 $MMTCO_2e$ (CARB 2020a).

Humans

Humans are better able to adapt to a changing climate than plants and animals in natural ecosystems. Nevertheless, climate change poses direct and indirect risks to public health, as people will experience earlier death and worsening illnesses. Heat causes the most weather-related deaths in the United States (CDWR 2022). Hospitalizations and deaths spike in years with especially high summertime temperatures. Additionally, indicators of the impacts of climate change on human health show that warming temperatures and changes in precipitation can affect vector-borne pathogen transmission and disease patterns in California.

3.7.3 Regulatory Framework

Federal

The U.S. Supreme Court determined in *Massachusetts v. EPA* (2007) 549 U.S. 497 that the USEPA has the authority to regulate motor-vehicle GHG emissions under the federal Clean Air Act. The USEPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines and requires annual reporting of emissions. In 2012, the USEPA issued a Final Rule that established the GHG permitting thresholds that determine when Clean Air Act permits under the New Source Review Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs are required for new and existing industrial facilities.

In *Utility Air Regulatory Group v. Environmental Protection Agency* (134 S. Ct. 2427 [2014]), the U.S. Supreme Court held that USEPA may not treat GHGs as an air pollutant for purposes of determining whether a source can be considered a major source required to obtain a PSD or Title V permit. The Court also held that PSD permits, otherwise required based on emissions of other pollutants, may continue to require limitations on GHG emissions based on the application of Best Available Control Technology.

The Federal Government administers a wide array of public-private partnerships to reduce the GHG intensity generated in the United States. These programs focus on energy efficiency, renewable energy, CH_4 and other non-CO_2 gases, agricultural practices, and implementation of technologies to achieve GHG reductions. The USEPA implements numerous voluntary programs that contribute to the reduction of GHG emissions. These programs (e.g., the ENERGY STAR labeling system for energy-efficient products) play a significant role in encouraging voluntary reductions from large corporations, consumers, industrial and commercial buildings, and many major industrial sectors.

Safer Affordable Fuel-Efficient Vehicles Rule and Corporate Average Fuel-Economy Rule

On September 27, 2019, the USEPA and the National Highway Traffic Safety Administration (NHTSA) published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program. The SAFE Rule Part One revokes California's authority to set its own GHG emissions standards and to adopt its own zero-emission vehicle mandates. On April 30, 2020, the USEPA and the NHTSA published Part Two of the SAFE Vehicles Rule, which revised corporate average fuel economy and CO_2 emissions standards for model years 2021-2026 passenger cars and trucks such that the standards increase by approximately 1.5 percent each year through model year 2026 as compared to the 2012 standards which required an approximately five percent annual increase (NHTSA 2020). To account for the effects of the Part Two Rule, CARB released off-model adjustment factors on June 26, 2020, to adjust GHG emissions outputs from the EMFAC model (CARB 2020b).

In February 2022, the USEPA issued the Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards (USEPA 2021). This final rule revises current GHG standards beginning for vehicles in model year 2023 and through model year 2026 and establishes the most stringent GHG standards ever set for the light-duty vehicle sector that are expected to result in average fuel economy label values of 40 mpg, while the standards they replace (the SAFE rule standards) would achieve only 32 mpg in model year 2026 vehicles (USEPA 2021).

On June 7, 2024, NHTSA announced the Final Rule for Corporate Average Fuel Economy (CAFE) Standards for Model Years 2027-2031 and Heavy-Duty Pickup Trucks and Vans (HDPUV) Fuel Efficiency Standards for Model Years 2030-2035 (NHTSA, 2024). The CAFE standards for passenger cars and light trucks increase at a rate of two percent per year for passenger cars in model years 2027-2031, zero percent per year for light trucks in model years 2027-2028 and two percent per year for light trucks in model years 2029-2031 (NHTSA 2024). The HDPUVs standards increase at a rate of 10 percent per year for model years 2030-2032 that and increase at a rate of 8 percent per year for model years 2033-2035 (NHTSA 2024).

State

California has promulgated a series of executive orders, laws, and regulations aimed at reducing both the level of GHGs in the atmosphere and emissions of GHGs from commercial and private activities within the state.

Executive Order S-3-05

EO S-3-05 set forth the following targets for progressively reducing statewide GHG emissions (Office of the Governor 2005):

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The executive order created the California Climate Action Team (CAT) to reduce GHG emissions to the target levels. The CAT produces biannual reports describing the progress made toward the emissions targets, the impacts of global climate change on California's resources, and mitigation and adaptation plans to combat these impacts. The first CAT Report to the Governor and the Legislature in 2006 contained recommendations and strategies to help meet the targets in EO S-3-05. The most recent 2022 State Agency Greenhouse Gas Reduction Report Card documents the effectiveness of measures to reduce GHG emissions in California and GHG emissions from state agencies' operations. This report card documents reductions of 1.157 $MMTCO_2e$ that occurred in 2021 (CalEPA 2023). In 2016, GHG emissions were 429 $MMTCO_2e$, showing that California reached its 2020 emissions target (431 $MMTCO_2e$) four years early and emissions are continuing to decline.

Executive Order B-30-15

In 2015, EO B-30-15 promulgated the following targets and measures (Office of the Governor 2015):

- Established a new interim statewide reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030.
- Ordered all state agencies with jurisdiction over sources of GHG emissions to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 reduction targets.
- Directed CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent.

Executive Order B-55-18

In 2018, EO B-55-18 established a statewide policy to achieve carbon neutrality by 2045 and maintain net negative emissions thereafter. As per EO B-55-18, CARB is directed to work with relevant state agencies to develop a framework for implementation and accounting that tracks progress toward this goal and to ensure future Climate Change Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. California is making progress towards the 2045 goal, however the pathway to carbon neutrality is still under development. According to CARB, there will be a strong reliance on energy efficiency, electrification, low carbon fuels (including low-carbon electricity), and CO_2 removal in future policies and strategies for reaching the ambitious goal. The path to carbon neutrality lies in striving for zero emissions from all new sources and maximum sequestration to offset existing sources.

Assembly Bill 32 – California Global Warming Solutions Act of 2006

In 2006, the California Legislature adopted Assembly Bill (AB) 32 (Health and Safety Code Division 25.5), also known as the California Global Warming Solutions Act of 2006, with a focus on reducing GHG emissions in California to 1990 levels by 2020. This act defines GHGs as CO_2, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride and represents the first enforceable statewide program to limit emissions of these GHGs from all major industries with penalties for noncompliance. The California Global Warming Solutions Act assigned CARB the primary responsibility for reducing GHG emissions, by adopting rules and regulations directing state actions to achieve the GHG emissions reductions equivalent to 1990 statewide level set at 431 $MMTCO_2e$ by 2020. In 2008, CARB adopted the Climate Change Scoping Plan, which outlines the State's strategy to achieve the 2020 GHG emissions limit. In 2014, CARB adopted the first update to the Climate Change Scoping Plan, which builds on the strategies from the first plan. In 2016, the State of California achieved its 2020 GHG emission reduction target of reducing emissions to 1990 levels as emissions fell below 431 $MMTCO_2e$ (CARB 2023).

Senate Bill 32 and Assembly Bill 197

In 2016, the California Legislature adopted Senate Bill (SB) 32 and its companion bill AB 197. SB 32 and AB 197 amended Health and Safety Code Division 25.5 and established a new climate pollution reduction target of 40 percent below 1990 levels by 2030, with provisions included to ensure that the benefits of state climate policies reach into vulnerable communities. In response to the 2030 GHG reduction target, CARB adopted the 2017 Scoping Plan (CARB 2017). The 2017 Scoping Plan outlines the strategies the state will implement to achieve the 2030 GHG emissions reduction target, which build on the Cap-and-Trade Program; the Low Carbon Fuel Standard; improved vehicle, truck, and freight movement emissions standards; increasing renewable energy; and strategies to reduce methane emissions from agricultural and other wastes by using it to meet California's energy needs. The 2017 Scoping Plan also comprehensively addresses GHG emissions from natural and working lands of California, including the agriculture and forestry sectors. The adopted 2017 Scoping Plan includes ongoing and statutorily required programs and the continuation of the Cap-and-Trade Program. The 2017 Scoping Plan also discusses the role of local governments in meeting the state's GHG reductions goals because local governments have jurisdiction and land use authority related to community-scale planning and permitting processes, local codes and actions, outreach and education programs, and municipal operations (CARB 2017).

Assembly Bill 1279 and 2022 Scoping Plan

The Legislature enacted AB 1279, The California Climate Crisis Act, on September 16, 2022 (CLI 2022). AB 1279 establishes the policy of the State of California to achieve net zero GHG emissions as soon as possible but no later than 2045, and to achieve and maintain net negative GHG emissions thereafter. Additionally, AB 1279 mandates that by 2045, statewide anthropogenic GHG emissions are to be reduced at least 85 percent below 1990 levels. AB 1279 also requires CARB to ensure that the Scoping Plan identifies and recommends measures to achieve carbon neutrality, and to identify and implement policies and strategies for CO_2 removal solutions and carbon capture, utilization, and storage technologies. It also requires CARB to submit an annual report on progress in achieving the Scoping Plan's goals.

In December 2022, CARB adopted the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan), which expands on prior scoping plans to include technologically feasible, cost-effective, and equity-focused pathways to achieve the state's climate target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045, while also assessing the progress California is making toward the 40 percent below 1990 levels by 2030, and achieving carbon neutrality[2] by 2045 or earlier (CARB 2022a). The 2030 target is an interim but important stepping stone along the critical path to the broader goal of deep decarbonization by 2045. The 2022 Scoping Plan outlines the strategies the state will implement to achieve carbon neutrality by reducing GHG emissions to meet the anthropogenic target, and by expanding actions to capture and store carbon through the state's natural and working lands and using a variety of mechanical approaches. A summary of the GHG emissions reductions and targets set forth under the 2022 Scoping Plan is provided in **Table 3.7-3**, *Estimated Statewide Greenhouse Gas Emissions Reductions in the 2022 Scoping Plan*.

The 2022 Scoping Plan reflects existing and recent direction in the Governor's Executive Orders and State Statutes, which identify policies, strategies, and regulations in support of and implementation of the Scoping Plan. Among these include Executive Order B-55-18 and AB 1279 (The California Climate Crisis Act), which identify the 2045 carbon neutrality and GHG reduction targets required for the Scoping Plan. **Table 3.7-4**, *Major Climate Legislation and Executive Orders Enacted Since the 2017 Scoping Plan*, provides a summary of major climate legislation and executive orders issued since the adoption of the 2017 Scoping Plan.

The 2022 Scoping Plan identifies the need to accelerate AB32's 2030 target, from 40 percent to 48 percent below 1990 levels. Cap-and-Trade regulation continues to play a large factor in the reduction of near-term emissions for meeting the 2030 reduction target. Every sector of the economy will need to begin to transition in this decade to meet these GHG reduction goals and achieve carbon neutrality no later than 2045. The 2022 Scoping Plan approaches decarbonization from two perspectives, managing a phasedown of existing energy sources and technologies, as well as increasing, developing, and deploying alternative clean energy sources and technology.

[2] *Carbon neutrality* means "net zero" emissions of GHGs. In other words, it means that GHG emissions generated by sources such as transportation, power plants, and industrial processes must be less than or equal to the amount of CO_2 that is stored, both in natural sinks and through mechanical sequestration. AB 1279 uses the terminology "net zero" and the 2022 Scoping Plan uses the terminology "carbon neutrality" or "carbon neutral." For purposes of this PEIR, these terms mean the same thing and are used interchangeably.

TABLE 3.7-3
ESTIMATED STATEWIDE GREENHOUSE GAS EMISSIONS REDUCTIONS IN THE 2022 SCOPING PLAN

Emissions Scenario	GHG Emissions ($MMTCO_2e$)
2019	
2019 State GHG Emissions	404
2030	
2030 BAU Forecast	312
2030 GHG Emissions without Carbon Removal and Capture	233
2030 GHG Emissions with Carbon Removal and Capture	226
2030 Emissions Target Set by AB 32 (i.e., 1990 level by 2030)	260
Reduction below Business-As-Usual necessary to achieve 1990 levels by 2030	52 (16.7%)[a]
2045	
2045 BAU Forecast	266
2045 GHG Emissions without Carbon Removal and Capture	72
2045 GHG Emissions with Carbon Removal and Capture	(3)

NOTES:

$MMTCO_2e$ = million metric tons of carbon dioxide equivalents; parenthetical numbers represent negative values.
BAU = Business As Usual.

a. 312 – 260 = 52 /312 = 16.7%

SOURCE: CARB, 2022.

TABLE 3.7-4
MAJOR CLIMATE LEGISLATION AND EXECUTIVE ORDERS ENACTED SINCE THE 2017 SCOPING PLAN

Bill/Executive Order	Summary
Assembly Bill 1279 (AB 1279) (Muratsuchi, Chapter 337, Statutes of 2022) *The California Climate Crisis Act*	AB 1279 establishes the policy of the state to achieve carbon neutrality as soon as possible, but no later than 2045; to maintain net negative GHG emissions thereafter; and to ensure that by 2045 statewide anthropogenic GHG emissions are reduced at least 85 percent below 1990 levels. The bill requires CARB to ensure that Scoping Plan updates identify and recommend measures to achieve carbon neutrality, and to identify and implement policies and strategies that enable CO_2 removal solutions and carbon capture, utilization, and storage (CCUS) technologies. This bill is reflected directly in the 2022 Scoping Plan.
Senate Bill 905 (SB 905) (Caballero, Chapter 359, Statutes of 2022) *Carbon Capture, Removal, Utilization, and Storage Program*	SB 905 requires CARB to create the Carbon Capture, Removal, Utilization, and Storage Program to evaluate, demonstrate, and regulate CCUS and carbon dioxide removal (CDR) projects and technology. The bill requires CARB, on or before January 1, 2025, to adopt regulations creating a unified state permitting application for approval of CCUS and CDR projects. The bill also requires the Secretary of the Natural Resources Agency to publish a framework for governing agreements for two or more tracts of land overlying the same geologic storage reservoir for the purposes of a carbon sequestration project. The 2022 Scoping Plan modeling reflects both CCUS and CDR contributions to achieve carbon neutrality.
Senate Bill 846 (SB 846) (Dodd, Chapter 239, Statutes of 2022) *Diablo Canyon Powerplant: Extension of Operations*	SB 846 extends the Diablo Canyon Power Plant's sunset date by up to five additional years for each of its two units and seeks to make the nuclear power plant eligible for federal loans. The bill requires that the CPUC not include and disallow a load-serving entity from including in their adopted resource plan, the energy, capacity, or any attribute from the Diablo Canyon power plant. The 2022 Scoping Plan explains the emissions impact of this legislation.

TABLE 3.7-4
MAJOR CLIMATE LEGISLATION AND EXECUTIVE ORDERS ENACTED SINCE THE 2017 SCOPING PLAN

Bill/Executive Order	Summary
Senate Bill (SB 1020) (Laird, Chapter 361, Statutes of 2022) *Clean Energy, Jobs, and Affordability Act of 2022*	SB 1020 adds interim renewable energy and zero carbon energy retail sales of electricity targets to California end-use customers set at 90 percent in 2035 and 95 percent in 2040. It accelerates the timeline required to have 100 percent renewable energy and zero carbon energy procured to serve state agencies from the original target year of 2045 to 2035. This bill requires each state agency to individually achieve the 100 percent goal by 2035 with specified requirements. This bill requires the CPUC, CEC, and CARB, on or before December 1, 2023, and annually thereafter, to issue a joint reliability progress report that reviews system and local reliability. The bill also modifies the requirement for CARB to hold a portion of its Scoping Plan workshops in regions of the state with the most significant exposure to air pollutants by further specifying that this includes communities with minority populations or low-income communities in areas designated as being in extreme federal non-attainment. The 2022 Scoping Plan describes the implications of this legislation on emissions.
Senate Bill 1137 (SB 1137) (Gonzales, Chapter 365, Statutes of 2022) *Oil & Gas Operations: Location Restrictions: Notice of Intention: Health protection zone: Sensitive receptors*	SB 1137 prohibits the development of new oil and gas wells or infrastructure in health protection zones, as defined, except for purposes of public health and safety or other limited exceptions. The bill requires operators of existing oil and gas wells or infrastructure within health protection zones to undertake specified monitoring, public notice, and nuisance requirements. The bill requires CARB to consult and concur with the California Geologic Energy Management Division (CalGEM) on leak detection and repair plans for these facilities, adopt regulations as necessary to implement emission detection system standards, and collaborate with CalGEM on public access to emissions detection data.
Senate Bill 1075 (SB 1075) (Skinner, Chapter 363, Statutes of 2022) *Hydrogen: Green Hydrogen: Emissions of Greenhouse Gases*	SB 1075 requires CARB, by June 1, 2024, to prepare an evaluation that includes: policy recommendations regarding the use of hydrogen, and specifically the use of green hydrogen, in California; a description of strategies supporting hydrogen infrastructure, including identifying policies that promote the reduction of GHGs and short-lived climate pollutants; a description of other forms of hydrogen to achieve emission reductions; an analysis of curtailed electricity; an estimate of GHG and emission reductions that could be achieved through deployment of green hydrogen through a variety of scenarios; an analysis of the potential for opportunities to integrate hydrogen production and applications with drinking water supply treatment needs; policy recommendations for regulatory and permitting processes associated with transmitting and distributing hydrogen from production sites to end uses; an analysis of the life-cycle GHG emissions from various forms of hydrogen production; and an analysis of air pollution and other environmental impacts from hydrogen distribution and end uses. This bill informs the production of hydrogen at the scale called for in the 2022 Scoping Plan.
Assembly Bill 1757 (AB 1757) (Garcia, Chapter 341, Statutes of 2022) *California Global Warming Solutions Act of 2006: Climate Goal: Natural and Working Lands*	AB 1757 requires the California Natural Resources Agency (CNRA), in collaboration with CARB, other state agencies, and an expert advisory committee, to determine a range of targets for natural carbon sequestration, and for nature-based climate solutions, that reduce GHG emissions in 2030, 2038, and 2045 by January 1, 2024. These targets must support state goals to achieve carbon neutrality and foster climate adaptation and resilience. This bill also requires CARB to develop standard methods for state agencies to consistently track GHG emissions and reductions, carbon sequestration, and additional benefits from natural and working lands over time. These methods will account for GHG emissions reductions of CO_2, methane, and nitrous oxide related to natural and working lands and the potential impacts of climate change on the ability to reduce GHG emissions and sequester carbon from natural and working lands, where feasible. This 2022 Scoping Plan describes the next steps and implications of this legislation for the natural and working lands sector.
Senate Bill 1206 (SB 1206) (Skinner, Chapter 884, Statutes of 2022) *Hydrofluorocarbon gases: sale or distribution*	SB 1206 mandates a stepped sales prohibition on newly produced high- global warming potential (GWP) hydrofluorocarbons (HFCs) to transition California's economy toward recycled and reclaimed HFCs for servicing existing HFC-based equipment. Additionally, SB 1206 also requires CARB to develop regulations to increase the adoption of very low-, i.e., GWP < 10, and no-GWP technologies in sectors that currently rely on higher-GWP HFCs.

TABLE 3.7-4
MAJOR CLIMATE LEGISLATION AND EXECUTIVE ORDERS ENACTED SINCE THE 2017 SCOPING PLAN

Bill/Executive Order	Summary
Senate Bill 27 (SB 27) (Skinner, Chapter 237, Statutes of 2021) *Carbon Sequestration: State Goals: Natural and Working Lands: Registry of Projects*	SB 27 requires CNRA, in coordination with other state agencies, to establish the Natural and Working Lands Climate Smart Strategy by July 1, 2023. This bill also requires CARB to establish specified CO_2 removal targets for 2030 and beyond as part of its Scoping Plan. Under SB 27, CNRA is to establish and maintain a registry to identify projects in the state that drive climate action on natural and working lands and are seeking funding. CNRA also must track carbon removal and GHG emission reduction benefits derived from projects funded through the registry. This bill is reflected directly in the 2022 Scoping Plan as CO_2 removal targets for 2030 and 2045 in support of carbon neutrality.
Senate Bill 596 (SB 596) (Becker, Chapter 246, Statutes of 2021) *Greenhouse Gases: Cement Sector: Net-Zero Emissions Strategy*	SB 596 requires CARB, by July 1, 2023, to develop a comprehensive strategy for the state's cement sector to achieve net-zero emissions of GHGs associated with cement used within the state as soon as possible, but no later than December 31, 2045. The bill establishes an interim target of 40 percent below the 2019 average GHG intensity of cement by December 31, 2035. Under SB 596, CARB must: Define a metric for GHG intensity and establish a baseline from which to measure GHG intensity reductions. • Evaluate the feasibility of the 2035 interim target (40 percent reduction in GHG intensity) by July 1, 2028. • Coordinate and consult with other state agencies. • Prioritize actions that leverage state and federal incentives. • Evaluate measures to support market demand and financial incentives to encourage the production and use of cement with low GHG intensity. The 2022 Scoping Plan modeling is designed to achieve these outcomes.
Executive Order N-82-20	Executive Order N-82-20 (October 2020) combat the climate and biodiversity crises by setting a statewide goal to conserve at least 30 percent of California's land and coastal waters by 2030. The Executive Order also instructed the CNRA, in consultation with other state agencies, to develop a Natural and Working Lands Climate Smart Strategy that serves as a framework to advance the state's carbon neutrality goal and build climate resilience. In addition to setting a statewide conservation goal, the Executive Order directed CARB to update the target for natural and working lands in support of carbon neutrality as part of this Scoping Plan, and to take into consideration the NWL Climate Smart Strategy. CO_2 Executive Order N-82-20 also calls on the CNRA, in consultation with other state agencies, to establish the California Biodiversity Collaborative (Collaborative). The Collaborative shall be made up of governmental partners, California Native American tribes, experts, business and community leaders, and other stakeholders from across the state. State agencies will consult the Collaborative on efforts to: • Establish a baseline assessment of California's biodiversity that builds upon existing data and can be updated over time. • Analyze and project the impact of climate change and other stressors in California's biodiversity. • Inventory current biodiversity efforts across all sectors and highlight opportunities for additional action to preserve and enhance biodiversity. CNRA also is tasked with advancing efforts to conserve biodiversity through various actions, such as streamlining the state's process to approve and facilitate projects related to environmental restoration and land management. The California Department of Food and Agriculture (CDFA) is directed to advance efforts to conserve biodiversity through measures such as reinvigorating populations of pollinator insects, which restore biodiversity and improve agricultural production. The Natural and Working Lands Climate Smart Strategy informs the 2022 Scoping Plan.

TABLE 3.7-4
MAJOR CLIMATE LEGISLATION AND EXECUTIVE ORDERS ENACTED SINCE THE 2017 SCOPING PLAN

Bill/Executive Order	Summary
Executive Order N-79-20	Executive Order N-79-20 (September 2020) establishes targets for the transportation sector to support the state in its goal to achieve carbon neutrality by 2045. The targets established in this Executive Order are: • 100 percent of in-state sales of new passenger cars and trucks will be zero-emission by 2035. • 100 percent of medium- and heavy-duty vehicles will be zero-emission by 2045 for all operations where feasible, and by 2035 for drayage trucks. • 100 percent of off-road vehicles and equipment will be zero-emission by 2035 where feasible. The Executive Order also tasked CARB to develop and propose regulations that require increasing volumes of zero- electric passenger vehicles, medium- and heavy-duty vehicles, drayage trucks, and off-road vehicles toward their corresponding targets of 100 percent zero-emission by 2035 or 2045, as listed above. The 2022 Scoping Plan modeling reflects achieving these targets.
Executive Order N-19-19	Executive Order N-19-19 (September 2019) directs state government to redouble its efforts to reduce GHG emissions and mitigate the impacts of climate change while building a sustainable, inclusive economy. This Executive Order instructs the Department of Finance to create a Climate Investment Framework that: • Includes a proactive strategy for the state's pension funds that reflects the increased risks to the economy and physical environment due to climate change. • Provides a timeline and criteria to shift investments to companies and industry sectors with greater growth potential based on their focus of reducing carbon emissions and adapting to the impacts of climate change. • Aligns with the fiduciary responsibilities of the California Public Employees' Retirement System, California State Teachers' Retirement System, and the University of California Retirement Program. Executive Order N-19-19 directs the State Transportation Agency to leverage more than $5 billion in annual state transportation spending to help reverse the trend of increased fuel consumption and reduce GHG emissions associated with the transportation sector. It also calls on the Department of General Services to leverage its management and ownership of the state's 19 million square feet in managed buildings, 51,000 vehicles, and other physical assets and goods to minimize state government's carbon footprint. Finally, it tasks CARB with accelerating progress toward California's goal of five million ZEV sales by 2030 by: • Developing new criteria for clean vehicle incentive programs to encourage manufacturers to produce clean, affordable cars. • Proposing new strategies to increase demand in the primary and secondary markets for ZEVs. • Considering strengthening existing regulations or adopting new ones to achieve the necessary GHG reductions from within the transportation sector. The 2022 Scoping Plan modeling reflects efforts to accelerate ZEV deployment.
Senate Bill 576 (SB 576) (Umberg, Chapter 374, Statutes of 2019) *Coastal Resources: Climate Ready Program and Coastal Climate Change Adaptation, Infrastructure and Readiness Program*	Sea level rise, combined with storm-driven waves, poses a direct risk to the state's coastal resources, including public and private real property and infrastructure. Rising marine waters threaten sensitive coastal areas, habitats, the survival of threatened and endangered species, beaches, other recreation areas, and urban waterfronts. SB 576 mandates that the Ocean Protection Council develop and implement a coastal climate adaptation, infrastructure, and readiness program to improve the climate change resiliency of California's coastal communities, infrastructure, and habitat. This bill also instructs the State Coastal Conservancy to administer the Climate Ready Program, which addresses the impacts and potential impacts of climate change on resources within the conservancy's jurisdiction.

TABLE 3.7-4
MAJOR CLIMATE LEGISLATION AND EXECUTIVE ORDERS ENACTED SINCE THE 2017 SCOPING PLAN

Bill/Executive Order	Summary
Assembly Bill 65 (AB 65) (Petrie- Norris, Chapter 347, Statutes of 2019) *Coastal Protection: Climate Adaption: Project Prioritization: Natural Infrastructure: Local General Plans*	This bill requires the State Coastal Conservancy, when it allocates any funding appropriated pursuant to the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018, to prioritize projects that use natural infrastructure in coastal communities to help adapt to climate change. The bill requires the conservancy to provide information to the Office of Planning and Research on any projects funded pursuant to the above provision to be considered for inclusion into the clearinghouse for climate adaptation information. The bill authorizes the conservancy to provide technical assistance to coastal communities to better assist them with their projects that use natural infrastructure.
Executive Order B-55-18	Governor Brown signed Executive Order B-55-18 in September 2018 to establish a statewide goal to achieve carbon neutrality as soon as possible, and no later than 2045, and to achieve and maintain net negative emissions thereafter. Policies and programs undertaken to achieve this goal shall: • Seek to improve air quality and support the health and economic resiliency of urban and rural communities, particularly low-income and disadvantaged communities. • Be implemented in a manner that supports climate adaptation and biodiversity, including protection of the state's water supply, water quality, and native plants and animals. This Executive Order also calls for CARB to: • Develop a framework for implementation and accounting that tracks progress toward this goal. • Ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The 2022 Scoping Plan is designed to achieve carbon neutrality no later than 2045 and the modeling includes technology and fuel transitions to achieve that outcome.
Senate Bill 100 (SB 100) (De León, Chapter 312, Statutes of 2018) *California Renewables Portfolio Standard Program: emissions of greenhouse gases*	Under SB 100, the CPUC, CEC, and CARB shall use programs under existing laws to achieve 100 percent clean electricity. The statute requires these agencies to issue a joint policy report on SB 100 every four years. The first of these reports was issued in 2021. The 2022 Scoping Plan reflects the SB 100 Core Scenario resource mix with a few minor updates.
Assembly Bill 2127 (AB 2127) (Ting, Chapter 365, Statutes of 2018) *Electric Vehicle Charging Infrastructure: Assessment*	This bill requires the CEC, working with CARB and the CPUC, to prepare and biennially update a statewide assessment of the electric vehicle charging infrastructure needed to support the levels of electric vehicle adoption required for the state to meet its goals of putting at least 5 million zero-emission vehicles on California roads by 2030 and of reducing emissions of GHGs to 40 percent below 1990 levels by 2030. The bill requires the CEC to regularly seek data and input from stakeholders relating to electric vehicle charging infrastructure. This bill supports the deployment of ZEVs as modeled in the 2022 Scoping Plan.
Senate Bill 30 (SB 30) (Lara, Chapter 614, Statutes of 2018) *Insurance: Climate Change*	This bill requires the Insurance Commissioner to convene a working group to identify, assess, and recommend risk transfer market mechanisms that, among other things, promote investment in natural infrastructure to reduce the risks of climate change related to catastrophic events, create incentives for investment in natural infrastructure to reduce risks to communities, and provide mitigation incentives for private investment in natural lands to lessen exposure and reduce climate risks to public safety, property, utilities, and infrastructure. The bill requires the policies recommended to address specified questions.
Assembly Bill 2061 (AB 2061) (Frazier, Chapter 580, Statutes of 2018) *Near-Zero-Emission and Zero-Emission Vehicles*	Existing state and federal law sets specified limits on the total gross weight imposed on the highway by a vehicle with any group of two or more consecutive axles. Under existing federal law, the maximum gross vehicle weight of that vehicle may not exceed 82,000 pounds. AB 2061 authorizes a near-zero- emission vehicle or a zero-emission vehicle to exceed the weight limits on the power unit by up to 2,000 pounds. This bill supports the deployment of cleaner trucks as modeled in the 2022 Scoping Plan.

SOURCE: CARB, 2022.

The 2022 Scoping Plan strategies are broadly summarized in Table 2-1 starting on page 72 of the Scoping Plan (CARB 2022a). It includes references to relevant statutes and Executive Orders, although it is not comprehensive of all existing new authorities for directing or supporting the actions described. Table 2-1 identifies actions related to a variety of sectors such as: smart growth and reductions in Vehicle Miles Traveled (VMT); light-duty vehicles (LDV) and zero-emission vehicles (ZEV); truck ZEVs; reduce fossil energy, emissions, and GHGs for aviation, ocean-going vessels, port operations, freight and passenger rail, oil and gas extraction; and petroleum refining; improvements in electricity generation; electrical appliances in new and existing residential and commercial buildings; electrification and emission reductions across industries such as the for food products, construction equipment, chemicals and allied products, pulp and paper, stone/clay/glass/cement, other industrial manufacturing, and agriculture; retiring of combined heat and power facilities; low carbon fuels for transportation, business, and industry; improvements in non-combustion methane emissions, and introduction of low GWP refrigerants.

Achieving the targets described in the 2022 Scoping Plan requires continued commitment to and successful implementation of existing policies and programs, and identification of new policy tools and technical solutions to go further, faster. California's Legislature and state agencies will continue to collaborate to achieve the state's climate, clean air, equity, and broader economic and environmental protection goals. It will be necessary to maintain and strengthen this collaborative effort, and to draw upon the assistance of the federal government, regional and local governments, tribes, communities, academic institutions, and the private sector to achieve the state's near-term and longer-term emission reduction goals and a more equitable future for all Californians. The Scoping Plan acknowledges that the path forward is not dependent on one agency, one state, or even one country. However, the State can lead by engaging Californians and demonstrating how actions at the state, regional, and local levels of governments, as well as action at community and individual levels, can contribute to addressing the challenge.

Appendix D, Local Actions, of the 2022 Scoping Plan includes "recommendations intended to build momentum for local government actions that align with the State's climate goals, with a focus on local GHG reduction strategies (commonly referred to as climate action planning) and approval of new land use development projects, including through environmental review under the California Environmental Quality Act (CEQA)." Appendix D is intended to provide clarification on challenges local jurisdictions face when implementing GHG reduction strategies or approving much-needed housing projects.[3] Aligning local jurisdiction action with state-level priorities to tackle climate change and the outcomes called for in the 2022 Scoping Plan is critical to achieving the statutory targets for 2030 and 2045. The 2022 Scoping Plan discusses the role of local governments in meeting the State's GHG reductions goals. Local governments have the primary authority to plan, zone, approve, and permit how and where land is developed to accommodate population growth, economic growth, and the changing needs of their jurisdictions. Local governments also make critical decisions on how and when to deploy transportation infrastructure, and can choose to support transit, walking, bicycling, and neighborhood development strategies that encourage non-automotive transportation. Local governments also have the option to adopt building ordinances that exceed statewide building code requirements and play a critical role in facilitating the rollout of ZEV infrastructure. As a result, local government decisions play a critical role in supporting

[3] CARB, 2022. Final 2022 Climate Change Scoping Plan – Appendix D: Local Actions, November. https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-appendix-d-local-actions.pdf. Accessed January 2024.

state-level measures to contain the growth of GHG emissions associated with the transportation system and the built environment—the two largest GHG emissions sectors over which local governments have authority. The County has taken the initiative in combating climate change by addressing it in the County of Santa Barbara Comprehensive Plan and 2030 Climate Action Plan, which is discussed below under the *Local* subheading

Cap-and-Trade Program

The Climate Change Scoping Plan identifies a Cap-and-Trade Program as one of the strategies California would employ to reduce GHG emissions. CARB asserts that this program will help put California on the path to meet its goal of ultimately achieving an 80 percent reduction from 1990 levels by 2050. Pursuant to its authority under AB 32, CARB designed and adopted the California Cap-and-Trade Program to reduce GHG emissions from major sources (deemed "covered entities") by setting a firm cap on statewide GHG emissions and employing market mechanisms to achieve AB 32's emissions reduction mandate of returning to 1990 levels of emissions by 2020 (17 CCR Sections 95800–96023).

The Cap-and-Trade Program establishes an overall limit for GHG emissions from capped sectors (e.g., electricity generation, petroleum refining, cement production, and large industrial facilities that emit more than 25,000 $MTCO_2e$ per year) and declines over time, and facilities subject to the cap may trade permits to emit GHGs. The statewide cap for GHG emissions from the capped sectors commenced in 2013 and declines over time, achieving GHG emissions reductions throughout the program's duration (17 CCR Sections 95811 and 9512). On July 17, 2017, the California Legislature enacted AB 398, extending the Cap-and-Trade Program through 2030.

The Cap-and-Trade Regulation provides a firm cap, ensuring that the statewide emission limits will not be exceeded. An inherent feature of the Cap-and-Trade Program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on a cumulative basis. In other words, because climate change is a global occurrence and the impacts of GHG emissions are considered cumulative, a focus on aggregate GHG emissions reductions, rather than source-specific reductions, is warranted.

Mobile Sources

Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling

In 2004, CARB adopted an Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other toxic air contaminants (13 CCR, Section 2485). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure generally does not allow diesel-fueled commercial vehicles to idle for more than 5 minutes at any given location with certain exemptions for equipment in which idling is a necessary function such as concrete trucks. While this measure primarily targets diesel particulate matter emissions, it has co-benefits of minimizing GHG emissions from unnecessary truck idling.

Low Carbon Fuel Standard

In 2007, Executive Order S-01-07 mandated the following: establish a statewide goal to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020; and adopt a low-carbon fuel

standard (LCFS) for transportation fuels in California. CARB identified the LCFS as one of the nine discrete early actions in the 2008 Climate Change Scoping Plan. In September 2018, the standards were amended by CARB to require a 20 percent reduction in carbon intensity by 2030, aligning with California's 2030 targets set by SB 32 (CARB 2018).

In-Use Off-Road Diesel-Fueled Fleets Regulation

In 2007, CARB promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower such as bulldozers, loaders, backhoes, and forklifts, as well as many other self-propelled off-road diesel vehicles. The regulation aims to reduce emissions by installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models.

CARB approved amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulation in November of 2022 (CARB 2022b). The amendment will require fleets to phase-out use of the oldest and highest polluting off-road diesel vehicles, prohibit the addition of high-emitting vehicles to a fleet, and require the use of R99 or R100 renewable diesel in off-road diesel vehicles. The amendments phase-in starting in 2024 through the end of 2046 and include changes to enhance enforceability and encourage the adoption of zero-emission technologies. These amendments aim to further reduce emissions from the off-road sector.

Truck and Bus Regulation

In 2008, CARB approved the Truck and Bus regulation to reduce particulate matter and nitrogen oxide emissions from existing diesel vehicles operating in California (13 CCR, Section 2025, subsection (h)). CARB has also promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower, such as, bulldozers, loaders, backhoes and forklifts, as well as many other self-propelled off-road diesel vehicles. The regulation aims to reduce emissions by installation of diesel soot filters, and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models. While these regulations primarily target reductions in criteria air pollutant emission, they have co-benefits of minimizing GHG emissions due to improved engine efficiencies.

Advanced Clean Car Program

In 2012, CARB adopted the Advanced Clean Cars (ACC) emissions-control program, which is closely associated with the emissions standards for passenger vehicles and light-duty trucks discussed above (CARB 2024b). The program requires an increase in the number of zero-emissions vehicle models for years 2015 through 2025 to control smog, soot and GHG emissions. By 2025, ZEVs must be 22 percent of large volume manufacturers overall production (CARB 2024c). This program includes the Low-Emissions Vehicle (LEV) regulations to reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles; and ZEV regulations to require manufacturers to produce an increasing number of pure ZEVs (meaning battery and fuel cell electric vehicles) with the provision to produce plug-in hybrid electric vehicles (PHEV) between 2018 and 2025.

Executive Order No. N-79-20 September 2020) phases out the sales of new gasoline-fueled passenger cars by 2035 in California with an additional 10-year transition period for heavy vehicles. The State would not restrict used car sales, nor forbid residents from owning gas-powered vehicles. In accordance with the Executive Order, CARB is developing a 2020 Mobile Source Strategy, a comprehensive analysis

that presents scenarios for possible strategies to reduce the carbon, toxic and unhealthy pollution from cars, trucks, equipment, and ships. The strategies will provide important information for numerous regulations and incentive programs going forward by conveying what is necessary to address the aggressive emission reduction requirements.

The primary mechanism for achieving the ZEV target for passenger cars and light trucks is CARB's Advanced Clean Cars II (ACC II) Program (CARB 2024d). The ACC II regulations will rapidly scale down light-duty passenger car, pickup truck and SUV emissions starting with the 2026 model year through 2035. The ACC II regulation amends the Zero-emission Vehicle Regulation to require an increasing number of zero-emission vehicles, and relies on currently available advanced vehicle technologies, including battery-electric, hydrogen fuel cell electric and plug-in hybrid electric-vehicles, to meet air quality and climate change emissions standards which supports Executive Order N-79-20 that requires all new passenger vehicles sold in California to be zero emissions by 2035. Additionally, the ACC II regulation amends the Low-emission Vehicle Regulations to include increasingly stringent standards for gasoline cars and heavier passenger trucks to continue to reduce smog-forming emissions.

Advanced Clean Trucks Program

The Advanced Clean Trucks regulations were approved on June 25, 2020, and require that manufacturers sell zero-emissions or near-zero-emissions trucks as an increasing percentage of their annual California sales beginning in 2024. The goal of this proposed strategy is to achieve nitrogen oxide (NOx) and GHG emission reductions through advanced clean technology, and to increase the penetration of the first wave of zero-emissions heavy-duty technology into applications that are well suited to its use. According to CARB, "Promoting the development and use of advanced clean trucks will help CARB achieve its emission reduction strategies as outlined in the SIP, Sustainable Freight Action Plan, SB 350, and AB 32" (CARB 2024e). The percentage of zero-emissions truck sales is required to increase every year until 2035 when sales would need to be 55 percent of Classes 2b–3 (light/medium- and medium-duty trucks) truck sales, 75 percent of Classes 4–8 (medium- to heavy-duty trucks) straight truck sales, and 40 percent of truck tractor (heavy-duty trucks weighing 33,001 pounds or greater) sales. Additionally, large fleet operators (of 50 or more trucks) would be required to report information about shipments and services and their existing fleet operations.

Land Use and Transportation Planning

In 2008, SB 375 (Chapter 728, Statutes of 2008) established mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. Under SB 375, CARB is required, in consultation with the State's metropolitan planning organizations (MPOs), to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035 (CARB 2024f). The proposed reduction targets explicitly exclude emission reductions expected from the AB 1493 and the LCFS regulations.

Under SB 375, the regional GHG reduction target must be incorporated within the applicable MPO's Regional Transportation Plan (RTP), which is used for long-term transportation planning, in a Sustainable Communities Strategy (SCS). In 2011, CARB adopted GHG emissions reduction targets for the Santa Barbara County Association of Governments (SBCAG), the MPO for the region. In 2018, CARB updated the SB 375 targets to require a 13 percent reduction by 2020 and a 17 percent reduction by 2035 in per capita passenger vehicle GHG emissions (CARB 2024g).

Energy Sector

The California Building Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR, Title 24, Part 6) were adopted to ensure that building construction and system design and installation achieve energy efficiency and preserve outdoor and indoor environmental quality. The CEC first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce GHG emissions, increased energy efficiency and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and non-residential buildings subject to the standard. The standards are updated periodically (typically every three years) to allow for the consideration and inclusion of new energy efficiency technologies and methods.

The current California Building Energy Efficiency Standards (Title 24 standards) are the 2022 Title 24 standards, which became effective January 1, 2023. The 2022 Title 24 standards encourage efficient electric heat pumps, establish electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 standards (CEC 2022).

In September 2024, the CEC approved the 2025 California Building Energy Efficiency Standards, which would go into effect on January 1, 2026. The 2025 standards build on the 2022 standards by aiming to decarbonize buildings by encouraging energy efficiency, solar and battery storage, and shifting times of energy use by expanding heat pump requirements for space and water heating in more building types, including low-rise multifamily units. It also introduces stronger electric-ready mandates to ease future transitions to electric appliances. Updates to solar and battery storage standards now align with revised net billing policies for high-rise multifamily and nonresidential buildings. Additionally, nonresidential buildings face new space conditioning controls, while multifamily buildings must meet stricter ventilation requirements for better indoor air quality. These updates enhance energy efficiency, reduce emissions, and save Californians an estimated $4.8 billion in energy costs over 30 years (CEC 2025).

The California Green Building Standards Code (CCR, Title 24, Part 11), commonly referred to as the CALGreen Code, with the most current version being the 2022 version which became effective January 1, 2023. The purpose of the CALGreen Building Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality" (CBSC 2010). The CALGreen Building Code is not intended to substitute for or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission. The CALGreen Building Code establishes mandatory measures for new residential and non-residential buildings. The CALGreen Code includes mandatory measures for non-residential development related to site development, energy efficiency, water efficiency and conservation; material conservation and resource efficiency; and environmental quality. The 2022 CALGreen Code: revises standards for electric vehicle charging for new construction, primarily multi-family dwellings and hotels/motels, including increased requirements for EV parking spaces and EVSE Level 2 chargers, establishes heat pumps as a baseline technology, strengthens ventilation standards, establishes electric-ready requirements for new homes, and sets minimum solar photovoltaic and battery energy storage

capacity for high-rise multifamily and commercial buildings, including office buildings, grocery stores, and schools, and more.

The 2012 Appliance Efficiency Regulations (CCR, Title 20, Sections 1601 through 1608) took effect February 13, 2013. The regulations include standards for both federally regulated appliances and non-federally regulated appliances. The regulations have since been amended on April 10, 2024, with updated information and align with applicable federal law and other changes for clarity (CEC 2024).

The State has adopted regulations to increase the proportion of electricity from renewable sources. SB 350 (Chapter 547, Statues of 2015) set the Renewables Portfolio Standard (RPS) to 50 percent by 2030, including interim targets of 40 percent by 2024 and 45 percent by 2027. In 2018, SB 100 further increased California's RPS and requires retail sellers and local publicly-owned electric utilities to procure eligible renewable electricity for 44 percent of retail sales by the end of 2024, 52 percent by the end of 2027, and 60 percent by the end of 2030; and requires that CARB should plan for 100 percent eligible renewable energy resources and zero-carbon resources by the end of 2045.

The California Public Utilities Commission (CPUC) and the CEC jointly implement the RPS program. The CPUC's responsibilities include: (1) determining annual procurement targets and enforcing compliance; (2) reviewing and approving each investor-owned utility's renewable energy procurement plan; (3) reviewing contracts for RPS-eligible energy; and (4) establishing the standard terms and conditions used in contracts for eligible renewable energy.

Regional

Santa Barbara County Association of Governments

SBCAG serves as the MPO for Santa Barbara County as is responsible for developing and maintaining a long-range transportation plan for the region. In general, the SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce vehicle miles traveled from automobiles and light duty trucks and thereby reduce GHG emissions from these sources. For the SBCAG region, Connected 2050 RTP/SCS, adopted in August 2021, is the current RTP/SCS. Connected 2050 RTP/SCS focuses on the continued efforts of the previous RTP/SCS plans for an integrated approach in transportation and land use strategies in development of the SBCAG region through horizon year 2050. Connected 2050 RTP/SCS projects that the SBCAG region will meet the GHG per capita reduction targets established for the SBCAG region of 17 percent by 2035.

Santa Barbara County Air Pollution Control District

As discussed in Section 3.3, *Air Quality*, of this PEIR, the Santa Barbara County Air Pollution Control District (SBCAPCD) is responsible for air quality planning in the South Central Coast Air Basin (where the Project is located) and developing rules and regulations to bring the Air Basin into attainment of the ambient air quality standards. The SBCAPCD has adopted Environmental Review Guidelines (2015) in which it has adopted GHG thresholds. The Guidelines state that a stationary source proposed project would not have a significant adverse environmental impact if operation of the project would:

1. Emit less than the screening significance level of 10,000 $MTCO_2e$ per year, or

2. Show compliance with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions (sources subject to the AB 32 Cap-and-Trade requirements pursuant to Title 17, Article 5 (California Cap on Greenhouse Gas Emissions and Market-based Compliance Mechanisms) would meet the criteria), or
3. Show consistency with the AB 32 Scoping Plan GHG emission reduction goals by reducing project emissions 15.3% below Business As Usual (BAU).

Additionally, the SBCAPCD has promoted a number of programs to promote energy conservation, low-carbon fuel technologies (natural gas vehicles; electric-hybrids, hydraulic-hybrids, and battery-electric vehicles), renewable energy, VMT reduction programs, and market incentive programs which would reduce GHG emissions.

Local

County of Santa Barbara Comprehensive Plan

The County of Santa Barbara Comprehensive Plan includes an Energy Element (County of Santa Barbara 2015) and was adopted in 1994, republished June 2015, and amended in August 2024. The Energy Element supersedes the Energy Conservation Element of the Santa Barbara County Comprehensive Plan. The Comprehensive Plan is a long-range planning document that is applicable to the unincorporated communities within the County where the Project would be implemented. The Energy Element contains long-range planning guidelines and mechanisms to encourage energy efficiency and alternative energies in Santa Barbara County, which has co-benefits to reducing GHG emissions. The Energy Element contains the following goals and policies that address GHGs that apply to the Project:

> **Goal 4: Water Use and Solid Waste.** Increase the efficiency of water and resource use to reduce energy consumption associated with various phases of using resources (pumping, distribution, treatment, heating, etc.).
>
> > ***Policy 4.1: Construction*.** Encourage recycling and reuse of construction waste to reduce energy consumption associated with extracting and manufacturing virgin materials.
> >
> > ***Policy 4.3: Reuse of Asphalt*.** Promote reuse of asphalt removed from roads and paved structures within the county and use of recycled materials in roadway and paved surface construction.
>
> **Goal 5: Alternative Energy.** Encourage the use of alternative energy for environmental and economic benefits and encourage opportunities for businesses that develop or market alternative energy technologies.
>
> > ***Policy 5.1: Environmental Analysis*.** In the consideration of alternative energy, the County shall consider the full life-cycle environmental effects and embedded energy requirements to provide such alternative energy. The County shall encourage the use of those alternatives determined to present sufficient environmental benefits.
> >
> > ***Policy 5.2: Alternative Energy Technologies*.** The County shall encourage the use of alternative energy technology in appropriate new and existing development.
> >
> > ***Policy 5.4: Solar Photovoltaic Equipment*.** The County shall use solar photovoltaic equipment in county applications when it is cost-effective on a life-cycle cost basis.

Policy 5.13: Alternative energy Technology Businesses. Among broader county-wide efforts to attract businesses, the County shall initiate planning efforts to pursue desired businesses that develop or market alternative energy technologies.

County of Santa Barbara Energy and Climate Action Plan (ECAP)

The County's 2015 Energy & Climate Action Plan (County of Santa Barbara 2020) sunset in 2020. The goal of the ECAP was to reduce GHG emissions by 15 percent below 2007 levels by 2020 through the implementation of 53 measures. Results of the ECAP were that 41 out of 53 measures were either initiated or completed by 2020, five measures were not started, and seven measures were discontinued (County of Santa Barbara 2020). An estimated 100,754 out of 226,760 (44 percent) metric tons of CO2e (MTCO2e) were reduced or avoided from ECAP implementation (County of Santa Barbara 2020). Additional measures from two other programs (Community Choice Energy and Tajiguas Landfill ReSource Center) achieved an estimated reduction of 156,768 $MTCO_2e$ (County of Santa Barbara 2020). The total of all reductions equated to the County of Santa Barbara meeting 69 percent of the ECAP's reduction target, which represents a three percent decrease from 2016. The County of Santa Barbara was still 11 percent over 2007 baseline levels (County of Santa Barbara 2020).

County of Santa Barbara 2030 Climate Action Plan

The 2030 Climate Action Plan (CAP) (County of Santa Barbara 2023b) has set a goal to achieve a 50% reduction of communitywide greenhouse gas emissions from 2018 levels by 2030. The measures laid out in the 2030 CAP provide a foundation that aligns with the State of California's goals to reduce GHG emissions to 40 percent below 1990 levels and achieve carbon neutrality by 2045. The CAP's six focus areas are: 1) Housing and Transportation; 2) Clean Energy; 3) Waste, Water, and Wastewater; 4) Nature-Based Solutions; 5) Low-Carbon Economy; and 6) Municipal Operations (County of Santa Barbara 2023b). General measures that may apply to the Project include Clean Energy Action CE-1.9 Electrification Permitting, which would implement best practices and streamline permitting for projects with associated renewable energy and energy storage systems. Additionally, Action CE-1.10 Utility Scale Solar aims to update the County's ordinances in order to expand opportunity for solar development on various land types. The 2030 CAP was adopted by the County Board of Supervisors on August 27, 2024.

Santa Barbara County Energy Assurance Plan

The Santa Barbara Energy Assurance Plan (EAP) is a strategic planning document developed to enhance energy reliability, resilience, and sustainability through 2030 (County of Santa Barbara 2024). It focuses on a just transition to a cleaner, more community-powered electricity system, especially for populations most vulnerable to climate impacts and grid disruptions. The plan sets goals to achieve by 2030, including increasing the County's total renewable energy capacity to 700 MW (250 MW from utility-scale and 450 MW from distributed sources) and increasing energy storage capacity to 245 MW (200 MW utility-scale and 45 MW distributed). Additionally, the plan sets objectives to enhance participation in demand response programs and establish 10 county-wide community resilience hubs that would store backup power.

To meet these objectives, the County will pursue a combination of distributed and utility-scale energy solutions. This includes promoting solar and battery storage systems at homes and businesses, enabling large-scale renewable energy projects, and ensuring critical buildings can maintain operations during outages. Community engagement is central to the plan—resilience hubs and widespread demand response

participation will support local preparedness. The EAP also incorporates an Energy Assurance Map, which shows existing infrastructure, climate hazards, and social vulnerability to prioritize equitable investment.

Santa Barbara County Strategic Energy Plan

The Santa Barbara County Strategic Energy Plan (SEP), published in August 2019, provides a comprehensive strategy to reduce greenhouse gas emissions, strengthen local energy resilience, and expand renewable energy use throughout the County. The SEP addresses the County's vulnerability to energy disruptions—due in part to its unique location between PG&E and SCE service areas and the exposure to wildfire, earthquake, and extreme weather risks. The SEP focuses on goals to increase local renewable energy generation, improve energy efficiency, and protect critical facilities from grid outages. The plan identifies significant local potential for solar systems, both rooftop and utility-scale. Strategies outlined in the SEP to achieve increased renewable energy and reliability include streamlining permitting, modernizing the grid to support distributed energy, creating financial incentives to offset initial investment costs, and boosting public outreach and education on the benefits of renewable energy. Furthermore, coordinated action across local governments, regional partners, and the private sector is emphasized.

Santa Barbara County Code

Santa Barbara County Code Article VI adopts the California Energy Code, 2022 Edition as the Primary Energy Code of the County. The California Energy Code has specific requirements for building design to reduce energy consumption, including the use of certain building materials to ensure a greater degree of energy efficiency during building operation and construction and energy efficiency standards for appliances, lighting amenities, and water fixtures, among other project components.

3.7.4 Project Impact Analysis

This analysis follows the guidance and methodologies recommended in the CEQA Appendix G thresholds, SBCAPCD's *Scope and Content of Air Quality Sections in Environmental Documents* (2022b), and the County of Santa Barbara *Environmental Thresholds and Guidelines Manual* (2024). While there is some overlap in the thresholds from these three sources, each has been individually listed below because thresholds from these sources may be applicable to individual projects that would result from the Projects.

Thresholds of Significance

CEQA Appendix G Significance Thresholds

Pursuant to Appendix G of the State CEQA Guidelines, potentially significant GHG impacts would result if the project would:

a) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The issue of climate change typically involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15355).

SBCAPCD Significance Thresholds

According to the SBCAPCD *Scope and Content of Air Quality Sections in Environmental Documents* (2022), a proposed stationary source[4] project would have a significant climate change and greenhouse gases impact on the environment if operation of the project would:

- Emit more than the screening significance level of 10,000 $MTCO_2e$ per year, or
- Does not show compliance with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions (sources subject to the AB 32 Cap-and-Trade requirements pursuant to Title 17, Article 5 (California Cap on Greenhouse Gas Emissions and Market-based Compliance Mechanisms) would meet the criteria), or
- Does not show consistency with the AB 32 Scoping Plan GHG emission reduction goals by reducing project emissions 15.3% below Business As Usual (BAU).

If annual emissions of GHGs exceed these threshold levels, the proposed project would result in a cumulatively considerable contribution of GHG emissions and a cumulatively significant adverse environmental impact.

The SBCAPCD does not currently have quantitative thresholds of significance in place for short-term or construction GHG emissions.

County of Santa Barbara Environmental Thresholds

Consistent with CEQA Guidelines Section 15064.7, Thresholds of Significance, the County of Santa Barbara developed and adopted thresholds of significance for determining the significance of a project's GHG emissions. According to the County's Environmental Thresholds and Guidelines Manual (2024), the County has developed thresholds for project-related GHG emissions, and a significant adverse GHG impact may occur when a project, individually or cumulatively, exceeds the significance thresholds. As per the County's Environmental Thresholds and Guidelines Manual (2024), all industrial stationary-source projects shall be subject to a numeric, bright-line threshold of 1,000 $MTCO_2e$ per year to determine if GHG emissions constitute a significant cumulative impact. Construction-related emissions are to be accounted for in the year that they occur.

For non-exempt projects and plans, other than industrial stationary source projects, subject to discretionary approvals by the County, where the County is the CEQA lead agency, the 2030 CAP Consistency Checklist may be used. Any project that does not demonstrate consistency with the 2030 CAP (i.e., the project or plan is not complying with the 2030 CAP measures) cannot be tiered from the 2030 CAP Program EIR and must be reviewed subject to the quantitative thresholds. The quantitative threshold for non-industrial projects applies to both direct and indirect emissions of GHGs. Direct emissions encompass the project's complete operations, including GHGs emitted from all on-site (e.g., natural gas combustion in appliances) and mobile sources, involved in the operation, including off-road equipment, as well as the removal of trees and other vegetation. Indirect emissions encompass GHGs that are emitted to provide the project with electricity (including generation and transmission) and supply the project with water (including water treatment and conveyance). The thresholds apply to emissions from the transportation and treatment

[4] A stationary source is any building, structure, facility, or installation which emits or may emit an air pollutant directly or as fugitive emissions.

of solid and liquid waste produced from the project's operations and water for the project's operations, and transportation and processing of solid waste. Construction related GHG emissions are to be amortized across the lifetime of the project (i.e., dividing total construction GHG emissions by the number of years the project is expected to be operated) if known, or a default lifetime of 30 years. The Project would enable the construction of future solar energy systems and facilities in the unincorporated regions of the County. The 2030 CAP recognizes that utilizing carbon free and renewable energy, such as solar, can reduce emissions generated by communities and buildings. As such, renewable energy projects, such as solar and wind projects, may be credited for GHG emissions that would otherwise be emitted by natural gas-fueled or other fossil-fueled electrical generation. The thresholds are separated into three categories - residential, non-residential, and mixed-use. A project's total estimated GHG emissions calculated using CalEEMod would be divided by the total number of residents, jobs, or service persons created by the project or plan. The efficiency thresholds established by the County are 2.68 MT CO_2e per resident for residential projects, 2.63 MT CO_2e per employee for non-residential projects, and 2.67 MT CO_2e per service person for mixed-use projects.

Methodology

Construction and Decommissioning

The Project would generate GHG from construction equipment, construction worker vehicles, heavy-duty trucks and from energy consumption from electricity used for lighting and equipment and water conveyance for dust control during construction of future solar energy systems and facilities enabled under the Project. Construction emissions are forecasted by assuming a conservative estimate of construction activities during each phase of construction. Construction emissions are estimated using CalEEMod software (Version 2022.1). Consistent with calculations in Section 3.3, *Air Quality*, construction emissions were forecasted by assuming a conservative estimate of construction activities (i.e., assuming all construction occurs at the earliest feasible date) and applying the mobile source emissions factors.

As discussed in Chapter 2, *Project Description*, the Project would allow solar development categorized into 4 tiers, ranging from small roof or ground mounted systems to utility-scale solar energy facilities. For the purposes of this Program EIR and to provide for a conservative and environmentally protective analysis, air quality impacts are modeled based on the proposed category of tiers of solar energy system and facilities (as described in Table 2-2) that specifies allowable size and classification. Specifically, two construction categories are modeled, a 5-acre project, representative of Tier 1 and Tier 2 projects, and a 600-acre project, representative of Tier 3 and Tier 4 projects. While no project-level information is known at this time, it is assumed that the nature and intensity of such future installation projects would be similar or smaller in scope and scale compared to the two models analyzed. As such, for the purposes of analysis in this CEQA document, construction activities and methods employed for the model projects have been quantitatively analyzed and would be comparable to or somewhat overestimate actual GHG emissions from the installation of future facilities in the County.

The input values used in this analysis were adjusted to reflect future solar energy developments based on conservative assumptions for equipment types, number of equipment used, and the construction schedule. These values were then applied to the same construction assumptions used in the criteria pollutant analysis in Section 3.3, *Air Quality*, (see Table 3.3-3 and Table 3.3-4) to generate GHG emissions values for a future development. In addition, construction-related GHG emissions would occur from energy

consumption from electricity used for the construction office (lights, electronic equipment, and heating and cooling) and water conveyance for dust control. See Appendix F of this Program EIR for construction assumptions and detailed input parameters and results.

In accordance with County guidelines, GHG emissions from construction have been amortized over a 30-year lifetime for the representative projects modeled and are discussed as a part of the qualitative operational discussion in order to determine the level of significance.

GHG emissions associated with decommissioning would be similar to or less than for construction as decommissioning would involve the use of similar types of heavy-duty equipment and vehicles, but at a lesser intensity, reduced numbers of equipment, and/or reduced duration. Therefore, GHG emissions associated with decommissioning is assessed within the construction assessment.

Operations

Once constructed, solar components for future solar energy systems and facilities enabled under the Project would generally operate passively, with minimal employee trips, occasional maintenance, and periodic solar panel washing. Operational activities that would generate mobile source emissions for any given solar generation site and associated facilities would generate minimal annual GHG emissions. Additionally, future projects may include battery energy storage systems (battery ESS) and may result in energy loss. Battery ESS facilities have inherent energy loss from multiple factors, including battery chemical degradation, particularly from charge-discharge cycles, and external environmental conditions, particularly temperature and humidity, that can accelerate degradation. Nonetheless, the Project would promote sustainable solar energy generation for both local and utility-scale use. Thus, operational energy is analyzed qualitatively.

Consistency with GHG Reduction Plans

Per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area of the project (14 CCR § 15064(h)(3)). To qualify, such a plan or program must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency (14 CCR § 15064(h)(3)). Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, [and] plans or regulations for the reduction of greenhouse gas emissions" (14 CCR § 15064(h)(3)). Thus, CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of non-significance for GHG emissions if a project complies with a program and/or other regulatory schemes to reduce GHG emissions, such as the CARB 2022 Scoping Plan for Achieving Carbon Neutrality, SBCAG Connected 2050 RTP/SCS, and County of Santa Barbara 2030 Climate Action Plan.

Project Impacts

This section describes generalized GHG and climate change impacts that could occur from the future development of solar energy systems and facilities. **Table 3.7-5**, *Summary of Greenhouse Gas Emissions Impacts*, provides a summary of the Project's potential environmental impacts related to GHGs. A detailed discussion of each impact follows.

TABLE 3.7-5
SUMMARY OF GREENHOUSE GAS EMISSIONS IMPACTS

Greenhouse Gas Emissions Impacts	Impact Classification	Mitigation Measures	Residual Impact
Impact GHG 1: Implementation of the Project could generate GHG emissions, directly or indirectly, that exceed the County of Santa Barbara or SBCAPCD screening thresholds or significance thresholds resulting in a significant impact on the environment.	Potentially significant	MM GHG-1	Insignificant with Mitigation
Impact GHG 2: Implementation of the Project would not contribute to cumulative GHG impacts since the Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.	Insignificant	No mitigation required	Insignificant
Cumulative Impacts	Insignificant	No mitigation required	Insignificant

Threshold a) The Project would result in a significant impact if the Project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment

Impact GHG 1: Implementation of the Project could generate GHG emissions, directly or indirectly, that exceed the County of Santa Barbara or SBCAPCD screening thresholds or significance thresholds resulting in a significant impact on the environment.

Construction and Decommissioning

Construction of future solar energy systems and facilities enabled under the Project has the potential to generate GHG emissions through the use of heavy-duty construction equipment, such as backhoes, loaders, drill rigs, trenchers, and other equipment; and through vehicle trips generated by workers, haul trucks, and vendor trucks traveling to and from the future solar energy development sites. Mobile source GHG emissions would result from the use of construction equipment and worker vehicles and trucks. In accordance with County guidance, GHG emissions from construction have been amortized over the 30-year lifetime for the two categories of solar development and are added to the operational emissions discussion for the determination of significance (see discussion below under Operation for impact conclusion). For the purposes of this analysis and to provide for a conservative and environmentally protective analysis, it is assumed that construction of individual projects may occur up to 34 months (about three years) for Tier 1 and Tier 2 projects (based on conservative assumptions, although most Tier 1 and Tier 2 projects would likely be closer to one to two years of construction) and up to 53 months (about four and half years) for Tier 3 and Tier 4 projects (based on conservative assumptions, although most Tier 3 and Tier 4 projects would likely be closer to one to three years of construction). Project construction emissions are shown in **Table 3.7-6**, *Representative Construction GHG Emissions for Tier 1 and Tier 2 Project*, and **Table 3.7-7**, *Representative Construction GHG Emissions for Tier 3 and Tier 4 Project*. As shown, construction GHG emissions in the year in which they occur could potentially exceed the County's Environmental Thresholds and Guidelines Manual (2024) bright-line threshold of 1,000 $MTCO_2e$ per year for a Tier 3 and Tier 4 project. It should be noted that project-level information is not known at this time. Therefore, the GHG emissions shown in Table 3.7-6 and Table 3.7-7 are based on model assumptions as

described in Methodology (also see Section 3.3, *Air Quality*, Table 3.3-3 and Table 3.3-4 for additional details). The emissions estimates were developed to be representative of a high-end envelope of GHG emissions that could occur for future solar energy systems and facilities enabled under the Project. The emissions are based on conservative estimates, which could overstate actual GHG emissions for a future project. Thus, the impact is potentially significant for a Tier 3 and Tier 4 project.

TABLE 3.7-6
REPRESENTATIVE CONSTRUCTION GHG EMISSIONS FOR TIER 1 AND TIER 2 PROJECT

Construction Year[a]	CO_2e (Metric Tons/year)[b]
Year 1	631
Year 2	659
Year 3	548
Maximum Annual GHG Construction Emissions	**659**
Total Project GHG Construction Emissions	1,838
30-year Amortization	61
County Annual GHG Threshold	**1,000**
Exceed Threshold?	**No**

NOTES:
a. For emissions modeling purposes, construction was assumed to begin in early 2026, corresponding to Year 1 and end in 2028, corresponding to Year 3.
b. Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix F.

SOURCE: ESA, 2025.

TABLE 3.7-7
REPRESENTATIVE CONSTRUCTION GHG EMISSIONS FOR TIER 3 AND TIER 4 PROJECT

Construction Year[a]	CO_2e (Metric Tons/year)[b]
Year 1	2,366
Year 2	2,278
Year 3	2,278
Year 4	2,272
Year 5	934
Maximum Annual GHG Construction Emissions	**2,366**
Total Project GHG Construction Emissions	10,1287
30-year Amortization	338
County Annual GHG Threshold	**1,000**
Exceed Threshold?	**Yes**

NOTES:
a. For emissions modeling purposes, construction was assumed to begin in early 2026, corresponding to Year 1 and end in 2030, corresponding to Year 5.
b. Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix F.

SOURCE: ESA, 2025.

At the end of the operational life of the solar systems, the process of decommissioning would occur. This process involves several steps that may include site assessment, system disconnection, removal of panels and associated equipment (inverters, wiring, racking), transportation of materials, and proper recycling or disposal. Decommissioning may also include land restoration for ground-mounted systems. This process may involve the use of on-site heavy-duty equipment and generate off-site vehicle trips similar to or less than those assumed under Project construction. Therefore, the process of decommissioning would have similar or less GHG emissions as assessed for construction.

Operation

Operation of future solar energy systems and facilities enabled under the Project would generally operate passively, with only occasional maintenance typically consisting of landscaping and maintenance activities; therefore, an increase in worker-related commuting vehicle emissions would not be significant. Limited maintenance operations at future solar energy systems and facilities would include travel from a few vehicles per month and periodic water demand for solar panel cleaning and would result in minimal annual GHG emissions (i.e., less than the annual 30-year amortized GHG emissions for construction as shown in Tables 3.7-6 and 3.7-7). Future solar energy systems and facilities enabled under the Project would also not induce substantial new electricity demand, nor would it result in substantial generation of solid waste. According to the Santa Barbara County Environmental Thresholds and Guidelines Manual, projects that do not demonstrate consistency with the 2030 CAP and its measures must be analyzed subject to the County's established quantitative thresholds. As discussed below, the Project would be consistent with several measures within the CAP. However, the CAP's consistency checklist would not be applicable to the Project. Step 2 of the Checklist Applicability contained within the Compliance Checklist Table notes that projects that involve the preparation of a CEQA document but do not include new buildings, substantial redevelopment, or additions of more than 2,000 square feet of floor area to existing building would not be applicable for compliance analysis under the checklist and that no further GHG analysis is required. Future solar energy systems and facilities enabled under the Project would not result in development of residential or commercial land use projects, for which the CAP checklist was primarily prepared. Thus, the Project is not required to utilize the checklist for consistency. Nevertheless, the Project would adhere to several measures contained within the CAP, including CE-1.5 and CE-1.9. Furthermore, because the CAP checklist notes that no further GHG analysis is necessary, the efficiency thresholds established by the County would not be applicable, nor suitable for the Project, because the Project does not involve the construction and operation of traditional land uses, such as a residential or office building, with well-defined residential and employee populations.

Future solar energy systems and facilities enabled under the Project would generate renewable electricity that would offset grid-provided electricity, a portion of which is derived from fossil-fuel based sources under existing conditions. While the portion of grid-provided electricity from fossil fuels continues to decline in accordance with the State's RPS, as discussed in Section 3.7.3 above, future solar projects would nonetheless result in the beneficial offsetting of GHG emissions in the electricity sector. Additionally, future solar energy projects may also include battery energy storage systems (battery ESS). Battery ESS facilities are commonly integrated with solar facilities to store excess solar energy generated during the day and discharge it later, improving grid reliability and allowing solar power to meet demand during non-solar hours. These systems are typically co-located with solar facilities and use lithium-ion batteries connected through shared inverters. However, battery ESS are not 100 percent efficient as electricity is lost in the charge/discharge cycle. This is measured by round-trip efficiency, which averages approximately

82 percent for U.S. utility-scale batteries (TEF, 2025). Although battery ESS are not 100 percent efficient, meaning more electricity must be charged to the system than can be later discharged, future projects with battery ESS that would be developed with adoption of the proposed amendments would nonetheless result in the beneficial offsetting of GHG emissions in the electricity sector. For illustrative purposes, **Table 3.7-8**, *Displaced GHG Emissions by Project Capacity and Utility*, provides an estimated example of potential GHG reductions that could result from future solar energy projects implemented under the Project and their capacity to offset or serve as an alternative for fossil-fuel based energy facility emissions.

TABLE 3.7-8
DISPLACED GHG EMISSIONS BY PROJECT CAPACITY AND UTILITY (METRIC TONS PER YEAR)

Solar Project Capacity (MW)	PG&E[a,b] (MTCO2e per year)		SCE[a,b] (MTCO2e per year)	
	No Battery ESS	With Battery ESS[c]	No Battery ESS	With Battery ESS[c]
1 MW	10	8	391	321
50 MW	478	392	19,546	16,027

NOTES:
a. Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix F.
b. Energy intensity factors for applicable utility providers in Santa Barbara County are based on reported 2023 Annual Power Content Labels reported to the California Energy Commission, accessible at https://www.energy.ca.gov/programs-and-topics/programs/power-source-disclosure-program/power-content-label/annual-power-4. Detailed emissions calculations are provided in Appendix F.
c. The higher the round-trip efficiency, the less energy is lost in the storage process. According to data from the U.S. Energy Information Administration, in 2019, the U.S. utility-scale battery fleet operated with an average monthly round-trip efficiency of 82 percent (TEF, 2025). Therefore, displaced GHG emissions would be approximately 18 percent (1.00 – 0.82 = 0.18) less efficient with battery ESS compared to projects without battery ESS as shown.

SOURCE: ESA, 2025.

Since no project-specific information is available at this time, further analysis may be needed to model project-specific implications of displaced GHG emissions on a project-level analysis. The operation of future solar energy facilities enabled under the Project would require minimal employees and maintenance vehicles and would result in negligible emissions over those of existing conditions. Nonetheless, the Project would expand solar energy facilities in the region, reducing overall GHG emissions from nonrenewable resources used for electricity generation. As such, the Project would not conflict with the County's 2030 CAP emission reduction goals. Therefore, the Project would have minimal operational emissions and therefore this impact would be insignificant.

Nonetheless, as discussed above and as shown in Table 3.7-7, construction and decommissioning GHG emissions in the year in which they occur could potentially exceed the County's Environmental Thresholds and Guidelines Manual (2024) bright-line threshold of 1,000 $MTCO_2e$ per year for a Tier 3 and Tier 4 project. Thus, the impact for construction and decommissioning GHG emissions is potentially significant for a Tier 3 and Tier 4 project and mitigation is required.

Mitigation Measures

MM GHG-1: For Tier 3 and Tier 4 solar energy facilities, construction and decommissioning GHG emissions shall be evaluated based on project-specific information and compared to the County of Santa Barbara *Environmental Thresholds and Guidelines Manual* brightline threshold as applicable. If project-level emissions exceed the applicable threshold, GHG emissions shall be reduced to below the threshold. Any reduction of GHG emissions used for compliance purposes

(e.g., carbon credits) must be real, permanent, quantifiable, verifiable, enforceable, and additional pursuant to Health and Safety Code (HSC) §38562(d)(1) and (2). Project applicants shall submit to County Planning and Development for review and approval documentation on GHG quantification, contractor equipment and fuel specifications, or other documents to ensure GHG reductions are consistent with HSC §38562(d)(1) and (2). Measures to reduce emissions shall include, but not be limited to, one or more of the following:

- Use commercially available and feasible low or zero carbon technology construction equipment and/or trucks or vehicles in place of diesel-fueled models. Example technologies may include compressed natural gas, electric, hybrid-electric, fuel cell, or other commercially available technologies. Feasible means the equipment, trucks, or vehicles are capable of performing the construction activities in a comparable manner to diesel-fueled models (with respect to time, safety, equipment power requirements, etc.) and which results in appreciable GHG reductions.
- Purchase carbon credits from a reputable carbon market. Priority should be given to those credits generated within the County of Santa Barbara, and in decreasing preference, credits generated within the region, in-state, and out-of-state.
- Measures that result in appreciable GHG reductions such as, but not limited to: reducing truck trips or trip lengths for material hauling and transport, reducing construction worker commuting trips or trip lengths, or other similar types of measures.

Residual Impacts

With implementation of MM GHG-1, construction GHG emission impacts would be insignificant.

Threshold b) The Project would result in a significant impact if the Project would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Impact GHG 2: Implementation of the Project would not contribute to cumulative GHG impacts since the Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

In order to assess the Project's potential to conflict with the 2022 Climate Change Scoping Plan, SBCAG's 2050 Connected RTP/SCS, and the County of Santa Barbara General Plan and 2030 Climate Action Plan, this section analyzes the Project's consistency with the strategies and policies set forth in these plans to meet GHG emission-reduction targets set by CARB. Generally, projects would not conflict with applicable land use plans and regulations if they are compatible with the general intent of the plans and would not preclude the attainment of their primary goals.

CARB 2022 Scoping Plan

The CARB 2022 Scoping Plan was adopted in December 2022 and expands on prior Scoping Plans and recent legislations, such as AB 1279, by outlining a technologically feasible, cost-effective, and equity-focused path to achieve the state's climate target of reducing anthropogenic GHG emissions to 85 percent below 1990 levels and achieving carbon neutrality by 2045 or earlier (CARB 2022a). To achieve carbon neutrality by 2045, the 2022 Scoping Plan contains GHG reductions, technology, and clean energy mandated by statutes, reduction of short-lived climate pollutants, and mechanical carbon dioxide capture and sequestration actions. The 2022 Scoping Plan contains actions and strategies to meet GHG reduction goals. **Table 3.7-9**, *Consistency Analysis with Applicable 2022 Scoping Plan Actions and Strategies,*

contains a list of GHG emission reduction actions and strategies from the 2022 Scoping Plan and describes the Project's consistency with them. As shown in Table 3.7-9, the Project would generally not conflict with the 2022 Scoping Plan. The Project could potentially conflict with the Natural and Working Lands (NWL) strategies; however, as discussed in Table 3.7-9, the potential conflict of solar energy systems and facilities would be limited as a result of development standards, permit findings, and the discretion of decision makers, and with policy considerations to minimize impacts to NWL. Thus, overall, impacts would be insignificant.

TABLE 3.7-9
CONSISTENCY ANALYSIS WITH APPLICABLE 2022 SCOPING PLAN ACTIONS AND STRATEGIES

2022 Scoping Plan Action	Responsible Party(ies)	Potential for Project to Conflict?
Transportation Technology and Fuels Sector Achieve 100 percent ZEV sales of light duty vehicles by 2035 and medium heavy-duty vehicles by 2040. Accelerate the reduction and replacement of fossil fuel production and consumption in California.	State agencies and local agencies	**No Conflict.** The Project would not conflict with these actions but would benefit from them by reducing GHG emissions from maintenance vehicles during operation as fossil fueled vehicles are replaced with ZEV.
Vehicles Miles Traveled Sector Achieve a per capita VMT reduction of at least 25 percent below 2019 levels by 2030 and 30 percent below 2019 levels by 2045.	State agencies and local agencies	**No Conflict.** The Project would amend several County plans and regulations to allow the development of solar energy systems and facilities on various land types in unincorporated Santa Barbara County. This would not conflict with the Scoping Plan's initiative to prioritize projects that would result in a reduction of VMT. Overall, the operation of individual solar energy projects would generate minimal VMT generated from occasional inspection and maintenance activities. Additionally, the Project would not induce growth, so they would not affect VMT reduction efforts.
Clean Electricity Grid Sector Use long-term planning processes (Integrated Energy Policy Report, IRP, CAISO Transmission Planning Process, AB 32 Climate Change Scoping Plan) to support grid reliability and expansion of renewable and zero-carbon resource and infrastructure deployment.	State agencies and local agencies	**No Conflict.** Decarbonizing the electricity sector depends on both using energy more efficiently and replacing fossil-fueled generation with renewable and zero carbon resources, including solar, wind, energy storage, geothermal, biomass, and hydroelectric power. The Project is consistent with IEPR and IRP by expanding renewable energy capacity and supporting the state's clean energy goals. It also aligns with Scoping Plan's efforts by reducing GHGs, especially if individual project would include battery storage to strengthen grid reliability. As such, the Project would promote the actions in the clean electricity grid sector to reduce GHGs.
Sustainable Manufacturing and Buildings Industry and Building Sectors Maximize air quality benefits using the best available control technologies for stationary sources in communities most in need, including frontline, low-income, disadvantaged, rural, and tribal communities. Achieve three million all-electric and electric-ready homes by 2030 and seven million by 2035 with six million heat pumps installed statewide by 2030.	State agencies and local agencies	**No Conflict.** The 2022 Scoping Plan reduces dependence on fossil fuels in the industrial and building sectors by transitioning substantial energy demand to alternative fuels. Although the Project would focus construction efforts on solar energy facilities and would not involve the construction of buildings, the Project would increase solar energy facilities on a community and utility-scale within the region, which would support the electrification of industrial and building sectors. As such, the Project would support the actions in the sustainable manufacturing and buildings industry and building sectors to reduce GHGs.

TABLE 3.7-9
CONSISTENCY ANALYSIS WITH APPLICABLE 2022 SCOPING PLAN ACTIONS AND STRATEGIES

2022 Scoping Plan Action	Responsible Party(ies)	Potential for Project to Conflict?
Carbon Dioxide Removal and Capture Sector Implement SB 905 by convening a multi-agency Carbon Capture and Sequestration Group to identify the current status, concerns, and outstanding questions concerning CCS, and develop a process to engage with communities to understand specific concerns and consider guardrails to ensure safe and effective deployment of CCS. Iteratively update the CARB CCS Protocol with the best available science and implementation experience.	State agencies and local agencies	**No Conflict.** The Project would not conflict with measures to increase carbon dioxide removal and capture. The Project would amend several land use plans and regulations to allow the development of solar energy systems and facilities on various land types in unincorporated Santa Barbara County. As such, the Project would not conflict with measures in the carbon dioxide removal and capture sector to reduce GHG emissions.
Short-Lived Climate Pollutants (Non-Combustion Gases) Sectors Install state of the art anaerobic digesters that maximize air and water quality protection, maximize biomethane capture, and direct biomethane to sectors that are hard to decarbonize or as a feedstock for energy. Maximize existing infrastructure and expand it to reduce landfill disposal, with strategies including composting, anaerobic digestion, co-digestion at wastewater treatment plants, and other non-combustion conversion technologies. Mitigate emissions from leaks by regular leak detection and repair (LDAR) surveys at all facilities and replace high emitting equipment with zero emission alternatives wherever feasible. Expand the use of very low- or no-GWP technologies in all HFC end-use sectors, including emerging sectors, like heat pumps for applications other than space conditioning, to maximize the benefits of building decarbonization. Reduce fuel combustion commensurate with state's climate and air quality programs, particularly from reductions in transportation emissions and agricultural equipment emissions.	State agencies and local agencies	**No Conflict.** The Project would not conflict with SLCP dairy and livestock methane sector actions, SLCP landfill methane sector actions, SLCP upstream oil and gas methane sector action, SLCP upstream oil and gas methane sector actions, SLCP hydrofluorocarbons sector, or SLCP anthropogenic black carbon sector actions in the 2022 Scoping Plan. The Project would result in future solar energy projects and do not include dairy or livestock.
Natural and Working Lands: Strategies for Forest Shrublands and Chaparral, Grasslands, Croplands, Developed Lands, Vegetative Lands, and Wetlands NWL Implement AB 1757 and SB 27 and the Climate Smart Strategy. Accelerate the pace and scale of climate smart forest management to at least 2.3 million acres annually by 2025, in line with the climate smart management strategies identified in this Scoping Plan, the NWL Climate Smart Strategy, and the Wildfire and Forest Resilience Action Plan. Establish and expand mechanisms that ensure grasslands are protected from land conversion/ parcelization and that support ongoing, rather than one-time, management actions that improve carbon sequestration.	State agencies and local agencies	**Potential Conflict.** The Project may conflict with NWL strategies for forest shrublands and chaparral, grasslands, croplands, developed lands, vegetative lands, and wetlands NWL actions under the 2022 Scoping Plan. The Project would amend several land use plans and regulations to allow the development of solar energy systems and facilities on various land types in unincorporated Santa Barbara County, such as agrivoltaics within agricultural lands. However, the Amendments would limit the extent of solar energy systems and facilities and impacts to NWL as a result of development standards, permit findings, and the discretion of decision makers, and with policy considerations such as the Santa Barbara County Comprehensive Plan Land Use Element and Agricultural Element, which lays out the general patterns of development throughout the county, including the distribution of open space and agricultural land and outlines goals and policies aimed

TABLE 3.7-9
CONSISTENCY ANALYSIS WITH APPLICABLE 2022 SCOPING PLAN ACTIONS AND STRATEGIES

2022 Scoping Plan Action	Responsible Party(ies)	Potential for Project to Conflict?
Accelerate the pace and scale of healthy soils practices to 80,000 acres annually by 2025, conserve at least 8,000 acres of annual crops annually, and increase organic agriculture to 20 percent of all cultivated acres by 2045. Increase urban forestry investment annually by 200 percent, relative to business as usual. Establish and expand mechanisms that ensure sparsely vegetated lands are protected from land conversion, prioritizing those areas most vulnerable to climate change and loss.		at preserving agricultural land (refer to Section 3.9, *Land Use and Planning*, for additional information on the Land Use Element and Agricultural Element). The Amendments themselves would not allow the building of general residential, commercial/retail or industrial uses. Nonetheless, the implementation of future solar energy systems and facilities may potentially conflict with this action.

SOURCE: ESA 2025.

SBCAG Connected 2050 RTP/SCS

The Project would amend several land use plans and regulations to allow the development of solar energy facilities on various land types in unincorporated Santa Barbara County. It is expected that the individual projects that would occur as a result of the Project would result in minimal VMT countywide for maintenance and repair activities. Although the Project would not directly reduce VMT, it would support decarbonization of electricity supply and may indirectly lower VMT by enabling local community-scale and utility-scale energy production, reducing fuel transport needs, and supporting EV adoption. Additionally, the Project would not be growth inducing and would not result in a substantial increase of VMT within the County. Therefore, the Project would support SBCAG's goals of decarbonizing transportation and would not contribute a substantial amount of Countywide VMT. Thus, the Project would not conflict with the SBCAG Connected RTP/SCS and impacts would be insignificant.

Santa Barbara County Air Pollution Control District

While the County is the Lead Agency, it is noted that future solar energy projects would not exceed the screening threshold of 10,000 $MTCO_2e$ per year, established in the SBCAPCD's Environmental Review Guidelines (2015). As previously discussed, the Project's operations would only consist of minimal vehicle trips for occasional maintenance, which would not be a major source of GHG emissions. Furthermore, as shown above, the Project would not conflict with the GHG emissions reduction goals of CARB's 2022 Scoping Plan and would expand renewable energy capacity thereby supporting the state's clean energy goals. The Project would also help to reduce County-wide GHGs by expanding and streamlining the process for solar energy development. As such, the Project would promote the actions in the clean electricity grid sector to reduce GHGs. Furthermore, the Project would support the local approved plans for GHG emission reduction. As such, the Project would not conflict with the thresholds established by the SBCAPCD and therefore the impacts would be insignificant.

County of Santa Barbara Comprehensive Plan

Future solar energy projects that would occur as a result of the Project would support Goal 5: Alternative Energy which encourages the use of renewable energies, including solar photovoltaic systems. Additionally, through Policy 5.13, the County aims to initiate planning efforts to encourage alternative energy technologies and businesses (County of Santa Barbara 2015). The Project would support a variety of solar

energy development, including community-scale and utility-scale solar fields, in the unincorporated portions of the County, which would help the County increase their use of renewable energy. Future solar energy projects would also comply with Goal 4, Policies 4.1, Construction, and 4.3, Reuse of Asphalt, by reusing and recycling construction waste to reduce energy consumption and by reusing asphalt where applicable. Thus, future solar energy projects would not conflict with the County of Santa Barbara General Plan and impacts would be insignificant.

County of Santa Barbara 2030 Climate Action Plan

The Project would amend several land use plans and regulations to allow the development of various levels of solar energy developments on different land types in the unincorporated County. Thus, the Project would support the 2030 CAP Action CE-1.9 Electrification Permitting, which would implement best practices and streamline permitting for projects with associated renewable energy and energy storage systems. Additionally, the Project would help to fulfill Action CE-1.10 Utility Scale Solar, which aims to update the County's ordinances in order to expand opportunity for solar development on various land types. These actions have been identified by the County as methods to help reduce the emission of GHGs within the County. Thus, the Project would not conflict with the County of Santa Barbara 2030 CAP and impacts would be insignificant.

Santa Barbara County EAP and SEP

The Project aligns with the goals outlined in the County's EAP and the SEP because the Project would encourage solar energy systems and facilities, the associated storage of the generated energy, and contribute to reduced GHG emissions from the energy sector. In the SEP, streamlining permitting processes is explicitly identified as a recommended action to overcome challenges to renewable energy development. The plan notes that "regulatory and permitting hurdles can be a deterrent to investment and project development," particularly for distributed solar energy (Santa Barbara County 2019). The Project would facilitate the process of developing local solar energy projects in the unincorporated areas of the County, thereby increasing renewable energy generation, improving energy efficiency, and reducing GHG emissions—all core goals of the SEP.

Similarly, the EAP sets a goal of installing 450 MW of distributed renewable energy by 2030 and emphasizes the development of solar and battery storage systems as a strategy to enhance energy resilience, increase local energy supply and storage, and reduce GHG emissions (County of Santa Barbara 2024). The Project would directly support the goals and strategies in the EAP by expanding areas in which community-scale and utility-scale solar energy systems can be located and clarifying and streamlining the process, thereby reducing cost barriers to solar development and encouraging more residents and businesses to adopt solar and storage systems. Therefore, the Project would contribute to the realization of the GHG-reduction goals stated in the EAP and would increase local energy resilience and renewable energy in the unincorporated County.

GHG Reduction Plans, Policies and Regulations

Based on the information above, future solar energy projects would comply with plans, policies and regulations for reducing GHG emissions and this impact would be insignificant.

Mitigation Measures

None required.

Residual Impacts

Residual impacts would be insignificant.

3.7.5 Cumulative Impacts Analysis

Analysis of GHG emissions is cumulative in nature because impacts are caused by cumulative global emissions and additionally, climate change impacts related to GHG emissions do not necessarily occur in the same area as a project is located. The emission of GHGs by a single development project into the atmosphere is not itself necessarily an adverse environmental effect. Rather, it is the increased accumulation of GHGs from more than one project and many sources in the atmosphere that may result in global climate change. The resultant consequences of climate change can cause adverse environmental effects. A project's GHG emissions typically would be very small in comparison to state or global GHG emissions and, consequently, they would, in isolation, have no significant direct impact on climate change.

As discussed above, the primary source of GHG emissions generated by implementation of the Project would occur during construction, which would be temporary in nature. Future solar energy systems and facilities enabled under the Project would be required to implement Mitigation Measure GHG-1 as applicable. Related projects would also be required to assess and mitigate construction GHG emissions as required by CEQA.

With the GHG reductions expected to result from implementation and operation of future solar energy systems and facilities enabled under the Project, the Project would have minimal GHG emissions that would not conflict with any County of Santa Barbara or SBCAPCD significance thresholds and thus, would not result in a significant cumulative GHG impact. Related projects would also have to meet the County's or SBCAPCD significance thresholds or mitigate impacts. Therefore, even when considered in conjunction with other development projects, the Project impact would not be cumulatively significant since they are below the significance thresholds.

With regard to consistency with applicable plans, policies, and regulations, as discussed above, the primary source of GHG emissions generated by implementation of future solar energy projects would occur during construction, which would be temporary in nature. Temporary construction when considered with minimal operational GHG emissions resulting from future solar energy developments would not conflict with any applicable screening or significance threshold. Further, as discussed above, future solar energy systems and facilities enabled under the Project would generate renewable electricity that would offset grid-provided electricity, a portion of which is derived from fossil-fuel based sources under existing conditions, and result in the beneficial offsetting of GHG emissions in the electricity sector. The generated renewable electricity could be supplied to other related projects to meet electricity demands, offsetting grid-provided electricity for related projects and resulting in the beneficial offsetting of GHG emissions from those related projects. Therefore, the Project would not contribute to a cumulative GHG impact. Furthermore, as analyzed above, future solar energy projects would not conflict with applicable plans, policies, or regulations established for the purposes of reducing the emissions of GHGs. Therefore, even when considered in conjunction with other development, the Project impact would not be cumulatively significant.

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3.8 Hazards and Hazardous Materials

3.8.1 Introduction

This section identifies and evaluates issues related to hazards and hazardous materials with future development of solar energy facilities enabled under the Project. This section provides the environmental setting and regulatory framework, and identifies potential hazards associated with the Project. The information and analysis in this section are based primarily on information from available planning documents, discussed further in Section 3.8.3 *Regulatory Setting*, and from a desktop review of hazardous materials sites provided by the State Water Resources Quality Control Board (SWRQCB) and the Department of Toxic Substances Control (DTSC) (SWRQCB 2025, DTSC 2025).

The County received a comment regarding the inclusion of battery energy storage systems (battery ESS) in the analysis for this Program Environmental Impact Report (EIR) during the public scoping period. A discussion of battery ESS is included within this section. Additional hazards associated with solar energy facilities are discussed in the Methodology Section. Hazards involving toxic air contaminants are discussed in Section 3.3, *Air Quality;* hazards relative to noise are discussed in Section 3.10, *Noise;* and hazards relative to wildland fires are discussed in Section 3.13, *Wildfires*.

3.8.2 Environmental Setting

Hazardous Materials

Definition of Hazardous Materials

A hazardous material is defined as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment (California Health and Safety Code Chapter 6.95, Section 25501[n]). The term “hazardous materials” refers to both hazardous substances and hazardous wastes. Under federal and State laws, any material, including wastes, may be considered hazardous if it is specifically listed by statute as such or if it is toxic (causes adverse human health effects), ignitable (has the ability to burn), corrosive (causes severe burns or damage to materials), or reactive (causes explosions or generates toxic gases).

Hazardous wastes are hazardous substances that no longer have practical use, such as materials that have been spent, discarded, discharged, spilled, contaminated, or are being stored until they can be disposed of properly (Title 22 California Code of Regulations [CCR] Section 66261.10). Soil that is excavated from a site containing hazardous materials is a hazardous waste if it exceeds specific criteria established in CCR Title 22 Sections 66261.20 through 66261.24. Hazardous substances are regulated by multiple agencies, as described in the regulatory setting below, and cleanup requirements of hazardous material releases are determined on a case-by-case basis according to the applicable regulatory agency with lead jurisdiction over a contaminated site (e.g., California Department of Toxic Substances Control [DTSC] or Central Coast Regional Water Quality Control Board [RWQCB]).

Hazardous Materials Sites

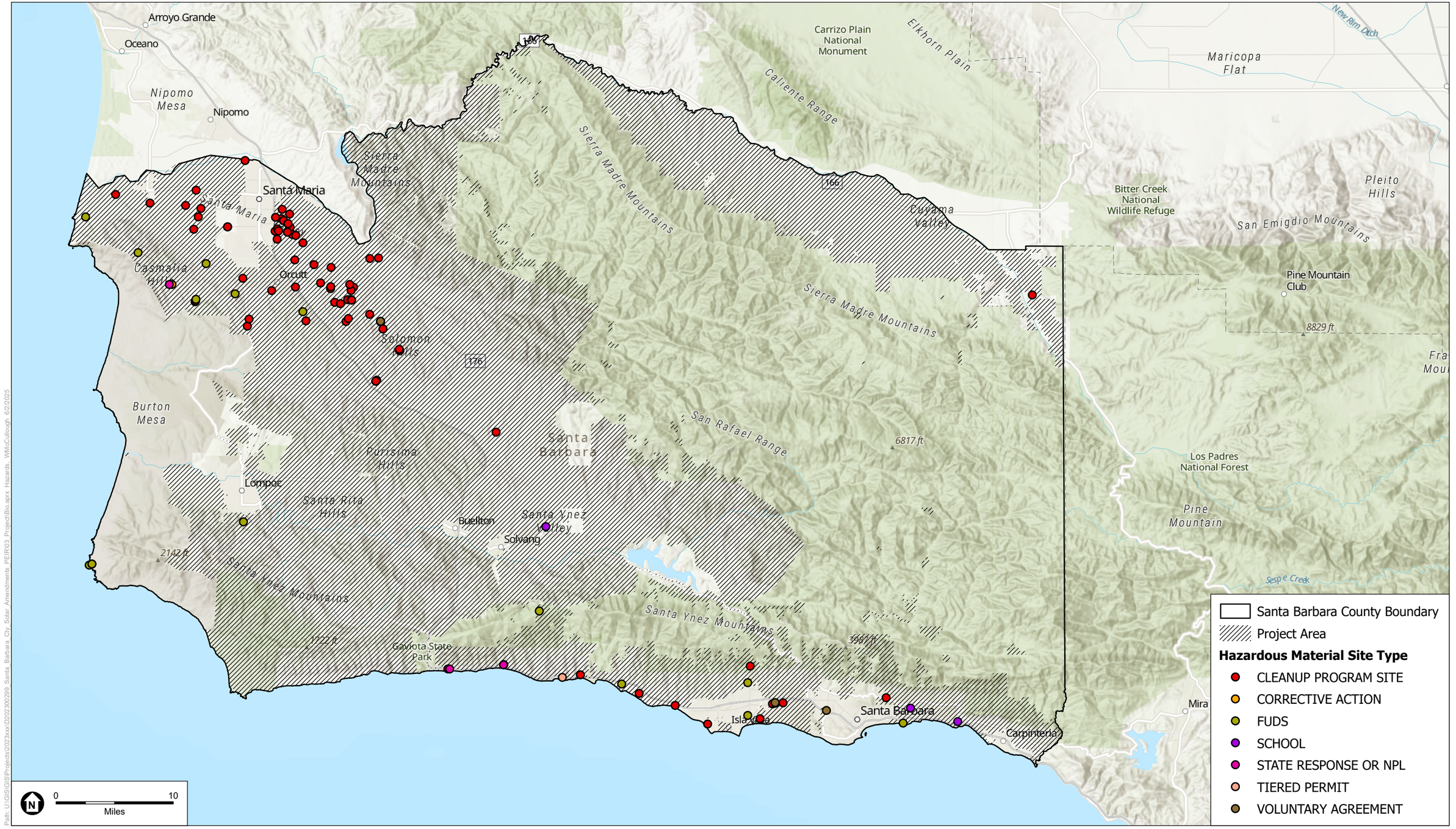
In California, Government Code Section 65962.5 requires the State Water Resources Control Board and DTSC to maintain regulatory databases listing hazardous materials sites; the list is also referred to as the Cortese List.

The Cortese List identifies sites with suspected and confirmed releases of hazardous materials to the subsurface soil and/or groundwater. The listed sites can be accessed through the State Water Resources Control Board's GeoTracker database for leaking underground storage tanks (LUSTs), permitted underground storage tanks (USTs), U.S. Department of Defense sites, and Cleanup Program sites and through the DTSC EnviroStor database for federal and state response sites; voluntary, school, and military cleanups and corrective actions; and permitted sites. The reporting and statuses of these hazardous materials sites change as identification, monitoring, and clean-up progresses. Typically, a listed site is considered closed or subject to no further action once it has been demonstrated that existing site uses combined with the levels of identified contamination present no significant risk to human health or the environment and the case is closed by the overseeing agency.

Hazardous materials sites in Santa Barbara County are generally located around developed areas, including incorporated and unincorporated communities, along highways, and at the Vandenberg Space Force Base (SWRQCB 2025). Additionally, agricultural lands may also have sites that currently store or use hazardous materials (or have in the past) or may have pesticide-contaminated soils. There are 113 open hazardous materials sites in unincorporated Santa Barbara County as of June 2025 (DTSC 2025). **Figure 3.8-1**, *Hazardous Materials Sites*, depicts the open hazardous materials sites within zoning amendment areas throughout the Project area. "Open" means that the site is being actively investigated, remediated, and/or monitored. The regulatory agency will grant case closure after it has concluded that the site no longer poses a risk to people or the environment. Examples of these hazardous materials sites include the Ellwood Marine Terminal Abandonment site, located near Goleta, the Gaviota Interim Marine Terminal/Shell Oil Site, located near Gaviota, and the DOW Chemical Company cleanup site. Each of these sites are in different phases of remediation for contaminants of concern in soil, soil vapor, surface water, and/or groundwater (SWRQCB 2025).

Proximity to Schools

Schools are located throughout Santa Barbara County, including within zoning amendment areas throughout the Project area. Schools are considered a sensitive receptor, and therefore particularly sensitive to hazardous materials or conditions. The Santa Barbara County Education Office serves 20 public school districts with approximately 70,000 students in Santa Barbara County. The 20 school districts in Santa Barbara County range from Carpinteria in the southeast corner to Guadalupe and Santa Maria-Bonita in the northwest corner. The largest unified (TK-12) district in the county is Santa Barbara Unified, with almost 15,000 students. The largest elementary district (TK-8) is Santa Maria-Bonita, with almost 17,000 students. The largest secondary district is Santa Maria High, with more than 8,000 students. By way of comparison, the smallest unified district is Cuyama, with just 786 students. The smallest elementary district is Vista del Mar, with 51 students, and the smallest secondary district is Santa Ynez Valley Union High School District, with 926 students (Santa Barbara County Education Office 2025).



Path: U:\GIS\GIS\Projects\2023\xxx\D202300299 Santa Barbara Cty Solar Amendments PEIR\03 Project\Bio.aprx Hazards WMcCullough 6/2/2025

SOURCE: ESA, 2025; GeoTracker/EnvironStor, 2025

Santa Barbara County Utility-Scale Solar Amendments

Figure 3.8-1
Hazardous Material Sites

ESA

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Proximity to Airports

There are four main airports located in Santa Barbara County (SBCAG 2025). Each of the airports and the Vandenberg Space Force Base have Airport Land Use Compatibility Plans (ALUCPs) that integrate general plan policies, land use policies, and safety elements. These ALUCPs include guidance for construction in Airport Influence Areas, as the construction of additional structures in an Airport Influence Area could interfere with flight paths, causing a hazardous condition. The following are the applicable airports and ALUCPs in the Project area:

- The Santa Barbara Airport (500 James Fowler Rd, Santa Barbara, CA 93117) is located off Highway 101, just outside of downtown Goleta along the coast of Santa Barbara County. This facility is located adjacent to a zoning amendment area, and the Airport Influence Areas may include portions of the Project area.
- The Santa Maria Airport (3249 Terminal Dr, Santa Maria, CA 93455) is located off Highway 101, outside of Santa Maria, California. This facility is located adjacent to a zoning amendment area, and the Airport Influence Areas may include portions of the Project area.
- The Santa Ynez Airport (900 Airport Rd, Santa Ynez, CA 93460) is located off Highway 154 outside of the unincorporated community of Santa Ynez, California. This facility is located adjacent to a zoning amendment area, and the Airport Influence Areas may include portions of the Project area.
- The Lompoc Airport (1801 N H St, Lompoc, CA 93436) is located off Highway 1, outside of the city of Lompoc, California. This facility is located adjacent to a zoning amendment area, and the Airport Influence Areas may include portions of the Project area.

The Vandenberg Space Force Base is also located in Santa Barbara County (747 Nebraska Ave Building 10577, Vandenberg SFB, CA 93437). Space Launch Delta 30, Vandenberg's host unit, supports West Coast launch activities for the Air Force, Department of Defense, National Aeronautics and Space Administration, national programs and various private industry contractors. The Vandenberg Space Force Base is not part of the Project area.

Wildland Fire Hazard

As discussed in the 2022 Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP), the climate, topography, and vegetation in Santa Barbara County are conducive to wildfires. According to the MJHMP, vegetation and topography are the most significant elements in the identification of the fire threat zones. The County of Santa Barbara Office of Emergency Management (OEM) synthesized this data at a more local level to convey communities at risk in the MJHMP. The MJHMP estimates that the annual average acres burned per year is set to increase by 30 percent by 2030 (Santa Barbara County 2023a). See Section 3.13, *Wildfire*, for a more detailed discussion regarding wildfires.

Battery Energy Storage Systems

Battery ESSs are used across the United States in residential, commercial, and utility-scale applications. Stand-alone battery ESSs are currently an allowed use within the County's zoning ordinances and have been permitted in unincorporated County areas, as described in Chapter 2, *Project Description*.

Battery ESSs most often use multiple lithium-ion battery cells. These lithium batteries can produce hazardous outcomes through multiple avenues of abuse, neglect, or environmental impacts. Lithium cells

can experience thermal runaway, which causes them to release very hot flammable and toxic gases. In large storage systems, failure of one lithium cell can cascade to include hundreds of individual cells. The hot flammable gases can result in an explosion, or a very-difficult-to-extinguish fire. While fire services routinely respond to explosive scenarios, such as those associated with natural gas leaks, standard operating procedures to extinguish the fire immediately do not exist for scenarios like a battery ESS fire for which there is no way to cut off the gas supply (FEMA 2020). There have been numerous efforts to develop 'safe by design' batteries by modifying the composition and architecture of the battery's anode, cathode, electrolyte, and their respective interfaces, creating barriers between cells to minimize thermal runaway. Safety design measures also include voltage sensing, temperature sensing, thermal management using air or liquid circulation, and improved insulation (U.S. Department of Energy 2024).

Sodium-sulfur batteries have a similar safety concern during operation, as molten sodium combined directly with molten sulfur can lead to a highly exothermic, toxic fire. Modern manufacturing of sodium-sulfur batteries has developed solutions to this challenge, employing measures such as sand filling to extinguish fire and absorb leaked active materials, thermal fuses to prevent short-circuits, hermetical cell seals, and a mechanically isolating thermal enclosure to protect against external shock or internal leakage (U.S. Department of Energy 2024).

A flow battery is a type of rechargeable battery that stores energy in liquid electrolytes. In a flow battery, an electrolyte containing one or more dissolved electroactive elements flows through an electrochemical cell, which converts chemical energy to electrical energy. Flow batteries are generally considered safer, although flow battery electrolytes are often strong acids and bases carrying high concentrations of metal ions. Hazard mitigation typically involves additional containment for any electrolyte that spills out of the primary system containment (U.S. Department of Energy 2024). Risks related to liquids in a flow battery are related to their toxicity, corrosiveness, environmental impact, and flammability (Trovo et al. 2023).

Battery ESSs are equipped with several advanced containment and safety features to ensure reliability and safety. These systems typically include robust thermal management solutions to prevent overheating and thermal runaway. They are also designed with fire suppression systems, often incorporating clean agents[1] or aerosol-based technologies to quickly extinguish fires without damaging the equipment. Additionally, battery ESS systems feature advanced battery management systems that continuously monitor the strength and performance of each cell, providing real-time diagnostics and ensuring that cells operate within safe parameters. Enclosure units are built to be fire-resistant and are often designed to vent gases safely in case of cell failure. Battery ESS are also designed and built with appropriate separation between units, and safety features typically prevent the need to place them within enclosed buildings. These features, combined with stringent safety protocols and regular maintenance, contribute to the high safety standards of today's battery ESS systems.

[1] A clean agent is any type of fire extinguishing agent that is electrically non-conductive, volatile, or gaseous, and that does not leave a residue upon evaporation. Clean agent fire suppression systems make use of an inert gas or chemical that is stored in a container and discharged when a fire is detected.

3.8.3 Regulatory Framework

Federal

The primary federal agencies with responsibility for hazards and hazardous materials management include the U.S. Environmental Protection Agency (USEPA), U.S. Occupational Safety and Health Administration (OSHA), and the U.S. Department of Transportation (DOT). Federal laws, regulations, and responsible agencies related to hazardous materials and hazards management are summarized in **Table 3.8-1**, *Relevant Federal Laws and Regulations Related to Hazards and Hazardous Materials*.

TABLE 3.8-1
RELEVANT FEDERAL LAWS AND REGULATIONS RELATED TO HAZARDS AND HAZARDOUS MATERIALS

Classification	Federal Law or Responsible Federal Agency	Description
Hazardous Waste Handling	Resource Conservation and Recovery Act of 1976 (RCRA)	Under RCRA, the USEPA regulates the generation, transportation, treatment, storage, and disposal of hazardous waste from "cradle to grave."
	Hazardous and Solid Waste Act	Amended RCRA in 1984, affirming and extending the "cradle to grave" system of regulating hazardous wastes. The amendments specifically prohibit the use of certain techniques for the disposal of some hazardous wastes.
	Toxic Substances Control Act (TSCA)	Code of Federal Regulation (CFR) Title 40 Chapter 1, Subchapter R – Toxic Substances Control Act – Part 761 Polychlorinated Biphenyls (PCBs) – covers the identification and sampling requirements for PCBs for disposal purposes.
Hazardous Materials Management	Community Right-to-Know Act of 1986 (also known as Title III of the Superfund Amendments and Reauthorization Act)	Imposes requirements to ensure that hazardous materials are properly handled, used, stored, disposed of and reported to prevent or mitigate injury to human health or the environment in the event that such materials are accidentally released.
Hazardous Materials Transportation	U.S. DOT	DOT has the regulatory responsibility for the safe transportation of hazardous materials. The DOT regulations govern all means of transportation except packages shipped by mail (49 CFR).
	U.S. Postal Service (USPS)	USPS regulations govern the transportation of hazardous materials shipped by mail.
Occupational Safety	Occupational Safety and Health Act of 1970	OSHA sets standards for safe workplaces and work practices, including the reporting of accidents and occupational injuries (29 CFR).
Structural and Building Components (Hazardous Building Materials [asbestos-containing materials, lead-based paint, polychlorinated biphenyls (PCBs)	Toxic Substances Control Act	Regulates the use and management of hazardous building materials and sets forth detailed safeguards to be followed during the disposal of such items.
	USEPA	The USEPA monitors and regulates hazardous materials used in structural and building components and their effects on human health.
Federal Regulation 49 CFR Part 77, Objects Affecting Navigable Airspace	Federal Aviation Administration (FAA)	Proximity to airports triggers the application of Federal Aviation Regulation (FAR) Part 77, Objects Affecting Navigable Airspace, which sets forth criteria and requirements for proposed structures to be filed with the FAA for airspace safety review. Title 14, Part 77 of the CFR states that FAA notification is necessary for construction projects greater than 200 feet in height or those located within 20,000 feet of a public use airport that exceed a 100-to-1 surface ratio from any point on an airport's longest runway measuring more than 3,200 feet. The FAA review determines whether the proposed structures would constitute an obstruction or hazard to aircraft.

TABLE 3.8-1
RELEVANT FEDERAL LAWS AND REGULATIONS RELATED TO HAZARDS AND HAZARDOUS MATERIALS

Classification	Federal Law or Responsible Federal Agency	Description
Instruction Memorandum Number 2022-036; Standard Stipulations for Fire Prevention and Control for Electric Transmission and Distribution Rights-of-Way	U.S. Bureau of Land Management (BLM)	BLM Instruction Memorandum Number 2022-036 provides guidance on the incorporation of appropriate fire prevention and control stipulations, as required by 43 CFR 2805.12(a)(4), for electric transmission and distribution right-of-way authorizations issued under Title V of the Federal Land Policy and Management Act (FLPMA).

State

The primary State agencies with responsibility for hazardous materials management in the region include the DTSC and the Central Coast RWQCB within the California Environmental Protection Agency (CalEPA), California Occupational Safety and Health Administration (Cal/OSHA), California Department of Public Health, California Highway Patrol (CHP), and the California Department of Transportation (Caltrans). State laws, regulations, and responsible agencies related to hazardous materials management are summarized in **Table 3.8-2**, *Relevant State Laws and Regulations Related to Hazards and Hazardous Materials***.**

California Department of Pesticide Regulation

The California Department of Pesticide Regulation (CDPR) is responsible for regulating the use of pesticides in California. The term *pesticides* includes pesticides, herbicides, insecticides, nematicides, fungicides, and rodenticides. CDPR evaluates and registers pesticides, monitors their sale and use, and enforces regulations to protect human health and the environment, as required by California Code of Regulations (Cal. Code Regs.) Title 3, *Food and Agriculture*, Division 6. *Pesticides and Pest Control Operations*.

California State Hazard Mitigation Plan

The updated California State Hazard Mitigation Plan (SHMP) was adopted in 2023 by the California Governor's Office of Emergency Services (Cal OES). The SHMP provides an overview of California's disaster history and landscape, outlines the efforts of the Cal OES Hazard Mitigation Section to reduce disaster losses, and describes the strategies used to administer an effective and comprehensive statewide hazard mitigation program. The SHMP was developed in conjunction with multi-disciplinary groups of federal, State, Tribal Nation, local, and non-governmental stakeholders, as well as with input from the public.

California Public Utilities Commission General Orders and Related Codes

California Public Utilities Commission (CPUC) General Order 95—Overhead Electric Line Construction

General Order 95 includes rules and other requirements for overhead line design, construction, and maintenance, the proper application of which would ensure adequate service and secure safety to persons engaged in the construction, maintenance, operation, or use of overhead lines and to the public in general.

TABLE 3.8-2
RELEVANT STATE LAWS AND REGULATIONS RELATED TO HAZARDS AND HAZARDOUS MATERIALS

Classification	Law or Responsible State Agency	Description
Hazardous Materials Management	Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program); Health and Safety Code Sections 25404 et seq	Cal EPA adopted regulations in January 1996 that implemented the Unified Program at the local level. The agency responsible for implementation of the Unified Program is called the Certified Unified Program Agency (CUPA). For the Project area, Santa Barbara County is the designated CUPA.
	California Fire Code, Title 24, Chapter 9, California Code of Regulations and California Building Code, Part 2	The California Fire Code regulates the storage and handling of hazardous materials, including the requirement for secondary containment, separation of incompatible materials, and preparation of spill response procedures.
Hazardous Waste Handling	California Hazardous Materials Release Response Plan and Inventory Law of 1985	The California Hazardous Materials Release Response Plan and Inventory Law of 1985 (Business Plan Act) requires that businesses that store hazardous materials on-site prepare a Hazardous Materials Business Plan (HMBP) and submit it to the applicable local CUPA.
	California Hazardous Waste Control Act; California Health and Safety Code, Division 20, Chapter 6.5, Article 2, Section 25100, et seq.; DTSC	Under the California Hazardous Waste Control Act, DTSC regulates the generation, transportation, treatment, storage, and disposal of hazardous waste in California. The hazardous waste regulations establish criteria for identifying, packaging, and labeling hazardous wastes; dictate the management of hazardous waste; establish permit requirements for hazardous waste treatment, storage, disposal, and transportation; and identify hazardous wastes that cannot be disposed of in landfills. DTSC is also the administering agency for the California Hazardous Substance Account Act. California Health and Safety Code, Division 20, Chapter 6.8, Sections 25300 et seq., also known as the State Superfund law, provides for the investigation and remediation of hazardous substances pursuant to State law. In addition, Health and Safety Code 25180 authorizes the DTSC or the local CUPA or the RWQCB to require responsible parties to cleanup spills and releases.
Hazardous Materials Transportation	Titles 13, 22, and 26 of the California Code of Regulations	Regulates the transportation of hazardous waste originating in and passing through the state, including requirements for shipping, containers, and labeling.
	CHP and Caltrans, California Vehicle Code, Chapter 5, Sections 31303 – 31309	These two state agencies are primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies.
Occupational Safety	Cal/OSHA regulations (Title 8 CCR)	Cal/OSHA has primary responsibility for developing and enforcing workplace safety regulations in California. Because California has a federally approved OSHA program, it is required to adopt regulations that are at least as stringent as those found in Title 29 of the CFR. Cal/OSHA standards are generally more stringent than federal regulations. Requires employee safety training, safety equipment, accident and illness prevention programs, hazardous substance exposure warnings, and emergency action and fire prevention plan preparation.
Construction Storm Water General Permit (Construction General Permit; Order 2022-0057-DWQ, NPDES No. CAS000002)	Central Coast RWQCB	Dischargers whose project disturbs 1 or more acres of soil or where projects disturb less than 1 acre but are part of a larger common plan of development that in total disturbs 1 of more acres, are required to obtain coverage under the *NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit; Order 2022-0057-DWQ, NPDES No. CAS000002). Construction activity subject to this permit includes clearing, grading, grubbing, and other disturbances to the ground such as excavation and stockpiling but does not include regular

TABLE 3.8-2
RELEVANT STATE LAWS AND REGULATIONS RELATED TO HAZARDS AND HAZARDOUS MATERIALS

Classification	Law or Responsible State Agency	Description
		maintenance activities performed to restore the original line, grade, or capacity of a facility. The Construction General Permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) that includes specific Best Management Practices (BMPs) designed to prevent sediment and pollutants from contacting stormwater from moving off-site into receiving waters. The BMPs fall into several categories, including erosion control, sediment control, waste management, and good housekeeping, and are intended to protect surface water quality by preventing the off-site migration of eroded soil and construction-related pollutants from the construction area.
Underground Infrastructure	California Code of Regulations Section 4216-4216.9	Sections 4216-4216.9, "Protection of Underground Infrastructure," requires an excavator to contact a regional notification center (e.g., Underground Services Alert or Dig Alert) at least two days prior to excavation of any subsurface installations. Any utility provider seeking to begin a project that could damage underground infrastructure can call Underground Service Alert, the regional notification center for Southern California. Underground Service Alert will notify the utilities that may have buried lines within 1,000 feet of the project. Representatives of the utilities are then notified and are required to mark the specific location of their facilities within the work area prior to the start of project activities in the area.
Oil and Natural Gas Wells	Public Resources Code Section 3208, 3208.1, and Section 3224, 3255; California Geologic Energy Management Division	For hazardous wells or as necessary to prevent damage to life, health, and property, these sections of the Public Resources Code authorize CalGEM to order or undertake the re-abandonment of any oil and gas well (Section 3255), order the re-abandonment of wells that are otherwise not accessible or visible (Section 3208.1), or perform tests and remedial work (Section 3224). These sections also stipulate that if construction occurs over an abandoned well or impedes access to an abandoned well, the property owner, developer, or local agency permitting the construction would be responsible for any re-abandonment efforts, if required. If the integrity of an abandoned or plugged well is disturbed during development of a property, the developer may also be responsible for any re-abandonment efforts under Section 3208 and 3208.1.

California Public Utilities Commission General Order 166—Standards for Operation, Reliability, and Safety During Emergencies and Disasters

The purpose of the standards contained in CPUC General Order 166 is to ensure that jurisdictional electric utilities are prepared for emergencies and disasters in order to minimize damage and inconvenience to the public that may occur as a result of electric system failures, major outages, or hazards posed by damage to electric distribution facilities. The standards require that each publicly traded electric utility prepare an emergency response plan and update the plan annually, conduct annual emergency training and exercises using the utility's emergency response plan, and coordinate emergency plans with state and local public safety agencies.

California Public Utilities Commission General Order 167— Enforcement of Maintenance and Operation Standards for Electric Generating Facilities and Energy Storage Systems.

The purpose and standards included in CPUC General Order 167 are to improve the safety and reliability of California electric generation facilities and energy storage facilities. General Order 167 establishes

standards for electric generating facilities as well as a method for enforcing such standards. The General Order establishes a program for electric generating facility audits and inspections and incident investigations. Other requirements established by the General Order include reporting safety incidents, submitting periodic compliance filing updates, and responding to staff information requests. It also provides a means to enforce the protocols for scheduling power plant outages of the California Independent System Operator and the other standards in General Order 167. General Order 167 established standards for the maintenance and operation of Energy Storage Systems and requires an Emergency Response and Emergency Action Plan for each Energy Storage System.

California Public Utilities Commission Fire Safety Rulemaking Background

In October 2007, devastating wildfires driven by strong Santa Ana winds burned hundreds of square miles in Southern California. Several of the worst wildfires were reportedly ignited by overhead utility power lines and aerial communication facilities in close proximity to power lines. In response to these wildfires, the CPUC initiated Rulemaking (R.) 08-11-005 to consider and adopt regulations to protect the public from potential fire hazards associated with overhead powerline facilities and nearby aerial communication facilities. Additional details are in Section 3.13 *Wildfire.*

Public Resources Code Sections 4201–4204

Public Resources Code Sections 4201–4202 require:

- The classification of lands within state responsibility areas in accordance with the severity of fire hazard present for the purpose of identifying measures to be taken to retard the rate of spreading and to reduce the potential intensity of uncontrolled fires that threaten to destroy resources, life, or property.
- The classification of lands within state responsibility areas into fire hazard severity zones. Each zone shall embrace relatively homogeneous lands and shall be based on fuel loading, slope, fire weather, and other relevant factors present, including areas where winds have been identified by the department as a major cause of wildfire spread.
- The designation of fire hazard severity zones and assignment to each zone a rating reflecting the degree of severity of fire hazard that is expected to prevail in the zone.
- The periodic review of zones designated and rated pursuant to this article and, as necessary, the revision of zones or their ratings or repeal the designation of zones.

Public Resources Code Sections 4292 and 4293

Public Resources Code Section 4292 requires a 10-foot clearance of any tree branches or ground vegetation from around the base of power poles carrying more than 110 kV. The firebreak clearances required by Public Resources Code Section 4292 are applicable within an imaginary cylindrical space surrounding each pole or tower on which a switch, fuse, transformer, or lightning arrester is attached and surrounding each dead end or corner pole. Section 4293 presents guidelines for line clearance including a minimum of 10 feet of vegetation clearance from any conductor operating at 110 kV or higher.

Local

Santa Barbara County Comprehensive Plan Seismic Safety & Safety Element

The Seismic Safety and Safety Element (Safety Element) establishes policies to protect the community from natural and climate-related hazards. It is intended to guide land use planning by providing pertinent data regarding geologic, soil, seismic, fire and flood hazards. The element also includes the Safety Element supplement which describes land use planning measures to reduce the risk of public exposure to acutely hazardous materials associated with oil and gas pipelines and fixed facilities. Santa Barbara County's Safety Element was updated in 2023 and includes draft potential evacuation routes as well as policies regarding wildfire hazards (Santa Barbara County 2023b). Relevant policies include:

> ***Policy FIRE-3.6: Fire Development Standards.*** To reduce the potential for fire damage, the County shall continue to require consistency with Fire Department Development Standards pursuant to the California Fire Code, Public Resource Code §4291, and Government Code §51175-51188, as may be amended.
>
> ***Policy FIRE-5.1: Fire and Building Code Compliance.*** New development within the State Responsibility Area, Very High Fire Hazard Severity Zones, and County High Fire Hazard Area will meet or exceed State standards set forth in the County Fire Code and County Building Code, Chapter 7A Materials and Construction Methods for Exterior Wildfire Exposure, as may be amended.

Santa Barbara Comprehensive Plan Hazardous Waste Element

As part of the Santa Barbara County Comprehensive Plan, the County has developed overall goals and policies on the management of hazardous waste in the County (Santa Barbara County 2009). The applicable policies are listed below:

> ***Policy 2-2*:** All businesses that generate hazardous wastes including home occupations, but excluding normal household activities, shall provide the County with information regarding the type, amount and management of all hazardous wastes generated. Such information shall be required as part of the EHD hazardous waste generator permit program and shall be updated annually.
>
> ***Policy 4-3*:** All new or modified land use permits for facilities that generate hazardous waste shall incorporate waste minimization techniques to the maximum extent economically and technically feasible. New applicants shall be required to submit this information as part of their permit application. This policy shall apply to both discretionary and ministerial land use permits.
>
> ***Policy 8-1*:** Any land use permit for a hazardous waste generator or a hazardous waste facility shall require submittal of an emergency response plan prior to operations, if such a plan is required under Chapter 6.95 (section 25500 et seq.) of the California Health and Safety Code.
>
> ***Policy 8-2*:** The County in conjunction with the cities, other agencies, and industry should continue to conduct wide-scale hazardous materials/waste emergency response exercises on a regular basis.

2023 Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan

The Santa Barbara County *Multi-Jurisdictional Hazard Mitigation Plan* (MJHMP) was prepared and formulated with input and coordination from each incorporated city, the County of Santa Barbara, citizen

participation, responsible officials, and support from the State of California Governor's Office of Emergency Services (CalOES) and the Federal Emergency Management Agency (FEMA). The MJHMP was developed to promote compliance with state and federal program requirements, to enhance local policies for hazard mitigation capability, and to achieve regulatory compliance, among other goals (Santa Barbara County 2023a).

Coastal Land Use Plan

The CLUP goals and policies endeavor to protect the County's scenic values and diverse habitats, preserve prime agricultural lands, and provide maximum recreational use of beaches while also allowing for orderly growth and development with respect to resources in the Coastal Zone. The CLUP contains development and utility policies as well as policies protecting environmentally sensitive habitats and historic resources in the coastal zone (Santa Barbara County 2019). Relevant CLUP policies are provided below:

> ***CLUP Policy 4-7*:** Utilities, including television, shall be placed underground in new developments in accordance with the rules and regulations of the California Public Utilities Commission, except where cost of undergrounding would be so high as to deny service.
>
> Coastal Act Policy 30253: New development shall:
>
> (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.
>
> (2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

Electric Transmission Lines

The CLUP also includes goals and policies regarding electrical transmission lines located in the Coastal Zone. The California Public Utilities Commission and California Energy Commission are the responsible agencies for permitting electric transmission lines, which include technical and safety performance and environmental concerns. All electric transmission lines proposed for the coastal zone are considered to be "development" under the Coastal Act, thus the County retains permit authority (Santa Barbara County 2019). The only exception is electric transmission lines proposed as part of a new electric power plant being reviewed by the California Energy Commission. While Tier 3 or Tier 4 solar energy facilities could include gen-tie lines, which are evaluated as part of the Project, this portion of the CLUP is not applicable to the Project since transmission lines are not considered part of the Project.

The Warren-Alquist Energy Resources Conservation and Development Act of 1975 exempts new power plants with capacity greater than 50 megawatts and electric transmission lines connecting such plants to the existing electricity transmission system from local government permit authority and the Coastal Act exempts them from Coastal Commission permit authority (Section 30264). While impacts from erosion, grading, and the operation of equipment may occur during construction and result in damage to coastal land resources and habitat areas, the primary concerns are associated with overhead electric transmission lines and their long-term impacts on views and visual resources. Visual impacts are particularly severe in undeveloped areas, especially the foothills and upland areas, and along the coastal terrace. Mitigating measures are limited at this time to alternate route locations and undergrounding of lines, which is expensive.

***CLUP Policy 6-20*:** Transmission line rights-of-way shall be routed to minimize impacts on the viewshed in the coastal zone, especially in scenic rural areas, and to avoid locations which are on or near habitat, recreational, or archaeological resources, whenever feasible. Scarring, grading, or other vegetative removal shall be repaired, and the affected areas revegetated with plants similar to those in the area to the extent safety and economic considerations allow.

***CLUP Policy 6-21*:** In important scenic areas, where above-ground transmission line placement would unavoidably affect views, undergrounding shall be required where it is technically and economically feasible unless it can be shown that other alternatives are less environmentally damaging. When above-ground facilities are necessary, design and color of the support towers shall be compatible with the surroundings to the extent safety and economic considerations allow.

Community Plans

As discussed in Chapter 2, *Project Description*, several of the unincorporated communities have specific community plans with their own goals, policies, and development standards relevant to this analysis. In addition, the County's Comprehensive Plan contains relevant policies for the Cuyama Valley and Lompoc areas. A list of the community plan goals, policies, development standards, and design guidelines (as applicable) pertinent to hazards and hazardous materials are listed below by community plan.

Eastern Goleta Valley

The following objectives, policies, and development standards are outlined in the Eastern Goleta Valley Community Plan and are applicable to the Project (Santa Barbara County 2025a).

Objective HAZ-EGV-1: Protect people from hazardous materials and conditions.

***Policy HAZ-EGV-1.1*:** Safety measures shall be required as part of project review to minimize the potential for hazardous materials risks and public safety impacts.

***Policy HAZ-EGV-1.2*:** Potential regional hazards shall be considered in land use planning and development, including hazards related to oil, gas, and nuclear energy production.

Goleta Community Plan

The following policies and development standard are outlined in the Goleta Community Plan and are applicable to the Project (Santa Barbara County 1993).

***Policy RISK-GV-l*:** Safety measures shall be required as part of project review to minimize the potential for risk of upset and public safety impacts within the Goleta Community Planning area.

***Policy RISK-GV-2*:** Before approval of a specific project in areas impacted by oil and gas development, old petroleum facilities shall be inspected by the Division of Oil and Gas (DOG) [California Geologic Energy Management Division (CalGEM)] and the Resource Management Department [County Planning & Development Department (P&D Department)] to determine compliance with current abandonment standards. If the site has been improperly abandoned, the developer shall follow the recommendations of the DOG [CalGEM] and RMD [P&D Department] regarding proper cleanup, monitoring, and new development on the contaminated sites.

DevStd RISK-GV-2.1: In areas impacted by oil and gas development, the project developer shall submit to Santa Barbara County Department of Environmental Health Services (EHS) a soil-sampling plan to investigate the extent of onsite soil contamination. Remedial measures shall be instituted by the developer as necessary in conjunction with the results of the soil sampling plan and the recommendations of EHS.

Orcutt Community Plan

The following development standards and policies are outlined in the Orcutt Community Plan and are applicable to the Project (Santa Barbara County 2024).

> ***Hazardous Materials Policy RISK-O-3*:** The County shall minimize the risk to public safety associated with hazardous materials.
>
> > *Action RISK-O-3.1*: To minimize the transportation of hazardous materials through the OPA, the County should map and identify with signs all existing hazardous material transportation routes as determined and updated by the California Highway Patrol.
> >
> > *DevStd RISK-O-3.2*: The County should require development involving the transportation of hazardous materials to prepare a Comparative Route Assessment, determining the route with the least risk and designate that route as the preferred transportation corridor.

Santa Barbara County Fire Department Development Standards

The Santa Barbara County Fire Department (SBCFD) has established multiple development standards regarding construction and development within the County. SBCFD provides review for various development projects within Santa Barbara County, including for commercial solar arrays, in accordance with local, state, and federal law. These development standards would include a review of fire access plans, road access, naming conventions, easements, stored water plans, fire hydrant plans, and defensible space (Santa Barbara County Fire Department 2025).

The 2023 Unit Strategic Fire Plan, developed by the SBCFD includes guiding principles on SBCFD Development standards, as well as other fire management strategies and tactics (Santa Barbara County Fire Department 2023). Additional details are in Section 3.13, *Wildfire*.

Santa Barbara County's Site Mitigation Unit

The Site Mitigation Unit is administered by the Santa Barbara County Environmental Health Services (EHS) and provides regulatory oversight for site assessment and corrective actions at properties where hazardous substance releases have occurred that are not associated with a Leaking Underground Fuel Tank (LUFT) system. The primary goal of the Site Mitigation Unit is to protect human health and natural resources by ensuring appropriate steps are taken to mitigate and cleanup land and water contaminated with hazardous materials. Site Mitigation cases include releases of crude oil, other hazardous substances and toxic heavy metals, oilfield restoration, properties contaminated by former industrial/commercial uses and sites with historic contaminated fill (Santa Barbara County 2025b).

3.8.4 Project Impact Analysis

Thresholds of Significance

CEQA Guidelines

Pursuant to Appendix G of the CEQA *Guidelines*, a project would result in significant hazards and hazardous materials effects on the environment if the project would:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

Non-applicable Thresholds

Potential hazards associated with interfering with evacuation routes, emergency response plans, wildland fires, and fire hazards are discussed in Section 3.13, *Wildfire.* Therefore, Impact Statements (f) and (g) are not discussed further in this section.

County of Santa Barbara Environmental Thresholds

Santa Barbara County's Environmental Thresholds and Guidelines Manual provides information to address the criteria specified in the CEQA Guidelines. The County's Environmental Thresholds and Guidelines Manual provides thresholds for public safety that discuss hazards and hazardous materials. However, these additional thresholds would only apply to certain facilities and activities, including oil wells and gas wells, refineries, and hazardous materials facilities. Solar energy systems and facilities that would occur as a result of the Project would not currently be considered a hazardous material facility under the County of Santa Barbara Environmental Thresholds and Guidelines Manual and would therefore not be subject to additional environmental thresholds. If battery types or hazardous materials classifications change in the future, then solar energy systems and facilities would be subject to those future conditions and classifications.

Methodology

As described in Chapter 2, *Project Description*, the County proposes to amend several land use plans and ordinances to allow the development of utility-scale solar energy facilities (and smaller scales of solar energy facilities and systems) on land in unincorporated Santa Barbara County. However, future project-level siting and design details as well as the timing of potential future solar development are unknown at this time. The magnitude of impacts related to hazards and hazardous materials would depend on site and facility-specific factors such as site conditions, proximity to schools and airports, and specific facility conditions such as the use of battery ESSs.

The impact analysis, therefore, does not evaluate potential impacts related to hazards and hazardous materials on a project- or site-specific level.

The following impact analysis considers the potential impacts related to hazards and hazardous materials associated with the construction, operation and maintenance (O&M), and decommissioning of future solar energy facilities that would occur as a result of the Project. This analysis assumes that all future solar facilities would comply with applicable federal, state, and local laws and regulations. Further, state and local agencies are expected to continue to enforce applicable requirements to the extent that they do so now. The information and analysis in this section are based on available long-range planning documents, EIRs, and related technical studies that apply to the Project area. The section relies on existing conditions in the Santa Barbara County Comprehensive Plan, Coastal Land Use Plan, and associated community plans (described in Chapter 2 and Section 3.8.3). The impact determinations are based on consistency with CEQA and the CEQA Guidelines thresholds, and the County's existing policies and regulations related to hazards and hazardous materials. Because the specific siting and design for future facilities is unknown, it is assumed that future solar facilities would be required to demonstrate compliance with the Land Use and Development Codes, Coastal Zoning Ordinance, and other applicable County codes related to hazards and hazardous materials.

Impacts related to hazards and hazardous materials would be considered significant if the Project would result in exposure of people and the environment to hazardous materials, be located on a listed hazardous materials site, or have the potential to conflict with an established airport land use compatibility plan or emergency response/evacuation plan.

The study area for the analysis of potential impacts relative to hazards and hazardous materials is defined as the footprint of future solar energy facility sites and alignments, including all areas of temporary and/or permanent ground disturbance, and haul routes used for the transport of hazardous materials and wastes associated with these facilities. Hazardous materials sites, schools, and wildland fires within 0.25 mile from the solar energy facility sites and alignments, airports, air traffic, and helicopter use within 2 miles of the solar energy facility site boundaries and alignments are also considered in this analysis. Figure 2-2 details the potential locations for all future solar energy facilities (e.g. Tier 3 and 4 projects). Furthermore, lands under federal jurisdiction (such as the Los Padres National Forest and Vandenburg Space Force Base) are not included in the Project area. Lands under state jurisdiction, including those of University of California, Santa Barbara (UCSB) are also excluded from consideration as these lands are not subject to County land use plan requirements.

Battery Energy Storage System

In January 2025, Assembly Bill 303, the Battery Energy Safety and Accountability Act, was introduced in California's congress. If passed, AB 303 would regulate 200 megawatt hours (MWh) or more battery storage systems and would require applicants to submit an application for certification with the State Energy Resources Conservation and Development Commission for the site and related facility. If passed as written, AB 303 would prohibit the development of battery ESSs capable of storing 200 MWh or more within 3,200 feet of a sensitive receptor or on an environmentally sensitive site. As of the development of this Programmatic EIR, AB 303 has not been passed.

Project Impacts

This section identifies and discusses potential hazards and hazardous materials impacts associated with the Project. **Table 3.8-3**, *Summary of Hazards and Hazardous Materials Impacts*, provides a summary of

the Project's potential impacts related to hazards and hazardous materials. A detailed discussion of each impact follows.

TABLE 3.8-3
SUMMARY OF HAZARDS AND HAZARDOUS MATERIALS IMPACTS

Hazards and Hazardous Materials Impacts	Impact Classification	Mitigation Measures	Residual Impact
Impact HAZ-1: Future solar energy systems and facilities enabled under the Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	Insignificant	No mitigation required	Insignificant
Impact HAZ-2: Future solar energy systems and facilities enabled under the Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	Insignificant	No mitigation required	Insignificant
Impact HAZ-3: Future solar energy systems and facilities enabled under the Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	Insignificant	No mitigation required	Insignificant
Impact HAZ-4: Future solar energy systems and facilities enabled under the Project could be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, could create a significant hazard to the public or the environment.	Potentially significant	MM HAZ-1: Site Management Plan	Insignificant with mitigation
Impact HAZ-5: Future solar energy systems and facilities that would occur as a result of the Project that are located within an airport land use plan or within two miles of a public airport or public use airport could result in a safety hazard or excessive noise for people residing or working in the project area.	Potentially significant	MMHAZ-2: FAA Traffic Coordination Plan	Insignificant with mitigation
Cumulative Impact	Potentially significant	MM HAZ-1: Site Management Plan MM HAZ-2: FAA Traffic Coordination Plan	Insignificant with mitigation

Threshold a) The Project would result in a significant impact if the Project would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Impact HAZ-1: Future solar energy systems and facilities enabled under the Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Construction

As discussed in the Project Description, the Project would allow for the development of utility-scale (and smaller-scale) solar energy systems and facilities within several land zoning designations in the unincorporated County. The solar energy systems and facilities would be categorized based on size. The smaller-scale systems (e.g., rooftop and small ground-mounted solar energy systems) would be categorized as Tier 1 or Tier 2. Tier 1 or 2 systems could occur on all unincorporated County lands (regardless of the zoning designation). Larger solar energy facilities (e.g., community-scale and utility-scale) would be categorized as Tier 3 and Tier 4, respectively. Tier 3 or 4 facilities would be allowed on lands zoned for agriculture, public utilities, light or general industry, and professional or institutional uses.

All future solar energy systems and facilities that would occur as a result of the Project would involve construction equipment and materials that would include fuels, oils and lubricants, solvents and cleaners, cements and adhesives, paints and thinners, degreasers, and cement and concrete, which are all commonly used in construction. The routine use or an accidental spill of hazardous materials could result in inadvertent releases, which could adversely affect construction workers, the public, and the environment. The future solar energy systems and facilities would vary in scale and materials used. The footprint of Tier 1 and 2 systems would be considerably smaller than those installed under Tiers 3 and 4; therefore, overall effects would be relatively smaller. As proposed in the amendments, Tier 1 solar energy systems would be limited to rooftops and small ground-mounted systems covering an area of up to 0.5 acres. Tier 2 solar energy systems (i.e., large ground-mounted systems) would be limited to previously developed locations (e.g., parking lots) covering an area between 0.5 and 5 acres. Tier 1 and 2 systems would require limited access and staging to construct, compared to community-scale (Tier 3) or utility-scale (Tier 4) solar facilities. Additionally, Tier 1 and 2 systems are already permitted within the unincorporated county areas, so they would be part of the existing baseline condition. The analysis below, therefore, focuses on solar energy facilities considered under Tiers 3 and 4.

Construction activities for all future solar energy projects that would occur under the Project would be required to comply with the numerous hazardous materials regulations described in Section 3.8.3, *Regulatory Setting,* designed to ensure that hazardous materials would be transported, used, stored, and disposed of in a safe manner to protect worker safety, and to reduce the potential for a release of construction-related fuels or other hazardous materials into the environment, including stormwater and downstream receiving water bodies. Where applicable, contractors would be required to prepare and implement Hazardous Materials Business Plans (HMBPs) requiring that hazardous materials used for construction be used properly and stored in appropriate containers with secondary containment to contain a potential release. The California Fire Code also requires measures for the safe storage and handling of hazardous materials.

Depending on the location of future solar energy facilities, the application of pre-emergent herbicides may be applied to on-site soils during site preparation. The use of herbicides is regulated by CDPR (see Section 3.8.3, *Regulatory Setting*, under *California Department of Pesticide Regulation*). Safety data sheets for all applicable materials present at the site would be made readily available to on-site personnel. The use of herbicides would be in accordance with manufacturers' specifications.

All future solar energy systems and facilities that could occur under the Project would involve the routine transport, use, or disposal of hazardous materials, as defined by the Hazardous Materials Transport Uniform Safety Act. Waste produced by the construction of these future energy systems and facilities would be scaled depending on the facility tier. Waste generated would also depend on existing site conditions and the site preparation tasks that would be required. Demolition of existing structures may be required prior to construction of future solar energy systems and facilities. The majority of construction materials would be non-hazardous. Most construction waste would be disposed of at a non-hazardous landfill or at a recycling facility whenever feasible. It is anticipated that all future solar energy systems and facilities would comply with applicable policies set forth in the Santa Barbara Comprehensive Plan Hazardous Waste Element. Waste would be recycled if possible or disposed of to meet existing state and local standards.

With compliance with applicable regulations, future solar energy systems and facilities enabled under the Project during construction would result in an insignificant impact related to the creation of a potential significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Operation and Maintenance

Maintenance of solar facilities would involve activities such as vegetation control and panel cleaning and occasional repairs or replacement of component parts. Similar to the construction phase, these activities could involve the use of hazardous materials; however, the quantity of hazardous materials would be used to a lesser extent than during construction. Other maintenance activities would be limited to cleaning solar panels, performing visual inspections, monitoring plant performance, and executing minor repairs. On intermittent occasions, repairs or replacement of equipment, and other specialized maintenance may occur. Repair and maintenance activities may involve the transportation, use, or temporary storage of a variety of hazardous materials such as batteries, hydraulic fluid, diesel fuel, insulation oil for the transformers, grease, lubricants, paints, solvents, and adhesives. The nature, extent, and magnitude of potential impacts related to hazards and hazardous materials would vary on a site-specific basis. Similar to the construction phase, all future solar facilities would be required to adhere to all applicable federal, state, and local standards and regulations regarding the routine transport, use, or disposal of hazardous materials. With compliance with applicable regulations, impacts would be insignificant.

Decommissioning

At the end of the solar energy facility lifespan, the site would be decommissioned and the land reclaimed. Above-ground equipment that would be removed could include the solar panels, battery ESSs, steel poles and foundations, electrical wiring, equipment on the inverter pads, transformer pads, fuel tanks, emergency generators, telecommunications equipment, and other associated equipment. Equipment would be de-energized prior to removal, salvaged or recycled (where possible), placed in appropriate shipping containers, and secured in a truck transport trailer for shipment off-site. Removal of solar modules would

include removal of the racks on which the solar panels were attached, and their placement in secure transport crates and a trailer for storage, for ultimate transportation to either an adequate recycling facility or returned to the manufacturer to be disposed. All remaining oil and lubricants removed from equipment and any remaining fuel in the emergency generator fuel tank would be transferred to an appropriate container and disposed of in accordance with the manufacturers' specifications and consistent with applicable regulatory requirements, such as the California Hazardous Waste Control Act and California Health and Safety Code, Division 20, Chapter 6.5, Article 2, Section 25100, as outlined further in Section 3.8.2, *Regulatory Setting*.

All site infrastructure would be removed, including fences, concrete pads that may support the inverters, transformers and related equipment, and underground conduit/electrical wiring. All materials would be recycled to the extent feasible. The area would be thoroughly cleaned and all debris removed. With adherence to all applicable federal, state, and local regulations, decommissioning and disposal of the components, including the solar panels, impacts related to the routine transport, use, or disposal of hazardous materials would be insignificant.

Mitigation Measures

Future solar energy systems and facilities that would be allowed as a result of the Project would not create a significant hazard to the public or the environment through the routine transport, storage, or use of hazardous materials and impacts would be insignificant, so no mitigation would be required.

Residual Impacts

Residual impacts would be insignificant.

Threshold b) The Project would result in a significant impact if the Project could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Impact HAZ-2: Future solar energy systems and facilities enabled under the Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Construction

As discussed in Impact HAZ-1, future solar energy systems and facilities would involve the use, transportation, and disposal of hazardous materials and wastes. These solar energy systems and facilities would comply with all applicable local, state, and federal requirements and related BMPs.

Accidental spills resulting from construction activities are typically small, localized, and cleaned up in a timely manner. Construction contractors are contractually responsible for their hazardous materials and are required under their contracts to store and dispose of these materials properly in compliance with federal and state laws. Any future solar energy facilities that would store or dispose of hazardous materials in quantities larger than 500 pounds of solid substances, 55 gallons of a liquid, 200 cubic feet of compressed gas, a hazardous compressed gas in any amount, or extremely hazardous substances in threshold quantities as defined in 40 CFR Part 355 would be required to implement a Hazardous

Materials Business Plan (HMBP) in accordance with the California Hazardous Materials Release Response Plan and Inventory Law of 1985. The HMBP would include BMPs for construction activities, as well as spill control and spill response measures. In the unlikely event of a spill, the HMBP would include appropriate measures to ensure that workers cease work activities to contain any release and enact the protocols for cleanup, including the notification of appropriate agencies and the use of materials stored on-site (e.g., absorbent pads) to minimize the spread or exposure.

In addition, future solar energy systems that disturb greater than one acre would be subject to the protections included in a storm water pollution prevention plan (SWPPP), which would outline BMPs to contain a potential release and to prevent any such release from reaching an adjacent waterway or stormwater collection system (e.g., erosion control, sediment control, and waste management). Projects under an acre would still be required to adhere to all applicable state and local pollution prevention regulations. Therefore, implementation of the requirements of HMBPs and site-specific SWPPPs would ensure that accidental spills would not adversely affect construction workers or the environment. Compliance with applicable federal, state, and local requirements and regulations outlined in Section 3.8.2, Regulatory Setting, would ensure that the Project would not create a significant hazard to the public through the accidental release of hazardous materials.

To avoid disturbance of infrastructure that could result in the accidental exposure of workers and the environmental to hazardous materials, state law requires an excavator to contact a regional notification center to identify any underground utility before excavation activities. Therefore, any utilities would be identified before excavation required for future solar energy systems and facilities. As a result, a natural gas pipeline would not be disturbed during construction activities.

With adherence to all local, state, and federal regulations, construction of solar energy systems and facilities that would occur as a result of the Project would have an insignificant impact with regard to resulting in a significant hazard to the public through the accidental release of hazardous materials during construction.

Operation and Maintenance

O&M activities associated with future solar energy facilities would require relatively minor use of hazardous materials. Any hazardous materials that would be stored on-site at a Tier 3 or Tier 4 facility would be contained in designated areas in accordance with an HMBP. Adherence to the HMBP as required by the California Hazardous Materials Release Response Plans and Inventory law (Health and Safety Code §25500 et seq.) would ensure that all handling, storage, and disposal of hazardous materials would be conducted in accordance with proven practices to minimize exposure to workers or the public. Solar panel cleaning would occur as needed, using demineralized water.

Tier 3 and Tier 4 solar energy facilities may utilize battery ESS. Lithium-ion batteries, sodium-sulfur, and flow batteries, found in battery ESSs, can produce significant amounts of flammable gases with potential risk of deflagration, or the burning away of chemicals, and fire when compromised. As discussed in the Methodology section above, battery ESSs are equipped with several advanced containment and safety features to ensure reliability and safety. These systems typically include robust thermal management solutions to prevent overheating and thermal runaway. They are also designed with fire suppression systems, often incorporating clean agents or aerosol-based technologies to quickly extinguish fires

without damaging the equipment. Additionally, battery ESS feature advanced battery management systems that continuously monitor the strength and performance of each cell, providing real-time diagnostics and ensuring cells operate within safe parameters. Enclosure units are built to be fire-resistant and are often designed to vent gases safely in case of cell failure. Other design measures include spacing battery ESS units to prevent multiple battery ESS structures from igniting in the incident of fire or system failure.

The Project amendments would require fire prevention and emergency management for Tier 3 and Tier 4 solar facilities to minimize and avoid fire hazards. The proposed development standards would require a fire prevention plan to identify sources of fire hazards and methods to mitigate fire hazards during construction and throughout operation of the project. The fire prevention plan would be reviewed and approved by the County Fire Department prior to issuance of any permits. In addition, an emergency response and emergency action plan consistent with Public Utilities Code Section 761.3 and any related regulations would be required for stand-alone battery energy storage facilities and solar energy facility projects that contain a battery ESS. The emergency response and emergency action plan would establish response procedures for an equipment malfunction or failure; include procedures that provide for the safety of surrounding residents, neighboring properties, emergency responders, and the environment. These procedures shall be established in consultation with local emergency management agencies; and establish notification and communication procedures between the operator of the battery energy storage facility and local emergency management agencies. As with the fire prevention plan, this plan would be reviewed and approved by the County Fire Department prior to issuance of permits. Incidents involving wildfire or fire management are discussed in Section 3.13, *Wildfire*.

All future solar energy facilities would be required to implement applicable state, federal, and local regulations. In accordance with the U.S. Occupational Safety and Health Administration, all equipment containing hazardous materials would be equipped with spill containment areas. Battery storage would be operated and maintained in accordance with U.S. Occupational Safety and Health Administration regulations as well as requirements from General Order 167, which include the use of heating, ventilation, air conditioning, fire protection systems, and spill response supplies. Under the California Hazardous Materials Release Response Plan and Inventory Law of 1985, all facilities that would use or store hazardous materials would require the preparation and implementation of an HMBP that would describe proper handling, storage, transport, and disposal techniques and methods to be used to avoid spills and minimize impacts in the event of a spill. Furthermore, as part of the Project, all Tier 3 and Tier 4 solar facilities would be required to implement fire prevention and emergency management plans. Future solar energy facilities that include battery ESS would also adhere to the most up-to-date design features to minimize additional risks associated with battery ESSs and the accidental release of hazardous materials. Battery ESS design features and regulatory requirements are continually being assessed and updated to consider new technologies and to be informed by current research and practices. With the adherence to all applicable local, state, and federal regulations as well as the implementation of Project amendments, impacts related to the accidental release of hazardous materials would be insignificant.

Decommissioning

At the end of the solar energy facility lifespan, the site would be decommissioned and the land reclaimed. Similar to construction, equipment used during decommissioning would require the use of minor amounts of hazardous materials that could include fuels, oils and lubricants, solvents and cleaners, cements and

adhesives, paints and thinners, degreasers, and cement and concrete, which are all commonly used in construction. The routine use or an accidental spill of hazardous materials could result in inadvertent releases, which could adversely affect construction workers, the public, and the environment.

However, given adherence to all applicable federal, state, and local regulations, decommissioning and disposal of components of the future solar facilities, including the solar panels, would have an insignificant impact on the creation of a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Mitigation Measures

With adherence to applicable regulations, future solar energy systems and facilities that would be enabled under the Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Impacts would be insignificant and no mitigation would be required.

Residual Impacts

Residual impacts would be insignificant.

Threshold c) The Project would result in a significant impact if the Project would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Impact HAZ-3: Future solar energy facilities enabled under the Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Construction, Operation and Maintenance, and Decommissioning

As discussed in Section 2.2, *Project Location*, the Project would allow for the development of utility-scale (and smaller-scale) solar energy systems and facilities within several land zoning designations in the unincorporated County. The smaller-scale systems (e.g., rooftop, small, and large ground-mounted solar energy systems) would be categorized as Tier 1 or Tier 2. Tier 1 or 2 systems could occur on all unincorporated County lands (regardless of the zoning designation). Larger solar energy facilities (e.g., community-scale and utility-scale) would be categorized as Tier 3 and Tier 4, respectively. Tier 3 or 4 facilities would be allowed on lands zoned for agriculture, public utilities, light or general industry, and professional or institutional uses. Therefore, future solar energy systems and facilities could be located within one-quarter mile of an existing or proposed school.

As discussed in Impacts HAZ-1 and HAZ-2, the solar energy systems and facilities would routinely use hazardous materials during construction, operation, and decommissioning (if applicable). Furthermore, these solar energy systems and facilities could create a significant hazard through accident conditions involving the release of hazardous materials into the environment. As discussed above, these solar energy systems and facilities would adhere to all local, state, and federal regulations. Furthermore, Tier 2, Tier 3, or Tier 4 solar energy facilities could potentially include battery ESSs, which if compromised, have the potential to produce flammable gases with potential risk of deflagration, or the burning away of

chemicals, and fire that could potentially be located within 0.25 miles of an existing or proposed school. As discussed above, solar energy systems and facilities that utilize battery ESSs would be required to prepare and implement an emergency response and emergency action plan to establish response procedures for an equipment malfunction or failure; include procedures that provide for the safety of surrounding residents, neighboring properties, emergency responders, and the environment. As with the fire prevention plan, this plan would be reviewed and approved by the SBCFD or respective fire district prior to issuance of permits.

The adherence to all local, state, and federal regulations would minimize impacts related to the exposure of hazardous materials, substances, or wastes within one-quarter mile of an existing or proposed school. Furthermore, each Tier 3 and Tier 4 solar energy facility would be required to implement an emergency response and emergency action plan that would be reviewed by the respective fire district prior to implementation to ensure the proper safety measures are in place, including evacuation and access planning. Therefore, with the required design measures for future solar energy facilities and systems with battery ESSs, adherence to all local, state, and federal laws and regulations, as well as a pre-implementation review of each Tier 3 or Tier 4 solar energy facility, impacts would be insignificant.

Mitigation Measure

Impacts would be insignificant and no mitigation measures would be required.

Residual Impacts

Residual impacts would be insignificant.

Threshold d) The Project would result in a significant impact if it would be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.

Impact HAZ-4: Future solar energy systems and facilities enabled under the Project could be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, could create a significant hazard to the public or the environment.

Construction, Operation, and Decommissioning

The Project would enable and streamline the development of future solar energy systems and facilities. The location of these facilities is not yet known and could therefore be located in an area that has known or unknown hazardous materials or conditions that could result in encountering hazardous materials if ground disturbance is required. As discussed in Section 3.8.2, *Environmental Setting*, hazardous materials sites in Santa Barbara County are generally located around developed areas, including incorporated and unincorporated communities, along highways, and at the Vandenberg Space Force Base. The Project would be located within the Inland and Coastal Zone areas of unincorporated Santa Barbara County and would not affect lands under the jurisdiction of the federal government (Los Padres National Forest and Vandenberg Space Force Base), the University of California, and tribal governments. Future solar energy facilities could be located near developed areas that could be affected by a hazardous materials site, including agricultural land that would have residual pesticides, herbicides, or other contaminants present

in the soil. Tier 1 and Tier 2 solar energy facilities would be largely rooftop and small ground-mounted solar energy systems, and would therefore be less likely to occur on undeveloped or agricultural land. Therefore, it is possible that the construction of future solar energy facilities would encounter sites that currently use or store hazardous materials (or have in the past) and could encounter sites that have pesticide-contaminated soil.

The proposed zoning ordinance development standards would require Tier 3 and Tier 4 solar energy facilities to be located to avoid sites that are known to be contaminated or are listed on agency databases as requiring clean-up action. Furthermore, Santa Barbara County includes a standard condition of approval related to the incidental discovery of contamination. Future solar energy system and facility proponents would also be required to implement Mitigation Measure HAZ-1, which would require the development of a Site Management Plan, which includes coordination with and notification of the appropriate federal, State, and local agencies if contamination is identified, and site cleanup in affected areas.

As required by the Project, Tier 3 and Tier 4 solar energy facilities would be located to avoid sites that are known to be contaminated or are listed on agency databases as requiring clean-up action, when feasible. However, since the locations of future solar energy systems or facilities have not yet been established, the solar energy systems or facilities could be located on a hazardous materials site. If that were to occur, impacts would be potentially significant.

Mitigation Measures

Mitigation Measure HAZ-1: Site Management Plan. If there is evidence of potential contamination during the application process for a Tier 3 or Tier 4 solar energy project, and, at the discretion of the County, an Environmental Site Assessment shall be performed to provide due diligence. For all future solar energy systems and facilities, if contaminated soils or hazardous conditions are anticipated based on the results of the Environmental Site Assessment or incidentally discovered during construction of a solar energy system or facility, the applicant shall prepare a Site Management Plan that identifies measures, including treatment, or excavation and removal of on-site contaminated soils, and needed redistributions of clean fill material on the project site, that shall be implemented prior to or as part of the development of the solar energy project, as necessary. The plan shall include measures to ensure the safe transport, use, and disposal of contaminated soil and building debris removed from the site. If ground-disturbing activities encounter contaminated groundwater during dewatering activities, the construction contractor shall report the contamination to the appropriate agencies and either treat the extracted groundwater to remove the contaminants before discharge into the sanitary sewer system, or dispose of the dewatering effluent at an offsite facility permitted to accept the waste.

The appropriate federal, state, and local agencies shall be notified if evidence of previously undiscovered soil or groundwater contamination (e.g., undocumented underground storage tanks (USTs), stained soil, stressed vegetation, or soil and/or groundwater with odors suggesting contamination) is identified during construction. Any contaminated areas shall be cleaned up in accordance with the recommendations of the Regional Board, DTSC, or other appropriate federal, state, or local regulatory agencies.

The construction contractor shall comply with the Site Management Plan and applicable federal, state, and local laws. The Site Management Plan shall outline specific procedures for handling and reporting of hazardous materials, and for disposing of hazardous materials removed from the site at an appropriate off-site facility.

Residual Impacts

With the implementation of Mitigation Measure HAZ-1, impacts would be insignificant.

Threshold e) The Project would result in a significant impact if the Project would be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, thereby resulting in a safety hazard or excessive noise for people residing or working in the project area.

Impact HAZ-5: Future solar energy systems and facilities that would occur as a result of the Project that are located within an airport land use plan area or within two miles of a public airport or public use airport could result in a safety hazard or excessive noise for people residing or working in the project area.

Each of the four airports located in Santa Barbara County have ALUCPs that include guidance for construction in Airport Influence Areas. Tier 1 and Tier 2 (e.g., rooftop and small ground-mounted solar energy systems) could occur on all unincorporated County lands regardless of the zoning designation. Tier 3 or 4 facilities would be allowed on lands zoned for agriculture, public utilities, light or general industry, and professional or institutional uses. Therefore, future solar energy systems and facilities could be located within an airport land use plan area or within two miles of a public airport or public use airport.

Future solar energy systems and facilities that would be located within an airport land use plan area would be required to comply with all applicable land use restrictions, including noise and height restrictions. All Santa Barbara County airports adhere to FAR Section 77.17 Obstruction standards, which include height restrictions on structures, including a height of 499 feet above ground level (AGL) or 200 feet AGL within three nautical miles of the established reference point of an airport. Other restrictions may be included in an airport-specific ALUCP. If a future solar energy system would require the construction of structures that would exceed the height restrictions of an ALUCP, project applicants are required to submit a completed copy of FAA Form 7460-1, *Notice of Proposed Construction or Alteration*, to the FAA. Submitting this form prompts the FAA to prepare an aeronautical study to determine whether the structure would be a hazard to air navigation. This requirement applies to both permanent and temporary structures. Upon completing the aeronautical study, the FAA shall either issue a "Determination of Hazard," meaning that the facility would cause airspace impacts that would have a substantial adverse effect on air navigation, or a "Determination of No Hazard," meaning that the facility would not be a hazard to air navigation. In determining that a structure would not be a hazard to air navigation, the FAA may recommend the application of lighting and marking consistent with the guidance in FAA Advisory Circular 70/7460-1, Obstruction Marking and Lighting. The applicant would be required to obtain a "Determination of No Hazard" from the FAA prior to the issuance of building permits.

Tier 1 and Tier 2 solar energy systems would either be ground-mounted or would be integrated into existing buildings or roofs. The Project would limit the height of ground-mounted Tier 1 and 2 solar energy systems to a maximum height of 25 feet. The height of ground-mounted systems shall be measured from the ground to the top of the system when oriented at maximum tilt. In contrast, Tier 3 and Tier 4 solar energy facilities could include the construction of gen-tie lines, which could potentially require the use of helicopters that could have the potential to create a significant hazard to air traffic.

All solar energy facilities located within an ALUCP plan would be required to adhere to all applicable height restrictions. Under ALUCP standards, any structures that would violate height restrictions would be required to coordinate to the FAA, as discussed above. Impacts related to the construction of structures that would violate height restrictions would therefore be insignificant with adherence to ALUCP standards. However, due to the potential safety hazards associated with the use of helicopters in restricted airspace, impacts would be potentially significant. Impacts related to noise are discussed in Section 3.10, *Noise*.

Mitigation Measures

> **Mitigation Measure HAZ-2: FAA Traffic Coordination Plan.** Applicants of solar energy facilities that utilize helicopters to install gen-tie lines within an airport influence area or within two miles of a public airport shall coordinate with the Federal Aviation Administration (FAA) prior to Project construction to develop an FAA Traffic Coordination Plan. The applicant shall prepare the FAA Traffic Coordination Plan based on consultation with the FAA and any applicable Airport Land Use Compatibility Plans. The FAA Traffic Coordination Plan may include flight restrictions and coordination efforts prior to the commencement of any transmission line construction and operational maintenance activities. The FAA shall approve the Traffic Coordination Plan prior to the commencement of construction.

Residual Impacts

With the implementation of Mitigation Measure HAZ-2, impacts would be insignificant.

3.8.5 Cumulative Impacts Analysis

For Project impacts to combine with the impacts of other projects, the collective incremental impacts must overlap both geographically and temporally, and thus must threaten the same ecosystem, resource, or people. The geographic area affected by the Project and its potential to contribute to cumulative impacts related to hazardous materials encompasses and is limited to a project site and its immediately adjacent area since hazardous materials impacts are generally site specific and depend on the nature and extent of the hazardous materials release. Hazardous materials incidents tend to be limited to a smaller and more localized area surrounding the immediate spill location and extent of the release.

The Project would allow the development of solar energy systems and facilities on land in unincorporated Santa Barbara County. All future solar energy projects would be required to adhere to the most current local, state, and federal regulations and to implement the applicable mitigation measures required in this PEIR. In addition, future solar energy projects would be required to complete further site-specific, environmental review, as necessary.

There are four solar energy projects that are in the planning stages prior to the implementation of this Project. These solar energy projects would similarly adhere to all local, state, and federal regulations and implement any necessary conditions of approval and mitigation measures. Therefore, the Project would not contribute to a significant cumulative impact.

Impacts related to the routine transport, storage, and disposal of hazardous materials, discussed in Impact HAZ-1, would be insignificant. As with the future solar energy systems and facilities, related projects would comply with applicable federal, State and local requirements. Therefore, cumulative impacts would be insignificant.

Impacts related to battery ESSs, discussed in Impact HAZ-2 and Impact HAZ-3, for future solar energy projects would be insignificant due to technological advancements, as well as the incorporation of current and future policy changes such as AB 303, discussed in the Methodology Section above. All future solar energy facilities enabled under the Project would be required to adhere to all regulatory requirements and receive approval from the SBCFD. Therefore, the project would not contribute to a significant cumulative impact.

As part of the Project, future solar energy facilities would avoid areas of known contamination. A Site Management Plan would also be required for all Tier 3 and Tier 4 facilities if unknown contamination is identified on-site, and all future solar energy facilities would also be required to coordinate with the appropriate agencies if contamination is identified during project construction, or if areas of known contamination cannot be feasibly avoided. As with the Project, the related projects would also comply with applicable requirements and would implement mitigation measures, if required. Therefore, the project would not contribute to a significant cumulative impact with mitigation as applicable.

Impacts related to airports, as discussed under Impact HAZ-5 would be insignificant with mitigation. All future development that would be located within two miles of an airport or within an ALUCP, including future solar energy facilities under the Project, would be required to coordinate with the FAA. Similar mitigation measures would be implemented as required for all development projects that could potentially interfere with airport operations. Therefore, with adherence to applicable requirements, cumulative impacts related to airports would be insignificant with mitigation as required.

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3.9 Land Use and Planning

3.9.1 Introduction

This section evaluates potential land use and planning impacts that could occur from future development of solar facilities enabled under the Project. The section evaluates issues related to established communities and any conflicts with applicable land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. The section provides the physical and regulatory setting, the criteria and methodology used to evaluate the significance of potential impacts, and the results of the impact assessment.

3.9.2 Environmental Setting

Santa Barbara County is located within the central coast area of California. It is a topographically, ecologically, and economically diverse county, with lands ranging from preserved coastline to rural agriculture to urban development within mountainous, valley, or flat river or coastal plain areas. Santa Barbara County is bordered by Ventura County to the east and south, a corner of Kern County to the east, San Luis Obispo County to the north, and the Pacific Ocean to the west and south. Approximately one-third of the county's land area is within the Los Padres National Forest (LPNF). Vandenburg Space Force Base (VSFB) is located in the western portion of the County.

Regarding the unincorporated county areas specifically, much of the land is rural and in some form of agricultural use. The unincorporated communities are unique and geographically diverse. They range from suburban communities such as Orcutt and Eastern Goleta Valley, to small semi-rural communities like Montecito and parts of Summerland, to small rural towns such as Sisquoc, Los Olivos, Santa Ynez, and Los Alamos. Approximately 30 percent of the total county population lives in unincorporated communities and rural areas.

The Project includes amendments to policies and ordinances that apply to both the Inland and Coastal Zone areas of the unincorporated county. The Coastal Zone includes 110 miles of coastline, ranging from developed residential areas to protected, scenic coastal habitat. While the coastal zone boundary line generally extends inland only 1,000 yards, the Santa Barbara coastal zone extends further inland in several areas because of important habitat, recreational, and agricultural resources. These areas include the lands surrounding the Guadalupe Dunes and Point Conception, and most of the Carpinteria Valley (County of Santa Barbara 2019). The Inland areas are defined as the areas of the unincorporated county outside of the Coastal Zone.

Chapter 2, Project Description, describes the planning areas in which the amendments would allow for solar energy development. Generally, each planning area describes a unique unincorporated community and the surrounding area. Figure 2-2, *Community Plan Areas*, shows the location of each community plan area. For further information on each planning area, see Section 2.3.1, *Planning Areas*.

Land use in the county is governed by the County's Comprehensive Plan as described in Section 3.9.3, *Regulatory Framework*. Lands within the Coastal Zone are also governed by the Coastal Land Use Plan (CLUP). The Land Use Element maps of the Comprehensive Plan prescribe planning areas that generally organize the unincorporated county into distinct geographical regions. The Land Use Element describes

the planning areas' geography, communities, and density/intensity of development (County of Santa Barbara 2024b) and defines the different types of land uses allowed within each area. The Project includes land use amendments that would apply to the following areas as defined within the Land Use Element:

- **Urban Area:** The Urban Area allows the development of residential, commercial, and industrial activities, and their related uses, buildings and structures, including schools, parks, and utilities.
- **Inner-Rural Area:** In the Inner-Rural Area, development is limited to rural uses such as agriculture and its accessory uses, mineral extraction (including oil) and its accessory uses, recreation (public or private), ranchette development, agricultural parcels, and uses of a public or quasi-public nature. The minimum permitted lot size is five acres, with the sole exception of any parcel(s) to be owned and used solely by a public agency. These areas are adjacent to designated Urban Areas and mainly occur in the Santa Ynez Valley.
- **Rural Area:** In the Rural Area, development is limited to agriculture and related uses, mineral (including oil) extraction and related uses and activities, utility-scale solar photovoltaic facilities if located in the Rural Area of the Cuyama Valley Rural Region, recreation (public or private), low density residential and related uses and uses of a public or quasi-public nature. The minimum lot size permitted within this area is 40 acres, with the sole exception of any parcel(s) to be owned and used solely by a public agency.
- **Existing Developed Rural Neighborhood:** The Existing Developed Rural Neighborhood area is a neighborhood area that has developed historically with lots smaller than those found in the surrounding Rural or Inner Rural lands. The purpose of the neighborhood boundary is to keep pockets of rural residential development from expanding onto adjacent agricultural lands.

The Project encompasses lands within the Agricultural, Community Facilities, Industrial, and Commercial land use designations, as defined within the Land Use Element. The Agricultural land use designation preserves agricultural land for the cultivation of crops and the raising of animals. Agriculture is defined as the production of food and fiber, the growing of plants, the raising and keeping of animals, aquaculture, the preparation for marketing of products in their natural form when grown on the premises, and the sale of products which are accessory and customarily incidental to the marketing of products in their natural form which have been grown on the premises. The Community Facilities land use designation includes educational facilities (public or private), institution/government, public utilities, civic centers, and cemeteries. The Industrial land use designation includes coastal-related industries, industrial parks, light industries, and general industries. The Commercial land use designation is used to denote areas suitable for many types of commercial activities including the following categories: general commercial, neighborhood commercial, service commercial, highway commercial, resort/visitor serving commercial, and office and professional.

The County's zoning ordinances implement the policies of the County's Comprehensive Plan by classifying and regulating the uses of land within the county. While land use designations characterize allowable physical uses and the intensity of those uses, zoning designations legally define permitted uses and development standards and guidelines for those uses. Each zoning ordinance is described in Section 3.9.3, *Regulatory Setting*.

Table 2-3, *Proposed Allowed Zones and Permit Requirements,* within Chapter 2, *Project Description*, describes where each tier of solar energy system or facility would be allowed. Figure 2-2 in Chapter 2, *Proposed Solar Energy Facility (Tier 3 and 4) Zoning Amendment Areas*, shows the zoning for the areas

where the proposed amendments would allow for utility-scale (Tier 4) and community-scale (Tier 3) solar energy facility development. The Project would allow for the development of utility-scale and smaller-scale solar energy systems and facilities within the following zoning designations in the unincorporated County:

> **AG-I (Agricultural I):** The AG-I zone is applied to areas that are appropriate for agricultural uses within Urban, Inner Rural, Rural (Coastal Zone only) and Existing Developed Rural Neighborhood (EDRN) areas that are shown on the Santa Barbara County Comprehensive Plan land use maps. The intent of the AG-I zone is to provide standards that will support agriculture as a viable land use and encourage maximum agricultural productivity. The minimum lot size for AG-I parcels is almost always less than the minimum lot size for AG-II parcels.
>
> **AG-II (Agricultural II):** The AG-II zone is applied to areas that are appropriate for agricultural land uses on prime and non-prime agricultural lands located within the Rural Area as shown on the Santa Barbara County Comprehensive Plan land use maps. The intent of the AG-II zone is to preserve these lands for long-term agricultural use. The AG-II zone also includes a minimum gross lot area designation that limits the subdivision potential of land and in some cases affects the range of allowable land uses.
>
> **M-RP (Industrial Research Park):** The M-RP zone is applied to areas to provide exclusively for light industry, technical research, and business headquarters offices (as the primary land use types) that are located in well-designed buildings and attractively landscaped areas. The intent is to establish development standards and landscaping requirements to ensure a park-like environment for the permitted uses and compatibility with adjacent non-industrial areas.
>
> **M-1 (Light Industry):** The M-1 zone is applied to areas to provide exclusively for light industrial uses. The intent is to encourage sound industrial development through appropriate areas for these uses, and to protect nearby residential, commercial, and industrial uses from hazards, noise, and other disturbances.
>
> **M-2 (General Industry):** The M-2 zone is applied to areas to provide for all types of industrial uses while providing the level of project review necessary to ensure that adverse impacts will be minimized and that these uses will be compatible with surrounding properties.
>
> **M-CR (Coastal-Related Industry):** The M-CR zone is applied within the Inland area to areas that are appropriate for coastal-related industrial uses. The intent is to provide standards and conditions that will ensure that environmental damage will be avoided or minimized to the maximum extent feasible.
>
> **PU (Public Works Utilities and Private Services Facility):** The PU zone is applied to areas that are appropriate for the siting of large-scale public works, utilities and private service facilities. The intent is to provide adequate design requirements to ensure that these facilities are compatible with surrounding land uses.
>
> **PI (Professional and Institutional):** The PI zone is applied to areas that are appropriate for professional uses, and for educational, institutional, governmental, and other public facilities. It is the intent of this zone to ensure that these uses are well-designed and landscaped, and harmonious with surrounding land uses.

Each zoning designation listed above has its own set of lot size requirements, development standards, and other zoning ordinance regulations. **Table 3.9-1**, *Zoning Designation Characteristics*, shows the total zone acreages, numbers of parcels, and examples of energy-related allowable uses. **Table 3.9-2**, *Zoning*

Designation Development Standards and Lot Sizes, provides the minimum gross lot area acreages and general development standards including height, setbacks, and building separation within the County Land Use and Development Code (LUDC). For additional detail, refer to Article 35.2, Zones and Allowable Land Uses, of the County LUDC, Division 35.2 (Montecito Zones and Allowable Land Uses) of the Montecito LUDC, and Division 4 (Zoning Districts) of the Coastal Zoning Ordinance.

TABLE 3.9-1
ZONING DESIGNATION CHARACTERISTICS

Zone	Acres	Parcels	Example Energy-Related Allowable Land Uses
AG-I	Total: 41,741 Inland: 35,749 Coastal: 5,955 Montecito: 37	Total: 2,749 Smallest: 0.01 acres Largest: 577 acres Average: 15 acres	*Wind Energy Conversion Systems*: Output ≤ 25 KW per turbine, 300 ft apart: Permitted (P) Output > 200 KW: Conditional Use Permit (CUP) *Oil and Gas Production*: CUP *Electrical Substation-Minor:* Minor CUP (MCUP) *Electrical transmission line*: CUP *Public Utility Facility*: MCUP *Public works or private service facility*: MCUP
AG-II	Total: 718,784 Inland: 665,718 Coastal: 53,066 Montecito: 0	Total: 4,478 Smallest: 0.01 acres Largest: 10,036 acres Average: 159 acres	*Wind Energy Conversion Systems*: Output ≤ 25 KW per turbine, 300 ft apart: P Output > 200 KW: CUP *Oil and Gas Production*: P *Electrical Substation-Minor:* MCUP *Electrical transmission line*: CUP *Battery storage (Public Utility Facility)*: MCUP *Public Utility Facility*: CUP *Public works or private service facility*: MCUP
M-RP	Total: 92 Inland: 62 Coastal: 30 Montecito: 0	Total: 4 Smallest: 0.07 acres Largest: 124 acres Average: 44 acres	*Wind Energy Conversion Systems*: Output ≤ 200 KW: MCUP Output > 200 KW: CUP *Oil and Gas Production*: CUP *Electrical Substation-Minor:* MCUP *Electrical Substation-Major:* N/A *Electrical transmission line*: CUP *Battery storage (Public Utility Facility)*: MCUP (above ground electrical transmission lines not permitted in the View Corridor Overlay District) *Public Utility Facility*: CUP *Public works or private service facility*: MCUP
M-1	Total: 101 Inland: 101 Coastal: 0 Montecito: 0	Total: 20 Smallest: 0.2 acres Largest: 31 acres Average: 5.3 acres	*Wind Energy Conversion Systems*: Output ≤ 200 KW: MCUP Output > 200 KW: CUP *Oil and Gas Production*: CUP *Electrical Substation-Minor:* P *Electrical Substation-Major:* P *Electrical transmission line*: CUP *Battery storage (Public Utility Facility)*: MCUP *Public Utility Facility*: CUP *Public works or private service facility*: MCUP

TABLE 3.9-1
ZONING DESIGNATION CHARACTERISTICS

Zone	Acres	Parcels	Example Energy-Related Allowable Land Uses
M-2	Total: 1,732 Inland: 1,732 Coastal: 0 Montecito: 0	Total: 108 Smallest: 0.01 acres Largest: 470 acres Average: 14 acres	*Wind Energy Conversion Systems*: Output ≤ 200 KW: MCUP Output > 200 KW: CUP *Oil and Gas Production*: P *Electrical Substation-Minor:* P *Electrical Substation-Major:* P *Electrical transmission line*: CUP *Battery storage (Public Utility Facility)*: MCUP *Public Utility Facility*: CUP *Public works or private service facility*: MCUP
M-CR	Total: 294 Inland: 294 Coastal: 0 Montecito: 0	Total: 3 Smallest: 39.51 acres Largest: 550 acres Average: 269 acres	*Wind Energy Conversion Systems*: Output ≤ 200 KW: MCUP Output > 200 KW: CUP *Oil and Gas Production*: P *Electrical Substation-Minor:* MCUP *Electrical Substation-Major:* N/A *Electrical transmission line*: CUP *Public Utility Facility*: CUP *Public works or private service facility*: MCUP
PU	Total: 497 Inland: 153 Coastal: 322 Montecito: 22	Total: 56 Smallest: 0.01 acres Largest: 147 acres Average: 7.9 acres	*Wind Energy Conversion Systems*: Output ≤ 200 KW: MCUP *Oil and Gas Production*: N/A *Electrical Substation-Minor:* MCUP *Electrical Substation-Major:* P *Electrical transmission line*: CUP *Public Utility Facility*: P *Public works or private service facility*: MCUP
PI	Total: 263 Inland: 262 Coastal: 1 Montecito: 0	Total: 45 Smallest: 0.12 acres Largest: 20 acres Average: 5 acres	*Wind Energy Conversion Systems*: Output ≤ 25 KW per turbine, 300 ft apart: P Output > 200 KW: CUP *Oil and Gas Production*: P *Electrical Substation-Minor:* MCUP *Electrical transmission line*: CUP *Battery storage (Public Utility Facility)*: MCUP *Public Utility Facility*: CUP *Public works or private service facility*: MCUP

SOURCE: County of Santa Barbara 2024a; ESA 2025.

TABLE 3.9-2
ZONING DESIGNATION DEVELOPMENT STANDARDS AND LOT SIZES (COUNTY LUDC)

Zone	Zoning Map Symbol and Minimum Gross Lot Area	General Development Standards
AG-I	AG-I-5: 5 acres AG-I-10: 10 acres AG-I-20: 20 acres AG-I-40: 40 acres	Height: 35 ft Setbacks Front (Primary): 50 ft from road centerline Side: 20 ft; 10% of lot width on a lot of less than 1 acre, with no less than 5 ft or more than 10 ft required Rear: 20 ft; 25 ft on a lot of less than 1 acre Building Separation: None, except as required by Building Code Open Space: No requirement
AG-II	AG-II-40: 40 acres AG-II-100: 100 acres AG-II-320: 320 acres	Height: 35 ft Setbacks Front (Primary): 50 ft from road centerline Side: None. Rear: None. Building Separation: None, except as required by Building Code Open Space: No requirement
M-RP	1 acre	Height: 35 ft Setbacks Front (Primary): 80 ft from road centerline Front (Secondary): Same as front Side (Interior): 10 ft Rear: 10 ft Open Space: No requirement
M-1	1 acre	Height: 45 ft Setbacks Front (Primary): 80 ft from road centerline Front (Secondary): Same as front Side (Interior): 10 ft Rear: 10 ft Open Space: No requirement
M-2	None	Height: 45 ft Setbacks Front (Primary): 50 ft from road centerline Side (Corner): Same as front Side (Interior): 10 ft Rear: 10 ft Open Space: No requirement
M-CR	None	Height: 45 ft Setbacks Front (Primary): 50 ft from road centerline Side (Corner): Same as front Side (Interior): 10 ft Rear: 10 ft Open Space: No requirement

TABLE 3.9-2
ZONING DESIGNATION DEVELOPMENT STANDARDS AND LOT SIZES (COUNTY LUDC)

Zone	Zoning Map Symbol and Minimum Gross Lot Area	General Development Standards
PU	None	Height: 45 ft Setbacks Front (Primary): 50 ft from road centerline Front (Secondary): Same as primary front Side: 10 ft Rear: 10 ft Building Separation: None, except as required by Building Code Open Space: No requirement
PI	No minimum lot size	Height: 35 ft Setbacks Front (Primary): 45 ft from road centerline Side: 15 ft Rear: 15 ft Building Separation: 5 ft for buildings containing dwellings Site Coverage: 40% (for buildings only) Open Space: No minimum

SOURCE: County of Santa Barbara 2024a.

3.9.3 Regulatory Framework

Federal

No federal statutes, regulations, or policies govern land use or planning in the areas in which future solar facilities would occur as a result of the Project.

State

California Coastal Act

The State Legislature approved the California Coastal Act in 1976, which is enacted via Public Resources Code Division 20, Chapters 1 through 10. The Coastal Act policies focus on the protection of coastal resources and the regulation of development in the Coastal Zone. The policies govern land uses, including environmentally sensitive habitat areas and agricultural lands, recreational resources, the marine environment, scenic resources, and air quality. While the focus of the policies is on resource protection, the policies also govern land use, industrial development, and public works facilities to encourage well-planned and orderly development that is compatible with resource protection conservation. Pursuant to the Coastal Act, each of the 15 counties and 53 cities along the California coast is required to prepare a Local Coastal Plan (LCP). The LCP consists of the local government's land use plans, zoning ordinances, zoning district maps, and implementing actions that, when taken together, meet the requirements and implement the provisions and policies of the Coastal Act at the local level.

Executive Order B-55-18

Executive Order (EO) B-55-18, issued in 2018, is a statewide policy to achieve carbon neutrality by 2045 and maintain net negative emissions thereafter. The order directs the California Air Resources Board (CARB) to develop a framework for implementation and accounting that tracks progress toward this goal and ensures that future Climate Change Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. This transition requires a major shift towards renewable energy sources including large-scale energy storage solutions. EO B-55-18 does not allow for the State to regulate or control any land within Santa Barbara County's jurisdiction. However, as the State works towards its goal for clean energy, Santa Barbara County may see a greater influx of solar energy development, as developers seek new locations to meet the growing demand for clean energy and storage infrastructure. See Section 3.7, *Greenhouse Gas Emissions*, for further details related to greenhouse gas emissions and climate change.

Local

Land Use Regulatory Documents

Santa Barbara County Comprehensive Plan

The County's Comprehensive Plan is a long-term general plan that governs the future growth and development of the unincorporated county. The Comprehensive Plan contains land use goals, policies, and implementation measures within each of its elements. The Comprehensive Plan expresses the community's development goals, embodies public policy relative to the distribution of future public and private land uses, and is required to maintain internal consistency between all adopted elements. The Land Use Element describes and regulates development and uses of land throughout the county. Other State-mandated elements included in the Comprehensive Plan are the Circulation, Conservation, Housing, Noise, Open Space, Seismic Safety and Safety, and Environmental Justice elements. In addition, the County's Comprehensive Plan contains the following elective elements: Agriculture, Energy, Environmental Resource Management (ERME), Scenic Highways, and Hazardous Waste.

Land Use Element

The Land Use Element of the County's Comprehensive Plan lays out the general patterns of development throughout the county, including the distribution of developed, open space and agricultural land, mineral resources, recreational facilities, schools, and waste facilities. The Land Use Element of the Comprehensive Plan has four fundamental goals relating to the environment, urbanization, agriculture, and open lands. These goals aim to guide growth to locations and at a rate that can be sustained by available resources; to prevent scattered urban development and balance housing and jobs; to preserve cultivated agriculture and lands with both prime and non-prime farmland; and to prioritize open lands for non-urban uses where not suitable for agriculture (County of Santa Barbara 2024b).

Agricultural Element

The Agricultural Element serves as a comprehensive guide for the future use and management of agricultural lands and resources within the county. It outlines goals and policies aimed at preserving agricultural land, promoting sustainable farming practices, and supporting the agricultural economy. The element addresses various aspects such as land use planning, resource conservation, and environmental protection on agriculturally zoned lands (County of Santa Barbara 2009a). See Section 3.2, *Agricultural Resources*, for further discussion.

Coastal Land Use Plan

The Coastal Land Use Plan (CLUP) regulates land uses throughout the coastal areas of the county, in accordance with the Coastal Act. Its purpose is to protect coastal resources while accommodating development within the Coastal Zone (County of Santa Barbara 2019). The other elements of the Comprehensive Plan are applicable within the Coastal Zone; however, when there is conflict, the CLUP takes precedence.

Currently, the CLUP does not allow utility-scale and community-scale solar facilities within the Coastal Zone. Proposed amendments to the CLUP would allow utility-scale and smaller scales of solar energy systems and facilities as allowed uses within the Coastal Zone portion of the unincorporated county, for consistency with the Comprehensive Plan amendments.

Community Plans and Area Goals

The Project area consists of unincorporated lands zoned AG-I, AG-II, M-RP, M-1, M-2, M-CR, PU, and PI. The Project area would be subject to the goals and policies of the following community plans:

- Eastern Goleta Valley Community Plan
- Goleta Community Plan
- Gaviota Coast Plan
- Los Alamos Community Plan
- Mission Canyon Community Plan
- Montecito Community Plan
- Orcutt Community Plan
- Santa Ynez Valley Community Plan
- Summerland Community Plan
- Toro Canyon Plan

The Project would not amend any Community Plans. Pertinent policies would apply to solar energy facility or system development within any designated community plan areas.

County Zoning Ordinances

Santa Barbara County Land Use and Development Code

The Santa Barbara County Code Chapter 35, Zoning, contains the LUDC, which carries out the policies of the Comprehensive Plan by classifying and regulating the uses of land and structures within the Inland areas of the county, outside of the Montecito Community Plan area. The LUDC is adopted to protect and promote the public health, safety, comfort, convenience, prosperity, and general welfare of residents and businesses in the county (County of Santa Barbara 2024a).

The LUDC is the mechanism that implements the goals, objectives, and policies of the Comprehensive Plan, including any applicable community, specific, or area plans. Therefore, provisions of the LUDC and any land use, subdivision, or development approved in compliance with these regulations must be consistent with other components of the Comprehensive Plan, including any applicable community, specific, or area plans.

Currently, utility-scale solar is only allowed with a conditional use permit (CUP) within the 600-acre Utility-Scale Solar Photovoltaic Overlay on lands zoned AG-II in the unincorporated Cuyama Valley Rural Region. Battery energy storage systems (ESS) are allowed as part of a utility-scale solar energy facility within the overlay, as an accessory use to an existing energy operation, and are also allowed as stand-alone facilities in all zones under the public utility facility use. All permitted existing stand-alone battery ESS facilities within the unincorporated County are within the AG-II zone thus far.

As described in Table 1, *Solar Photovoltaic Systems Currently Allowed Within Santa Barbara County*, within Chapter 2, *Project Description*, rooftop and freestanding solar energy systems are exempt from planning permits in the Inland portion of the County (outside Montecito) per LUDC Section 35.110.020.S.

Montecito Land Use Development Code

The Montecito Land Use Development Code (MLUDC) constitutes a portion of Section 35 of the County Code and implements the County's Comprehensive Plan and the Montecito Community Plan by classifying and regulating the uses of land, buildings, and structures in Montecito located outside of the Coastal Zone (County of Santa Barbara 2025a). Currently, no utility-scale or community-scale solar energy facilities are allowed within the MLUDC. As described in Table 1, *Solar Photovoltaic Systems Currently Allowed Within Santa Barbara County*, within Chapter 2, *Project Description*, rooftop and freestanding solar energy systems are exempt from planning permits in the Inland portion of Montecito per MLUDC Section 35.500.020.S.

Santa Barbara County Coastal Zoning Ordinance

Article II Coastal Zoning Ordinance (CZO), a part of Chapter 35, *Zoning*, of the Santa Barbara County Code, applies to the unincorporated Coastal Zone within Santa Barbara County as well as the Channel Islands. The CZO implements the CLUP by classifying and regulating the uses of land, buildings, and structures in the Coastal Zone. The ordinance contains the coastal zoning district maps, which apply the regulations of the ordinance to the properties in the coastal areas (County of Santa Barbara 2025b). As described in Table 1, *Solar Photovoltaic Systems Currently Allowed Within Santa Barbara County*, within Chapter 2, *Project Description*, rooftop and freestanding solar energy systems are allowed with a Coastal Development Permit within all zones (per CZO Sections 35-51B.B.2.n and 35-169.4.2.c.1). No utility-scale solar energy facilities are currently allowed within the County's Coastal Zone.

Uniform Rules for Agricultural Preserves and Farmland Security Zones

As described in Section 3.2, *Agricultural Resources*, the Uniform Rules of Agricultural Preserves and Farmland Security Zones (Uniform Rules) are used to implement the Williamson Act and administer the Agricultural Preserve Program in Santa Barbara County. The Uniform Rules define eligibility requirements and compatible uses to which each participating landowner must adhere in order to receive a reduced tax assessment based on the actual use of the land for agricultural purposes, rather than its market value. Land enrolled in the Agricultural Preserve Program is to be used principally for commercial agricultural production, with the exception of land enrolled for open space or recreational purposes. The Uniform Rules do not explicitly address the development of solar energy facilities (County of Santa Barbara 2024c).

Related Local Climate and Renewable Energy Plans

The plans summarized below do not directly regulate land uses or development within the unincorporated County. However, they are discussed as part of the regulatory setting since they may relate to the growth of renewable energy development within the unincorporated County. Refer to Section 3.6, *Energy* for a description of the Strategic Energy Plan.

Strategic Energy Plan

The Santa Barbara County Strategic Energy Plan, adopted by the County Board of Supervisors in September 2019, is an initiative that aims to enhance local energy resilience and sustainability. Developed in collaboration with the cities of Goleta and Carpinteria, the Strategic Energy Plan presents a flexible pathway to achieving a 100% renewable electricity supply by 2030 through a combination of strategic policy and program options focused on developing renewable energy resources and bolstering local reliability and resilience.

County of Santa Barbara 2030 Climate Action Plan

The Santa Barbara County 2030 Climate Action Plan (CAP), adopted by the Board of Supervisors on August 27, 2024, aims to reduce greenhouse gas emissions in unincorporated areas by 50 percent from 2018 levels by 2030. The measures laid out in the 2030 CAP provide a foundation that aligns with the State of California's goals to reduce GHG emissions to 40 percent below 1990 levels and achieve carbon neutrality by 2045 (County of Santa Barbara 2024d).

County of Santa Barbara Energy Assurance Plan

The Santa Barbara County's Energy Assurance Plan (EAP) is a strategic initiative developed to enhance the resilience, reliability, and sustainability of the county's energy infrastructure. The EAP outlines a comprehensive approach to mitigate the risk of power outages in the region. The EAP encourages the development of large-scale solar energy systems in the region due to its emphasis on energy resilience, renewable energy expansion, and grid stability.

3.9.4 Project Impact Analysis

Thresholds of Significance

CEQA Appendix G Significance Thresholds

According to Appendix G of the CEQA Guidelines, a project would result in significant land use and planning impacts on the environment if it would:

a) Physically divide an established community, or

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

County of Santa Barbara Environmental Thresholds

In addition to the land use and planning thresholds of significance from Appendix G of the CEQA Guidelines, the County's Environmental Thresholds and Guidelines Manual includes consideration of "Quality of Life" issues. Quality of life effects can be broadly defined as the aggregate effect of a project's impacts on individuals, families, communities, and other social groups, and on how those

groups function. They are social changes that result from a project, rather than physical effects on the environment. Quality of life effects are typically subjective and not based on quantifiable measures. However, quality of life issues, while hard to quantify, are often of primary concern to the community affected by a project.

The County's Environmental Thresholds and Guidelines Manual states that although changes to quality of life resulting from a project are not treated as significant effects on the environment pursuant to CEQA, many quality of life considerations are addressed in Comprehensive Plan policies, which are the subject of this section of the Program EIR. Further, project-caused changes to quality of life are social changes that may be used: 1) to identify physical impacts caused by a change in quality of life; and 2) when related to a physical change, to determine whether the physical change is a significant effect on the environment. The thresholds of significance referenced in other impact areas include quality of life considerations. For example, the noise threshold relies on quality of life considerations to determine when noise experienced by a sensitive receptor is considered "significant." The following quality of life issues referenced in the County's Environmental Thresholds and Guidelines Manual and the County's Comprehensive Plan policies are relevant to the Project and used herein to inform the determination of impacts related to land use and planning:

1. Loss of privacy
2. Neighborhood incompatibility
3. Nuisance noise levels (not exceeding noise thresholds)
4. Increased traffic in quiet neighborhoods (not exceeding traffic thresholds)
5. Loss of sunlight/solar access

Methodology

The analysis provides a preliminary evaluation of the consistency of the Project with the County's Comprehensive Plan, and other applicable plans, policies, and regulations. Pursuant to the County's Environmental Thresholds and Guidelines Manual, projects must conform to the applicable Comprehensive Plan policies, and decision-makers must make findings of consistency in order to approve the land use entitlements required for a project. Further, CEQA Guidelines Section 15125(d) requires that an EIR "…shall discuss any inconsistencies between the project and applicable general plans and regional plans." While a preliminary determination of inconsistency with these plans or policies in itself would not constitute an impact to the physical environment, an inconsistency with an adopted plan or policy might suggest that the Project would be conducted in such a way that it could result in an impact to the physical environment that is subject to CEQA review. Should the Board of Supervisors determine that the Project is inconsistent with an existing County's Comprehensive Plan or regional plan policy, the Project could not be approved unless measures are identified to eliminate this inconsistency.

Project Impacts

This section identifies and discusses potential land use and planning impacts associated with the Project. **Table 3.9-3**, *Summary of Land Use and Planning Impacts*, provides a summary of the Project's potentially significant land use and planning impacts. A detailed discussion of each impact follows.

TABLE 3.9-3
SUMMARY OF LAND USE AND PLANNING IMPACTS

Land Use and Planning Impacts	Impact Classification	Mitigation Measures	Residual Impact
Impact LU-1: While the Project would allow solar energy systems and facilities in areas throughout the County, the Project would not divide established communities.	Insignificant	No mitigation required	Insignificant
Impact LU-2: The Project and future renewable energy projects allowed under the Project would not conflict with applicable County land use plans, policies, or regulations.	Insignificant	No mitigation required	Insignificant
Impact LU-3: The Project would not cause adverse quality-of-life effects on existing communities due to loss of privacy, neighborhood incompatibility, traffic, noise, or loss of sunlight/solar access.	Insignificant	No mitigation required	Insignificant
Cumulative Impact	Insignificant	No mitigation required	Insignificant

Threshold a) The Project would have a significant impact if the Project would physically divide an established community.

Impact LU-1: While the Project would allow solar energy systems and facilities in areas throughout the County, the Project would not divide established communities.

Solar Energy Systems (Tiers 1 and 2)

With respect to Tier 1 solar energy systems (rooftop and small ground-mounted systems), there would be no change from current conditions within the Inland portions of the county. Currently, the LUDC and MLUDC allow rooftop and "freestanding" ground-mounted solar energy systems to be exempt from planning permit requirements in all zones. Both ordinances currently define "solar energy system" to be consistent with the definition in Section 801.5 of the California Civil Code, as it was written prior to the Civil Code update in 2023 to include "structural design features" such as solar carports, solar shade structures, and building-integrated solar energy systems.

In the LUDC and MLUDC, Tier 2 (large ground-mounted solar energy systems) are currently exempt from planning permits if they are considered "freestanding" and support the principal use. Neither ordinance has an upper limit on the size of a "freestanding" ground-mounted solar energy system that would be exempt from planning permits. Currently, if a ground-mounted solar energy system is the primary use of a site, it would be considered a utility-scale solar energy facility and could only be allowed within the existing Utility-Scale Solar Photovoltaic Overlay area, as described within the LUDC.

Rooftop solar energy systems are exempt from planning permits within the Coastal Zone and would continue to be exempt under the Project. Currently, ground-mounted systems of any size require a Coastal Development Permit, which has specific noticing and appeal procedures under CZO Section 35-169, *Coastal Development Permits.* The CZO currently does not specify an upper limit as to the size of a ground-mounted solar energy system that could be permitted with a CDP, only that it be "sized to primarily support only the principal use."

Under the Project, the CZO would be amended to change the permitting requirements to a more streamlined permitting type for ground-mounted solar energy systems under Tiers 1 and 2. The Project would allow for ground-mounted solar energy systems under Tier 1 or 2 to be allowed under a permit type that reduces the public noticing and appeal requirements and timeframes, to streamline and facilitate the installation of these systems. Therefore, the Project affects the processing rather than what is allowed.

To summarize, rooftop and ground-mounted solar energy systems that are sized to be placed on building rooftops or to support the principal use of a site are already allowed anywhere within the unincorporated County. The County's ordinances do not specify the maximum size in acres that a ground-mounted solar energy system must be before a planning permit is required. Under the Project, rooftop, building integrated, and small ground-mounted solar energy systems (Tier 1) would be limited to the size of a roof or up to 0.5 acres in size (in the Inland area) to qualify for a permit exemption. Freestanding or ground-mounted Tier 1 systems in the Coastal Zone would still require a ministerial permit (non-locally appealable CDP). Tier 2 systems in the Inland and Coastal Zone areas could only be placed on existing developed areas, such as existing parking lots, and could not be larger than 5.0 acres in size to qualify for a ministerial permit (Zoning Clearance or non-locally appealable CDP). For these reasons, Tier 1 and 2 solar energy systems would therefore integrate into the existing urban fabric and development patterns, within individual lots, and would not divide established communities.

Solar Energy Facilities (Tiers 3 and 4)

Currently, as described in Chapter 2, Project Description, utility-scale solar energy facilities are only allowed on lands zoned AG-II within the 600-acre Utility-Scale Solar Photovoltaic Overlay. The LUDC does not establish any parameters regarding the size of utility-scale solar facilities that can be permitted within the overlay.

With respect to solar energy facilities (Tiers 3 and 4), the Project includes amending the LUDC to allow Tier 3 and Tier 4 solar energy facilities within the following zones: AG-I and AG-II; M-RP, M-1, M-2, and M-CR; and PI and PU. Tier 3 or Tier 4 projects would be permitted under a Development Plan within the PU zone. Tier 3 would be permitted by a Minor Conditional Use Permit (CUP), and Tier 4 would be permitted by a Major CUP, in the other seven zones.

The Project also includes amendments to the MLUDC to allow Tier 3 and Tier 4 solar energy facilities. Of the zoning designations to be amended as part of this Project, the Inland area of the Montecito Community Plan only contains land zoned as PU. Therefore, community-scale (Tier 3) and utility-scale (Tier 4) solar energy facilities would be allowed within the PU zoning designation in the Inland portion of Montecito. Tier 3 or Tier 4 projects would be permitted by a Development Plan in the PU zone in accordance with the requirements in MLUDC Section 35.472.080.

In the Coastal Zone, the Project would amend the AG-I, AG-II, M-CR, M-RP, PI, and PU zones to allow Tier 3 and Tier 4 solar energy facilities. The Coastal Zone does not contain any lands zoned M-1 or M-2. Similar to the LUDC amendments, Tier 3 and Tier 4 would be permitted by a Development Plan within PU zones. Tier 3 would be permitted by a Minor CUP, and Tier 4 by a Major CUP, within the other five zones.

As described in Section 3.9.2, *Environmental Setting*, the Project would allow for the future development of solar energy facilities in unincorporated areas of Santa Barbara County (Tiers 3 and 4). The Project

would allow Tier 3 and Tier 4 energy systems on undeveloped or developed land. Tier 3 systems would be between 0.5 and up to 30 acres, while Tier 4 systems would be greater than 30 acres. Although these solar facilities would be located on large parcels of land, as indicated in Section 2.4, *Purpose and Objectives of the Project*, the Project seeks to facilitate solar energy development in areas that can accommodate their use while maintaining valued resources.

Typically, the division of an established community would result from the construction of a physical barrier to neighborhood access or the removal of means of access. With regard to physically dividing an established community, the development of Tier 3 and Tier 4 systems may include the installation and presence of perimeter fencing surrounding the Project site. While such features would hinder access to the site, it would not present a barrier between portions of a community, or between communities. Impacts are therefore considered insignificant.

Mitigation Measures

The future solar energy systems and facilities that would be allowed as a result of the Project would not divide established communities and impacts would be insignificant. No mitigation measures are required.

Residual Impacts

The Project would not divide established communities and impacts would be insignificant.

Threshold b) The Project would have a significant impact if the Project would conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Impact LU-2: The Project and future renewable energy projects allowed under the Project would not conflict with applicable County land use plans, policies, or regulations.

The following discussion of County policies and analysis regarding the consistency of the Project with these policies is presented to comply with CEQA Guidelines Section 15125(d), which requires that an EIR "…shall discuss any inconsistencies between the proposed Project and applicable general plans and regional plans." The underlying purpose of the Project is to allow utility-scale solar and smaller scales of solar energy generation facilities to be developed on land previously not available for such use in order for the County to come closer to meeting its goals under the Strategic Energy Plan and the 2030 Climate Action Plan and to meet the County's goals of increasing renewable energy generation through such facilities. This analysis focuses on the relevant local and regional plans and policies identified in Section 3.9.3, *Regulatory Framework,* above. Table 3.9-3 summarizes relevant Santa Barbara County Comprehensive Plan goals and policies, and other relevant plans and policies.

Amendments to the Comprehensive Plan primarily include amending the Land Use Element to remove the Utility-Scale Solar Photovoltaic Facility Overlay and Utility-Scale Solar Photovoltaic Facility Policy, thereby allowing utility-scale solar (and smaller scales of solar energy generation facilities) as an allowed use outside of the Cuyama Valley Rural Region. The definition of "utility-scale solar photovoltaic facilities" would be revised, and new definitions would be added to support smaller scales of solar energy generation systems and facilities (e.g., community-scale solar energy facilities, distributed energy systems, on-site solar energy systems).

In addition to the policies identified in **Table 3.9-4**, *County Land Use Plans and Policies Consistency Summary*, below, various community plans within the county provide policies and development standards that address a wide range of resources. Many of these policies are also addressed in the Land Use, Agricultural, Seismic Safety and Safety, and Conservation elements of the County's Comprehensive Plan. Given that policies in specific community plans are designed to be consistent with policies in the Comprehensive Plan as a whole, as well as other County ordinances and plans, Project consistency with the Comprehensive Plan would indicate that the Project would also be consistent with policies and goals in the applicable community plans.

TABLE 3.9-4
COUNTY LAND USE PLANS AND POLICIES CONSISTENCY SUMMARY

Element/Plan	Policy Name/ Number	Policy	Consistency Analysis
Aesthetics/Visual Resources			
Coastal Land Use Plan (CLUP)	Coastal Act Policy 30251	The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.	**Consistent**. The Project would enable a range of solar energy system and facility uses by creating a tiered permitting approach. Solar facilities would undergo permit review and be subject to County regulations protecting visual resources, including public views, to control where and how development occurs in the Coastal Zone. For developments within the Coastal Zone, Tier 1 and 2 solar energy systems would require a Coastal Development Permit (CDP) while Tier 3 and 4 systems would require a minor or major Conditional Use Permit (CUP) and may include site-specific standards relating to applicable plans for development. CDP standards would ensure that scenic views are maintained and that activities are compatible with surrounding areas. The CUP process would require a more rigorous level of County permit review that would ensure consistency with Coastal Zone goals. In addition, proposed development standards as defined in the CZO amendments would require Tier 3 and Tier 4 facilities to be designed and located in a manner to minimize adverse visual impacts. The development standards would not allow solar facilities to be within identified scenic areas. Such standards would ensure that future solar energy system and facility development sited within the Coastal Zone would protect scenic and visual qualities.
Coastal Land Use Plan (CLUP)	Visual Resource Policy 4-3	In areas designated as rural on the land use plan maps, the height, scale, and design of structures shall be compatible with the character of the surrounding natural environment, except where technical requirements dictate otherwise. Structures shall be subordinate in appearance to natural landforms; shall be designed to follow the natural contours of the landscape; and shall be sited so as not to intrude into the skyline as seen from public viewing places.	**Consistent**. Some Tier 1 and 2 and all Tier 3 and 4 developments would undergo County permit review to determine compliance with relevant plans, development standards, and practices. Permit conditions would ensure that the character of the surrounding natural environment would not be adversely affected. In addition, the Project would require Tier 3 and Tier 4 facilities to be designed and located in a manner to minimize adverse visual impacts. The development standards would not allow solar facilities to be within identified scenic areas. Such standards would ensure that future solar energy system and facility developments would protect scenic and visual qualities.

TABLE 3.9-4
COUNTY LAND USE PLANS AND POLICIES CONSISTENCY SUMMARY

Element/Plan	Policy Name/ Number	Policy	Consistency Analysis
Coastal Land Use Plan (CLUP)	Visual Resource Policy 4-5	In addition to that required for safety (see Policy 3-4), further bluff setbacks may be required for oceanfront structures to minimize or avoid impacts on public views from the beach. Bluff top structures shall be set back from the bluff edge sufficiently far to ensure that the structure does not infringe on views from the beach except in areas where existing structures on both sides of the proposed structure already impact public views from the beach. In such cases, the new structure shall be located no closer to the bluff's edge than the adjacent structures.	**Consistent**. Within the Coastal Zone, coastal bluffs are found within the Gaviota Coast Plan area. Smaller Tier 1 and 2 solar energy systems would require a CDP within the Coastal Zone while Tier 3 and 4 systems would require a minor or major CUP and may include site-specific standards relating to applicable plans for development. CDP standards would ensure that new development regardless of size would be required to set back from the bluff edge sufficiently so as to not infringe on views from the beach. CUP standards would require a more rigorous level of County permit review that would aid in consistency with Coastal Zone goals. In addition, the Project would require the development of Tier 3 and Tier 4 facilities to abide by the setback standards of the applicable zone district. Such standards would ensure that future solar energy system and facility developments would establish further bluff setbacks to protect visual qualities.
Agriculture			
Coastal Land Use Plan (CLUP)	Policy 8-2	A parcel is designated for agricultural use and is located in a rural area not contiguous with the urban/rural boundary, conversion to non-agricultural use shall not be permitted unless such conversion of the entire parcel would allow for another priority use under the Coastal Act, e.g., coastal dependent industry, recreation and access, or protection of an environmentally sensitive habitat. Such conversion shall not be in conflict with contiguous agricultural operations in the area, and shall be consistent with Section 30241 and 30242 of the Coastal Act.	**Consistent**. Some Tier 1 and 2 and all Tier 3 and 4 developments would undergo County permit review to determine compliance with relevant plans, development standards, and practices. In addition, the Project would require Tier 3 and Tier 4 facilities to minimize adverse agricultural impacts by permanently preserving off-site agricultural land if the project requires the conversion of prime agricultural land and/or Important Farmland shown on the Department of Conservation's Important Farmland Maps to non-agricultural use. The proposed development standards would require the applicant to provide documentation of the completion of preservation of off-site agricultural land of equal or better agricultural quality. Such standards would ensure that any of the solar energy system and facility developments converted to non-agricultural uses would preserve prime agricultural land and would ensure that permitted conversion shall be compatible with continued agricultural use on surrounding lands.
Biological Resources			
Land Use Element/Coastal Land Use Plan (CLUP)	Hillside and Watershed Protection Policy 2/CLUP Policy 3-14	2. All developments shall be designed to fit the site topography, soils, geology, hydrology, and any other existing conditions and be oriented so that grading and other site preparation is kept to an absolute minimum. Natural features, landforms, and native vegetation, such as trees, shall be preserved to the maximum extent feasible. Areas of the site which are not suited to development because of known soil,	**Consistent**. Proposed Development Standards as defined in the LUDC amendments include setbacks, geologic hazards avoidance, noise level reduction, and vegetation establishment and maintenance. Such standards would ensure that development of solar energy facilities would avoid adverse impacts on natural features and geologic resources and prevent impacts that would degrade such areas. Development plans would ensure that future solar facilities would be designed to minimize impacts related to topography, soils, geology, and hydrology,

TABLE 3.9-4
COUNTY LAND USE PLANS AND POLICIES CONSISTENCY SUMMARY

Element/Plan	Policy Name/ Number	Policy	Consistency Analysis
		geologic, flood, erosion or other hazards shall remain in open space.	as well as other existing conditions. The development standards would require Tier 3 and Tier 4 facilities to be designed and located in a manner to minimize adverse geologic impacts to avoid hazards including erosion control and minimizing flooding. The development standards would require the development of Tier 3 and Tier 4 facilities to be designed and located in a manner so as to minimize any adverse biological impacts. Such standards and policies would ensure that any of the solar energy system and facilities are placed on sites suited for development.
	Streams and Creeks Policy 1	1. All permitted construction and grading within stream corridors shall be carried out in such a manner as to minimize impacts from increased runoff, sedimentation, biochemical degradation, or thermal pollution.	
Coastal Land Use Plan (CLUP)	Development Policy 2-11	All development, including agriculture, adjacent to areas designated on the land use plan or resource maps as environmentally sensitive habitat areas, shall be regulated to avoid adverse impacts on habitat resources. Regulatory measures include, but are not limited to, setbacks, buffer zones, grading controls, noise restrictions, maintenance of natural vegetation, and control of runoff.	**Consistent**. Tier 3 and 4 systems would require a minor or major CUP and may include site-specific standards relating to applicable plans for development. CUP standards would require a more rigorous level of County permit review that would aid in consistency with Environmentally Sensitive Habitat Area goals. In addition, the Project would require Tier 3 and Tier 4 facilities to be designed and located in a manner so as to minimize any adverse biological impacts. The development standards would require the facility to avoid significant impacts to known sensitive natural communities, Environmentally Sensitive Habitats (ESH), rare and special-status plant species, special-status wildlife species and their habitats, critical habitat corridors, and nesting birds. Proposed Development Standards as defined in the CZO amendments also include setbacks, geologic hazards avoidance, noise level reduction, and vegetation establishment and maintenance. Such standards would ensure that future solar energy facilities would avoid adverse impacts on habitat resources and disruption of habitat values and prevent impacts that would degrade such areas.
	Coastal Act Policy 30240	a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas. b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.	
	Environmentally Sensitive Habitat Area Policy 9-1	Prior to the issuance of a development permit, all projects on parcels shown on the land use plan and/or resource maps with a Habitat Area overlay designation or within 250 feet of such designation or projects affecting an environmentally sensitive habitat area shall be found to be in conformity with the applicable habitat protection policies of the land use plan. All development plans, grading plans, etc., shall show the precise location of the habitat(s) potentially affected by the proposed project. Projects which could adversely impact an environmentally sensitive habitat area may be subject to a site inspection by a qualified biologist to be selected jointly by the County and the applicant.	

TABLE 3.9-4
COUNTY LAND USE PLANS AND POLICIES CONSISTENCY SUMMARY

Element/Plan	Policy Name/ Number	Policy	Consistency Analysis
	Environmentally Sensitive Habitat Area Policy 9-18	Development shall be sited and designed to protect native grassland areas, structures, runoff, and erosion on native vegetation. In particular, grading and paving shall not adversely affect root zone aeration and stability of native tree.	
	Environmentally Sensitive Habitat Area Policy 9-36	When sites are graded or developed, areas with significant amounts of native vegetation shall be preserved. All development shall be sited, designed, and constructed to minimize impacts of grading, paving, construction of roads or	
Coastal Land Use			
Coastal Land Use Plan (CLUP)	Policy 1-2	1-2: Where policies within the land use plan overlap, the policy which is the most protective of coastal resources shall take precedence.	**Consistent**. In the Coastal Zone, development would require review as part of the CDP or a minor or major CUP. During this review, the most protective coastal resource policies would prevail, the policies of the CLUP would take precedence over similar or conflicting policies of the County's Comprehensive Plan, and the project would be evaluated and designed to ensure it meets the standards set forth in all applicable land use policies.
	Policy 1-3	1-3: Where there are conflicts between the policies set forth in the coastal land use plan and those set forth in any element of the County's Comprehensive Plan or existing ordinances, the policies of the coastal land use plan shall take precedence.	
	Policy 1-4	1-4: Prior to the issuance of a coastal development permit, the County shall make the finding that the development reasonably meets the standards set forth in all applicable land use plan policies.	
Geology and Soils			
Coastal Land Use Plan (CLUP)	Policy 3-4	In areas of new development, above-ground structures shall be set back a sufficient distance from the bluff edge to be safe from the threat of bluff erosion for a minimum of 75 years, unless such standard will make a lot unbuildable, in which case a standard of 50 years shall be used. The County shall determine the required setback. A geologic report shall be required by the County in order to make this determination. At a minimum, such geologic report shall be prepared in conformance with the Coastal Commission's adopted Statewide Interpretive Guidelines regarding "Geologic Stability of Bluff top Development."	**Consistent**. Within the Coastal Zone, coastal bluffs are found within the Gaviota Coast Plan area. For future solar development within the Coastal Zone, Tier 1 and 2 solar energy systems would require a CDP while Tier 3 and 4 systems would require a minor or major CUP and may include site-specific standards relating to applicable plans for development. CDP standards would ensure that new development regardless of size would be required to set back from the bluff edge consistent with this policy. CUP standards would require a more rigorous level of County permit review that would aid in consistency with Coastal Zone goals. In addition, proposed Development Standards as defined in the CZO amendments would require the development of Tier 3 and Tier 4 facilities to abide by the setback standards of the applicable zone district. The development

TABLE 3.9-4
COUNTY LAND USE PLANS AND POLICIES CONSISTENCY SUMMARY

Element/Plan	Policy Name/ Number	Policy	Consistency Analysis
			standards would require the applicant to provide documentation that the facilities would follow the setback standards of the applicable zone. The development standards would require Tier 3 and Tier 4 facilities to be designed and located in a manner to minimize adverse geologic impacts to avoid hazards including erosion. Such standards would ensure that any of the solar energy system and facility developments would be safe from the threat of bluff erosion.
Hazards/Hazardous Materials			
Coastal Land Use Plan (CLUP)	Coastal Act Policy 30253	30253. New development shall: (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard. (2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.	**Consistent**. Permit review would include review for compliance with relevant policies from the Seismic Safety and Safety Element, the California Fire Code, as well as Santa Barabara County Fire Department development standards to ensure that new development minimizes risks to life and property in areas of high hazard risk and that stability and structural integrity are sufficient to avoid contributions to erosion or alterations to natural landforms. In addition, the Development Standards would require Tier 3 and Tier 4 facilities to be designed and located in a manner to minimize adverse geologic impacts to avoid hazards including erosion control and minimizing flooding. The development standards would require Tier 3 and Tier 4 facilities to include a fire prevention plan to mitigate fire hazards through construction and operation of the development. Such standards would ensure that any of the solar energy system and facilities minimize geologic and fire hazards.
Coastal Land Use Plan (CLUP)	Policy 3-8	Applications for grading and building permits, and applications for subdivision shall be reviewed for adjacency to, threats from, and impacts on geologic hazards arising from seismic events, tsunami runup, landslides, beach erosion, or other geologic hazards such as expansive soils and subsidence areas. In areas of known geologic hazards, a geologic report shall be required. Mitigation measures shall be required where necessary.	**Consistent**. Some Tier 1 and 2 structures and all Tier 3 and 4 developments would undergo County permit review to determine compliance with relevant plans and practice. Policies and design/development standards from plans such as the County's Seismic Safety and Safety Element would also be implemented to ensure that hazard risks are minimized for new development. This could include geologic studies and various mitigation measures relating to seismic events, tsunami runup, landslides, erosion, and other geologic hazards. In addition, the development standards would require Tier 3 and Tier 4 facilities to be designed and located in a manner to minimize adverse geologic impacts. Such standards would ensure that any of the solar energy system and facilities minimize geologic and soil hazards.

TABLE 3.9-4
COUNTY LAND USE PLANS AND POLICIES CONSISTENCY SUMMARY

Element/Plan	Policy Name/ Number	Policy	Consistency Analysis
Seismic Safety and Safety Element	Flood Policy 2	The County shall evaluate whether development should be located in flood hazard zones, and identify construction methods or other methods to minimize damage if development is located in flood hazard zones pursuant to Government Code §65302(3)(g)(2)(ii).	**Consistent**. Some Tier 1 and 2 structures and all Tier 3 and 4 developments would undergo County permit review to determine compliance with relevant plans and policies, depending on the location of the development, as well as other associated permit conditions. This review would ensure that future facilities within or near a flood hazard zone contain the required setbacks, building materials, construction methods, and utilities. In addition, the development standards would require Tier 3 and Tier 4 facilities to be designed and located in a manner to minimize adverse geologic impacts to avoid hazards including minimizing flooding. Such standards would ensure that any of the solar energy system and facilities minimize geologic and flood hazards.
Seismic Safety and Safety Element	Fire Protection and Prevention Goal 1	Continue to pursue and promote County fire prevention programs and control measures.	**Consistent**. Some Tier 1 and 2 structures and all Tier 3 and 4 developments would undergo County permit review to determine compliance with relevant plans and practices. This would include compliance with relevant policies from the California Fire Code and the Santa Barbara County Fire Department development standards to ensure that new development minimizes risks to life and property in areas of high fire hazard risk. In addition, the development standards would require Tier 3 and Tier 4 facilities to include a fire prevention plan to mitigate fire hazards through construction and operation of the development. Such standards would ensure that any of the solar energy system and facilities minimize fire hazards.
Seismic Safety and Safety Element	Geologic and Seismic Protection Policy 1	The County shall minimize the potential effects of geologic, soil, and seismic hazards through the development review process. Implement implementation measures.	**Consistent**. Some Tier 1 and 2 structures and all Tier 3 and 4 developments would undergo County permit review and be subject to existing County regulations regarding geologic hazards. This would include compliance with relevant policies and design/ development standards from plans such as the Seismic Safety and Safety Element. This could include geologic studies and various mitigation measures relating to seismic events, landslides, erosion, and other geologic hazards such as expansion of soils and subsidence areas. In addition, the development standards would require Tier 3 and Tier 4 facilities to be designed and located in a manner to minimize adverse geologic impacts. Tier 3 and Tier 4 facilities would be sited and designed to avoid significant geologic impacts considering soil types and geologic and seismic hazards. Such standards would ensure that any of the solar energy system and facilities minimize geologic, soil, and seismic hazards.

TABLE 3.9-4
COUNTY LAND USE PLANS AND POLICIES CONSISTENCY SUMMARY

Element/Plan	Policy Name/ Number	Policy	Consistency Analysis
Hydrology and Water Quality			
Land Use Element	Hillside and Watershed Protection Policy 7	7. Degradation of the water quality of groundwater basins, nearby streams, or wetlands shall not result from development of the site. Pollutants, such as chemicals, fuels, lubricants, raw sewage, and other harmful waste, shall not be discharged into or alongside coastal streams or wetlands either during or after construction.	**Consistent**. Some Tier 1 and 2 structures and all Tier 3 and 4 developments would undergo County permit review to determine compliance with relevant plans and practices, depending on the location of development, as well as other associated permit conditions. This review would ensure that appropriate erosion and sediment control measures are implemented in accordance with Grading Ordinance regulations (Chapter 14 of the County Code). This review would also ensure that development sited within or near a flood hazard zone contains the required setbacks, building materials, construction methods, and utilities. Adherence to Santa Barbara County Code Chapter 15A, *Floodplain Management*, and Section 15A-16, *Standards of Construction*, would minimize or avoid flood hazards. In addition, the development standards as defined in the LUDC amendments would require Tier 3 and Tier 4 facilities to be designed and located in a manner to minimize adverse geologic impacts to avoid hazards through adequate erosion and sediment controls. Such standards would ensure that any of the solar energy system and facilities minimize geologic and sedimentation hazards.
	Flood Hazard Area Policies	3. All development shall be reviewed in accordance with the requirements of County Code Chapter 15A-Floodplain Management and 15B-Development Along Watercourses.	
Coastal Land Use Plan	Coastal Act Policy 30231	The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging wastewater reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.	**Consistent**. In the Coastal Zone, development would require review as part of the CDP or a minor or major CUP. During this review, the County would ensure that the project meets the standards set forth in all applicable land use policies. The implementation of conditions imposed as a part of that review would ensure that the proposed uses and related development would not adversely affect biological productivity and water quality. In addition, the development standards would require Tier 3 and Tier 4 facilities to be designed and located in a manner to minimize adverse geologic impacts. Tier 3 and Tier 4 facilities would be required to minimize degradation of water quality during facility construction and operation. The development would be sited and designed to avoid significant geologic impacts considering groundwater conditions. Impacts to surface water due to sedimentation of streams shall be mitigated to the maximum extent feasible through adequate erosion and sediment controls during and after construction. Such standards would ensure that any of the solar energy system and facilities minimize geologic hazards and degradation of hydrological resources.

TABLE 3.9-4
COUNTY LAND USE PLANS AND POLICIES CONSISTENCY SUMMARY

Element/Plan	Policy Name/ Number	Policy	Consistency Analysis
Coastal Land Use Plan / Land Use Element	Policy 3-11 / Flood Hazard Area Policy 1	All development, including construction, excavation, and grading, except for flood control projects and non-structural agricultural uses, shall be prohibited in the floodway unless off-setting improvements in accordance with HUD regulations are provided. If the proposed development falls within the floodway fringe, development may be permitted, provided creek setback requirements are met and finish floor elevations are above the projected 100-year flood elevation, as specified in the Flood Plain Management Ordinance.	**Consistent**. Some Tier 1 and 2 structures and all Tier 3 and 4 developments would undergo County permit review. This review would ensure that development sited within or near a flood hazard zone contains the required setbacks, building materials, construction methods, and utilities. Adherence to Santa Barbara County Code Chapter 15A, *Floodplain Management*, and Section 15A-16, *Standards of Construction*, would minimize or avoid flood hazards. In addition, the development standards would require Tier 3 and Tier 4 facilities to be designed and located in a manner to minimize adverse geologic impacts to avoid hazards including minimizing flooding. Such standards would ensure that any of the solar energy system and facilities minimize geologic and flood hazards.
Coastal Land Use Plan / Land Use Element	Policy 3-16 / Hillside and Watershed Protection Policy 4	Sediment basins (including debris basins, desilting basins, or silt traps) shall be installed on the project site in conjunction with the initial grading operations and maintained throughout the development process to remove sediment from runoff waters. All sediment shall be retained on site unless removed to an appropriate dumping location.	**Consistent**. Some Tier 1 and 2 structures and all Tier 3 and 4 developments would undergo County permit review to determine compliance with relevant plans and practices, depending on the location of development, as well as other associated permit conditions. This review would ensure that appropriate erosion and sediment control measures are implemented in accordance with Grading Ordinance regulations (Chapter 14 of the County Code). In addition, the development standards as defined in the LUDC amendments would require Tier 3 and Tier 4 facilities to be designed and located in a manner to minimize adverse geologic impacts to avoid hazards through adequate erosion and sediment controls. Such standards would ensure that any of the solar energy system and facilities minimize geologic and sedimentation hazards.
Coastal Land Use Plan (CLUP)	Environmentally Sensitive Habitat Area Policy 9-37	The minimum buffer strip for major streams in rural areas, as defined by the land use plan, shall be presumptively 100 feet, and for streams in urban areas, 50 feet. These minimum buffers may be adjusted upward or downward on a case-by-case basis. The buffer shall be established based on an investigation of factors including soil type and stability of stream corridors; how surface water filters into the ground; slope of the land on either side of the stream; and location of the 100-year flood plain boundary, and after consultation with the Department of Fish and Game and Regional Water Quality Control Board in order to protect the biological productivity and water quality of streams.	**Consistent**. All new freestanding systems would need to comply with this policy. Some Tier 1 and 2 structures and all Tier 3 and 4 developments would undergo County permit review to determine compliance. The permit review would ensure development adjacent to streams would follow rules relating to buffer strips and setbacks, including criteria affecting establishment of buffers.

TABLE 3.9-4
COUNTY LAND USE PLANS AND POLICIES CONSISTENCY SUMMARY

Element/Plan	Policy Name/ Number	Policy	Consistency Analysis
Land Use			
Land Use Element	Land Use Development Policy 4	Prior to issuance of a development permit, the County shall make the finding, based on information provided by environmental documents, staff analysis, and the applicant, that adequate public or private services and resources (i.e., water, sewer, roads, etc.) are available to serve the proposed development. The applicant shall assume full responsibility for costs incurred in service extensions or improvements that are required as a result of the proposed project. Lack of available public or private services or resources shall be grounds for denial of the project or reduction in the density otherwise indicated in the land use plan. Affordable housing projects proposed pursuant to the Affordable Housing Overlay regulations, special needs housing projects or other affordable housing projects which include at least 50% of the total number of units for affordable housing or 30% of the total number of units affordable at the very low income level shall be presumed to be consistent with this policy if the project has, or is conditioned to obtain all necessary can and will serve letters at the time of final map recordation, or if no map, prior to issuance of land use permits.	**Consistent**. Some Tier 1 and 2 structures and all Tier 3 and 4 developments would undergo County permit review to determine compliance with this policy. The permit review would ensure that adequate public or private services and resources are available to serve the proposed development.
Public Services, Utilities, Energy, and Recreation			
Coastal Land Use Plan (CLUP)	Coastal Act Policy 30211	Development shall not interfere with the public's right of access to the sea where acquired through use, custom, or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.	**Consistent**. Some Tier 1 and 2 structures and all Tier 3 and 4 developments would undergo County permit review to determine compliance with relevant plans and practices. In the Coastal Zone, development would require review as part of the CDP or a minor or major CUP. This review would ensure compliance with relevant plans, policies, and conditions of approval relating to the public's right of access. Permits may include site specific standards relating to applicable project plans. County review would ensure that future solar facilities would not interfere with public access to the sea. In addition, the development standards would require Tier 3 and Tier 4 facilities to be screened to the maximum extent feasible to avoid being visible from public roads, trails, and right-of-way. Such standards would ensure that future solar energy systems and facilities do not interfere with the public's right of access to the sea and shoreline.
	Policy 7-3	For all new development between the first public road and the ocean, granting of lateral easements to allow for public access along the shoreline shall be mandatory. In coastal areas, where the bluffs exceed five feet in height, all beach seaward of the base of the bluff shall be dedicated. In coastal areas where the bluffs are less than five feet, the area to be dedicated shall be determined by the County, based on findings reflecting historic use, existing and future public recreational needs, and coastal	

TABLE 3.9-4
COUNTY LAND USE PLANS AND POLICIES CONSISTENCY SUMMARY

Element/Plan	Policy Name/ Number	Policy	Consistency Analysis
		resource protection. At a minimum, the dedicated easement shall be adequate to allow for lateral access during periods of high tide. In no case shall the dedicated easement be required to be closer than 10 feet to a residential structure. In addition, all fences, no trespassing signs, and other obstructions that may limit public lateral access shall be removed as a condition of development approval.	
Noise			
Noise Element	Policy 1	In the planning of land use, 65 dB Day-Night Average Sound Level should be regarded as the maximum exterior noise exposure compatible with noise-sensitive uses unless noise mitigation features are included in project designs.	**Consistent.** All non-exempt projects i would be required to observe the County's requirements regarding construction hours. Construction and maintenance activities are temporary, and the future solar energy facilities would not produce much noise during operation. In addition, the development standards would require Tier 3 and Tier 4 facilities to be designed and located in a manner to avoid any significant adverse construction and operational noise impacts to noise sensitive uses as determined by the Noise Element. Such standards would ensure that any of the solar energy system and facilities minimize noise impacts.

SOURCE: County of Santa Barbara 2009b; County of Santa Barbara 2019; County of Santa Barbara 2023; County of Santa Barbara 2024b.

As shown in Table 3.9-4, the Project would not conflict with plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. In addition, the development of utility-scale solar facilities within the region would help Santa Barbara County reduce greenhouse gas emissions, enhance energy reliability, expand renewable energy capacity, and promote sustainable land-use practices. This would allow the County to achieve the goals established in the County's CAP and EAP (see section 3.96.3, *Regulatory Framework,* for further details on the CAP and EAP). Achieving the goals set in the County's local climate and renewable energy plans would also contribute to California's broader climate goals, including EO B-55-18. Utility-scale solar projects would be added to the electrical grid and benefit the region, this would enhance the quality-of-life effects on existing communities.

Mitigation Measures

The Project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, impacts would be insignificant and no mitigation measures are necessary.

Residual Impacts

The Project would not conflict with any land use plan, policy, or regulation and residual impacts would be insignificant.

Threshold c) The Project would result in a significant impact if the Project would cause adverse quality-of-life effects on existing communities due to loss of privacy, neighborhood incompatibility, traffic, noise, or loss of sunlight/solar access.

Impact LU-3: The Project would not cause adverse quality-of-life effects on existing communities due to loss of privacy, neighborhood incompatibility, traffic, noise, or loss of sunlight/solar access.

The County's Environmental Thresholds and Guidelines Manual states that although changes to quality of life resulting from a project are not treated as significant effects on the environment pursuant to CEQA, many quality-of-life considerations are addressed in Comprehensive Plan policies, which are the subject of this section of the PEIR. As such, quality of life issues related to loss of privacy, neighborhood incompatibility, traffic, noise, and loss of sunlight/solar access are discussed below to inform the environmental review and decision-making process for the proposed Project.

Privacy

As described above under Impact LU-1, Tier 1 systems would consist of building-integrated or roof-mounted solar energy systems and small ground-mounted solar energy systems, which are up to 0.5 acres, and the Tier 2 systems would consist of large ground-mounted solar energy systems between 0.5 and up to 5.0 acres on previously developed sites. Tier 1 and Tier 2 systems would typically be integrated with the infrastructure already built on the site and would therefore not impact the privacy of neighboring properties. Tier 3 (community-scale solar energy facilities) systems would be between 0.5 and up to 30 acres, while Tier 4 (utility-scale solar energy facilities) systems would be greater than 30 acres. The Project could allow for solar development among areas of public activity and within existing neighborhoods, primarily through the location of Tier 1, 2, or 3 facilities. Tier 4 solar energy system facilities must be a minimum of 30 acres in size. Larger Tier 3 and all Tier 4 systems would not be accommodated on smaller lots, as are typical in urban or semi-rural communities or within EDRNs. Tier 3 systems allowed within urban or semi-rural communities or within EDRNs would have to abide by development standards that require setbacks of 45-80 feet from the road centerline for the front of the development and 10-20 feet for the side and rear of the development. The construction of Tier 3 and Tier 4 systems may include the installation and presence of perimeter fencing surrounding the Project site. Additionally, the proposed development standards would require a Landscape and Screening Plan, to be developed in accordance with landscape plan requirements contained within the applicable zoning ordinance, to ensure that the solar energy facility is screened to the maximum extent feasible from view along public roads, trails, and rights-of-way. Such features would mitigate privacy concerns and therefore, future solar energy facilities would not impact the privacy of surrounding properties.

Neighborhood Compatibility

Tier 1 systems are allowed in all zones and would only require a CDP in Coastal Zones. CDP standards would ensure that development is compatible with surrounding areas. Like Tier 1 systems, Tier 2 systems are allowed in all zones. Tier 2 systems would require a CDP in Coastal Zones and a Zoning Clearance in Inland Area zones. A Zoning Clearance would ensure that future solar energy systems adhere to zoning regulations, thereby maintaining compatibility with the underlying land use. Additionally, as mentioned in Table 3.9-4, compliance with visual resource policies would ensure that the development is compatible with surrounding areas.

Tier 3 and 4 systems would not be allowed within residentially zoned lands. However, the amendments could allow for solar energy facilities within agriculturally-zoned EDRNs. Tier 4 solar energy system facilities would be a minimum of 30 acres in size, so would not be accommodated on smaller lots, as are typical in urban or semi-rural communities or within EDRNs. However, if a Tier 3 or 4 solar energy facility was permitted on AG-I land within an EDRN on a large lot, the use could be incompatible. Tier 3 systems would require an MCUP or a Development Plan depending on the zone of the project site. The MCUP process would require the County to evaluate proposed projects to ensure they are compatible with existing land uses and comply with applicable policies and regulations. A Development Plan would ensure that the project would align with the Development Code and Comprehensive Plan. A key component of a Development Plan is community compatibility which would require the assessment of whether the proposed project is adequate in terms of location and physical characteristics among other requirements (County of Santa Barbara 2024a). Tier 4 systems would require a CUP or would also require a Development Plan depending on the zone of the project site. The CUP process would require the County to assess and regulate the future solar energy facilities to ensure consistency with community standards and that the facilities would not negatively impact surrounding areas. As previously mentioned, a Development Plan would require community compatibility for new developments. All future solar energy facilities would require planning permits that would ensure that developments would align with local land uses and would be compatible with the surrounding community. (See also Section 3.1, *Aesthetics*, for a discussion regarding potential visual impacts.) Therefore, the Project would not impact neighborhood compatibility.

Traffic

For Tier 1-2 projects and smaller Tier 3 projects, construction activities may not increase traffic as the solar energy components would be smaller in size and anticipate a short construction period. Heavy equipment and material transport would be minimal and would not affect traffic in the project area. Larger Tier 3 projects and all Tier 4 projects are generally large in scale, and construction activities would require multiple trips, including heavy equipment and material transport traffic. Such changes in vehicle trips and congestion may impact local traffic and circulation patterns. However, construction activities would be temporary. Once fully constructed, maintenance activities would require limited vehicle trips and would not typically require the transport of heavy equipment and materials. This would cause insignificant traffic impacts on neighboring communities. See Section 3.11, *Transportation*, for further discussion regarding traffic impacts.

Noise

As mentioned previously, Tier 1-2 and smaller Tier 3 projects would require the construction of smaller structures which would require minimal equipment and materials and would imply a short construction period. Project-related noise would be minimal and temporary. Tier 3 and Tier 4 projects are generally larger and would require a substantial amount of equipment and materials as well as a longer construction period. An increase in vehicle trips and workforce, as well as construction activities, may result in temporary noise impacts in the vicinity of the development. County requirements for all zones include setbacks, as described in further detail above, that provide a buffer. The setback requirements for Tier 3 and 4 developments would serve to minimize or reduce noise impacts from construction. In addition, County standard conditions of approval limit construction activities at certain hours to minimize noise disturbances, especially in residential areas. As such, the Project would not cause significant impacts to

noise on surrounding properties. See Section 3.10, *Noise*, for further discussion and analysis on noise impacts.

Loss of Sunlight/Solar Access

As mentioned earlier, Tier 1 systems would consist of building-integrated or roof-mounted solar energy systems and small ground-mounted solar energy systems and Tier 2 systems would consist of ground-mounted or freestanding solar energy systems on developed sites. Tier 1 and Tier 2 systems would be integrated with the infrastructure already built on the site. Tier 1 and 2 systems would, therefore, not cause a loss in sunlight or impact solar access. Tier 3 and Tier 4 systems would consist of large structures such as solar photovoltaic (PV) modules and arrays, inverters, and battery storage units that could cast large shadows. However, such structures are typically low-profile, so the shadows cast by the structures would most likely fall within the project site. Additionally, PV modules and solar arrays are typically designed to maximize solar exposure rather than obstruct solar access to absorb as much sunlight as possible. Tier 3 and Tier 4 systems would not cause significant loss of sunlight or obstruct solar access.

Overall, for the reasons stated above, the Project would not affect the quality of life of existing communities due to a loss of privacy, neighborhood incompatibility, traffic, noise, or loss of sunlight/solar access.

Mitigation Measures

No mitigation measures are proposed.

Residual Impacts

The residual impact would be insignificant.

3.9.5 Cumulative Impacts Analysis

As described in Chapter 3.0, *Environmental Impact Analysis*, the cumulative setting for the proposed Project involves a variety of policies and initiatives in the county, as well as solar and energy storage projects. Project impacts, along with potential impacts from pending and current programmatic or development projects, inform the cumulative impacts analysis.

As previously stated, the Project would not result in the division of an established community. The Project does not involve infrastructure or land use changes that would divide existing neighborhoods or communities. Similarly, comprehensive planning projects and energy projects within Santa Barbara County would not involve development or policy changes that would divide existing neighborhoods or communities.

The Project would amend several land use plans and regulations to allow the development of community-scale and utility-scale solar systems and facilities on land in unincorporated Santa Barbara County. As indicated above, the Project is consistent with the County's Comprehensive Plan goals related to renewable energy development and land use compatibility. Future solar projects would be required to comply with applicable zoning and land use policies, which would include policies designed to minimize land use conflicts. The County is concurrently implementing the 2030 Climate Action Plan (CAP), which established GHG emissions targets and provides measures to establish trajectory towards achieving those

targets. GHG reduction measures include increasing energy resilience, which may result in further solar development. While the Project and the 2030 CAP both support renewable energy development, such projects would be required to be consistent with the Comprehensive Plan. Therefore, the Project in combination with other projects within Santa Barbara County would be consistent with land use plans, policies, or regulations.

The Project would not directly or cumulatively result in loss of privacy and loss of sunlight/solar access. Future solar projects allowed under the Project, as well as related projects, may involve construction near sensitive receptors, which could contribute to cumulative neighborhood incompatibility resulting from noise and transportation impacts. The Project could generate a temporary increase in noise levels from on-site construction. However, the Project would implement mitigation measures (MM NOI-1 and MM-NOI-2) to reduce noise to insignificant levels. Related projects must also follow County noise rules, limiting construction hours and noise levels, with additional noise controls if needed. Construction activities could also cause temporary vibration impacts if they are near sensitive receptors. Mitigation (MM NOI-2 and MM NOI-3) would require that construction activities are located and conducted at times so as to reduce impacts to insignificant levels. During construction of future solar energy facilities enabled by the Project mobile source noise could exceed thresholds in rural areas due to higher vehicle and truck traffic volumes. However, such impacts would be short-term and therefore, would not impact neighborhood compatibility. Additionally, Mitigation Measure T-1 would be implemented to address cumulative transportation impacts related to emergency access. (Refer to Section 3.10, *Noise*, and 3.11, *Transportation*, for further details on noise and transportation-related impacts.) Therefore, the Project would not result in cumulative impacts.

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3.10 Noise

3.10.1 Introduction

This section analyzes noise and vibration impacts related to future development of solar energy facilities enabled under the Project. Noise impacts are addressed for construction, operation, and decommissioning activities. This section describes the physical environmental and regulatory setting, the criteria and thresholds used to evaluate the significance of impacts, the methods used in evaluating these impacts, and the results of the impact assessment.

3.10.2 Environmental Setting

Overview of Noise and Vibration

The following discussion describes the characteristics of noise and vibration. These characteristics are used to assess potential impacts on sensitive land uses. Noise- and vibration-sensitive land uses include locations where people reside or where the presence of unwanted sound and vibration could adversely affect the use of the land. Residences, senior facilities, schools, hospitals, guest lodging, libraries and some passive recreation areas are examples of typical noise- and vibration-sensitive land uses.

Noise

Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz). In addition to the actual instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise level (Leq). The Leq is defined as the single steady A-weighted level that is equivalent to the same amount of energy as contained in fluctuating levels of sound over a period of time. Typically, Leq is summed over a one-hour period.

Sound pressure is measured on a logarithmic scale with the 0 dB level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dB and a sound that is 10 dB less than the ambient sound level has no effect on ambient noise. Because of the nature of the human ear, a sound must be about 10 dB greater than the reference sound to be judged as twice as loud. In general, a 3-dBA change in community noise levels is noticeable, while changes of 1 to 2 dBA generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40 to 50 dBA, while noise levels along arterial streets are generally in the 50 to 60+ dBA range. Normal conversational levels are in the 60-65 dBA range and ambient noise levels greater than that can interrupt conversations.

Noise levels typically decrease as the distance to the source increases. Noise levels typically attenuate at a rate of 6 dBA per doubling of distance from point sources such as industrial machinery. Noise from roads typically attenuates at a rate of about 4.5 dBA per doubling of distance over absorptive ground surfaces

(e.g., grass). Noise from roads typically attenuates at about 3 dBA per doubling of distance over reflective ground surfaces (e.g., pavement).

The actual time period in which noise occurs is also important since noise that occurs at night tends to be more disturbing than that which occurs during the daytime. To evaluate community noise on a 24-hour basis, the day-night average sound level was developed (Ldn). Ldn is the time average of all A-weighted levels for a 24-hour period with a 10 dB upward adjustment added to those noise levels occurring between 10:00 p.m. and 7:00 a.m. to account for the general increased sensitivity of people to nighttime noise levels. The Community Noise Equivalent Level (CNEL) is identical to the Ldn with one exception. The CNEL adds 5 dB to evening noise levels (7:00 p.m. to 10:00 p.m.). Thus, both the Ldn and CNEL noise measures represent a 24-hour average of A-weighted noise levels. Ldn provides a nighttime adjustment, while CNEL provides both an evening and a nighttime adjustment. The County relies on Ldn thresholds for maintaining acceptable noise levels at noise sensitive land uses.

Vibration

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration can be a serious concern, causing buildings to shake and rumbling sounds to be heard. In contrast to noise, vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads.

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings and is usually measured in inches per second. The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body. The RMS amplitude is defined as the average of the squared amplitude of the signal. Decibel notation (VdB) is commonly used to measure RMS. The decibel notation acts to compress the range of numbers required to describe vibration.

High levels of vibration may cause physical personal injury or damage to buildings. However, groundborne vibration levels rarely affect human health. Instead, most people consider groundborne vibration to be an annoyance that can affect concentration or disturb sleep. In addition, high levels of groundborne vibration can damage fragile buildings or interfere with equipment that is highly sensitive to groundborne vibration (e.g., electron microscopes).

In contrast to noise, groundborne vibration is not a phenomenon that most people experience every day. The background vibration velocity level in residential areas is usually 50 RMS or lower which is well below the threshold of perception for humans (human perception is around 65 RMS). Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people, or slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If the roadway is smooth, the vibration from traffic is rarely perceptible.

Noise and Vibration Sources

Ambient noise levels in Santa Barbara County vary widely depending upon proximity to noise generators, such as major roads, airports, and rail lines. The major noise sources in the County are described below.

Motor Vehicle Traffic

Motor vehicles, including cars/light trucks, buses, and various types of trucks, are the most substantial source of noise in most of Santa Barbara County. This can be attributed to the extensive network of major, primary, and secondary arterials located throughout the County, as well as the large number of vehicle trips that occur each day.

The primary roadway corridor noise source in the County is US 101, due to both the high traffic volumes experienced and the high speed of traffic. In 2023, daily traffic within the County at the Junction of US 101 and State Route 1 (SR 1) averaged around 22,800 vehicles per day (Caltrans 2023). According to the County's General Plan Noise Element, noise levels along the entire US 101 corridor exceed 65 dBA Ldn near the freeway. At approximately 200 feet from the freeway, Ldn drops to 60 dB(A) or less in the segment between Buellton and Los Alamos; and along the stretch of highway between Mission Street and Las Positas, Ldn is 60 dB(A) or less at approximately 800 feet (County of Santa Barbara 2009). Furthermore, noise-sensitive land uses in the vicinity of the freeway corridor therefore have the potential to be exposed to noise in excess of what the County normally considers acceptable (County of Santa Barbara 2009).

Traffic on other major transportation corridors also generates noise in excess of 65 dBA CNEL within certain distances from centerline of the freeway/roadway. According to the Santa Barbara County General Plan Noise Element major roadway noise contour maps, unincorporated areas within the Lompoc area contain noisy road corridors including SR 246 and SR 1. In the Santa Ynez Valley Area, noisy road corridors include US 101, SR 246, and SR 154. In the Carpinteria and Montecito Area, the major source of roadway noise stems from US 101. In the Santa Maria area, noisy road corridors include SR 135, SR 166, and US 101.

Aircraft Operation

Both the Santa Barbara and Santa Maria airports have commercial and general aviation activities. Because of the level of activity at these airports, noise generated at these airports is audible in the surrounding communities. Therefore, land uses in the surrounding areas have been planned to ensure that noise levels remain at acceptable levels for the various uses.

The Lompoc and Santa Ynez airports are general aviation airports, with little commercial traffic and no jet operations. While these general aviation airports do not generate as much noise as the Santa Barbara or Santa Maria airports, flight operations have also had impacts on the nearby residential areas because of their location.

In addition to the four active County airports, flight operations at Vandenberg Space Force Base, located near the City of Lompoc and in proximity to future Project areas, generate aircraft noise. While the areas in which future solar energy facilities under the Project would be developed do not include the Vandenberg Space Force Base, the 60-65 dB contour from base operations extends into a portion of the City of Lompoc

as shown in Figure 4-1 of the Vandenberg Space Force Base Land Use Compatibility Plan (SBCAG 2022). More specifically, future solar energy facilities under the Project may be developed in areas between the Vandenberg Space Force Base and the City of Lompoc, potentially in areas within the 60-65 dB contour from base operations. Although the Vandenberg Space Force Base is exempt from County and City noise controls, the Air Force has developed measures to reduce noise impacts from flight operations in the areas surrounding the base.

In addition to airplanes, helicopter flights occur throughout the County. Other flight-related activities include tourist sightseeing, fire emergency operations, Coast Guard, Santa Barbara County Sheriff's Department for search and rescue operations, and energy utility companies for power infrastructure work. These flights typically follow major and primary arterials with the exception of police patrol activities. Cottage Hospital in Santa Barbara is verified as a Level II Trauma Center and provides helicopter emergency medical services. Helicopters traveling to Cottage Hospital follow the US 101 corridor until turning inland at Junipero Street toward the hospital. Although single-event noise exposure resulting from helicopter operations may be considered a nuisance, the relatively low frequency and short duration of these operations do not significantly affect average daily noise levels anywhere in the County.

Railroad Operations

Train operations on the Southern Pacific Railroad and the Santa Maria Valley Railroad generate noise within proximity to the railroad lines. Noise is generated during rail operations by locomotives starting and stopping, trains braking, the connection and disconnection of cars, train whistles, and track noise (the trains' wheels running on the track). The Southern Pacific Railroad right-of-way traverses the County through much of its coastal and unincorporated areas, extending from south Santa Barbara County, providing two branches at Vandenberg Air Force Base and Surf which serves the City of Lompoc, and continuing northward through Guadalupe and into San Luis Obispo County. The Santa Maria Valley Railroad originates in the City of Santa Maria and travels westward through Santa Maria to connect with the Southern Pacific railroad line in Guadalupe.

Amtrak provides the only commercial intercity passenger rail transportation available in Santa Barbara County. Its trains share the Southern Pacific Railroad main line tracks. Two Amtrack trains have daily round trips that serve Santa Barbara County; the Pacific Surf liner has five daily round trips and the Coast Starlight has once a day round trips.

Noise-sensitive land uses within approximately 800 feet of the tracks could be exposed to noise levels above 65 dBA (County of Santa Barbara 2009). In the northern part of the County, much of the rail corridor is located in undeveloped areas. In the southern part of the County, train tracks are generally located much closer to residences. Portions of the rail corridor run parallel to Highway 101, which may amplify transportation-related noise in those areas.

3.10.3 Regulatory Framework

Federal

Noise Control Act of 1972

Under the authority of the Noise Control Act of 1972, the United States Environmental Protection Agency (USEPA) established noise emission criteria and testing methods published in Parts 201 through 205 of Title 40 of the Code of Federal Regulations (CFR) that apply to some transportation equipment (e.g., interstate rail carriers, medium trucks, and heavy trucks) and construction equipment. In 1974, USEPA issued guidance levels for the protection of public health and welfare in residential areas of an outdoor L_{dn} of 55 dBA and an indoor L_{dn} of 45 dBA.[1] These guidance levels are not standards or regulations and were developed without consideration of technical or economic feasibility. There are no federal noise standards that directly regulate environmental noise related to the construction or operation activities from future solar energy projects that would be enabled under the Project. As such, for purposes of determining acceptable sound levels to determine and evaluate intrusive noise sources and increases, this document utilizes local standards, discussed further below.

Federal Aviation Administration

Aircraft operated in the U.S. are subject to federal requirements regarding noise emissions levels. These requirements are set forth in Title 14 CFR, Part 36. Part 36 establishes maximum acceptable noise levels for specific aircraft types, taking into account the model year, aircraft weight, and number of engines.

Federal Transit Administration

The FTA has developed guidance to evaluate noise impacts from operation of surface transportation modes (i.e. passenger cars, trucks, buses, and rail) in the FTA Transit Noise Impact and Vibration Assessment. All mass transit projects receiving federal funding must use these guidelines to predict and assess potential noise and vibration impacts. As ambient levels increase, smaller increments of change are allowed to minimize community annoyance related to transit operations.

The criteria for environmental impact from groundborne vibration are based on the maximum levels for a single event. **Table 3.10-1**, *Construction Vibration Damage Criteria*, lists the potential vibration damage criteria associated with construction activities, as suggested in the *Transit Noise and Vibration Impact Assessment* (FTA 2018).

Federal Transit Administration (FTA) guidelines show that a vibration level of up to 102 VdB [equivalent to 0.5 inch/sec in Root Mean Square (RMS)] (FTA 2018) is considered safe for buildings consisting of reinforced concrete, steel, or timber (no plaster), and would not result in any construction vibration damage. For a non-engineered timber and masonry building, the construction vibration damage criterion is 94 VdB (0.2 inch/sec in RMS).

[1] United States Environmental Protection Agency, EPA Identifies Noise Levels Affecting Health and Welfare, 1974.

TABLE 3.10-1
CONSTRUCTION VIBRATION DAMAGE CRITERIA

Building Category	PPV (inch/sec)	Approximate L_V[a]
Reinforced-concrete, steel or timber (no plaster)	0.50	102
Engineered concrete and masonry (no plaster)	0.30	98
Non-engineered timber and masonry buildings	0.20	94
Buildings extremely susceptible to vibration damage	0.12	90

NOTES:
PPV = peak particle velocity; LV = velocity in decibels; inch/sec = inches per second
a. Root-mean-square velocity in decibels (VdB) re 1 microinch per second.
SOURCE: FTA 2018*, Table 7-5*

Based on Table 8-3 in the FTA's *Transit Noise and Vibration Impact Assessment* (FTA 2018), interpretation of vibration criteria for detailed analysis is 78 VdB for residential uses during daytime hours. During nighttime hours, the vibration criterion is 72 VdB. For office and office buildings, the FTA guidelines suggest that a vibration level of 84 VdB should be used for detailed analysis.

State

Relevant State noise regulations include those established by the California Department of Health Services and the California Department of Transportation (Caltrans), as well as standards in the California Code of Regulations. There are no adopted State policies or standards for groundborne vibration. However, Caltrans recommends that extreme care be taken when sustained pile driving occurs within 7.5 meters (25 feet) of any building, 15 to 30 meters (50 to 100 feet) of a historic building, or near a building in poor condition. The Governor's Office of Land Use and Climate Innovation (LCI) (formerly Office of Planning and Research) have also established guidelines regarding noise level and land use compatibility.

State of California General Plan Guidelines

The Governor's LCI is required to adopt and periodically revise guidelines for the preparation and content of local general plans. The 2017 General Plan Guidelines (Governor's Office of Land Use and Climate Innovation, 2017) establish land use compatibility guidelines. Where a noise level range is denoted as "normally acceptable" for the given land use, the highest noise level in that range should be considered the maximum desirable for conventional construction that does not incorporate any special acoustic treatment. The acceptability of noise environments classified as "conditionally acceptable" or "normally unacceptable" will also depend on the anticipated amount of time that will normally be spent outside the structure and the acoustic treatment to be incorporated in structural design.

With regard to noise-sensitive residential uses, the recommended exterior noise limits are 60 dBA CNEL for single-family residences and 65 dBA CNEL for multi-family residences. The recommended maximum interior noise level is 45 dBA CNEL, which could normally be achieved using standard construction techniques if exterior noise levels are within the levels described above. The State of California Land Use Compatibility Matrix is shown below in **Table 3.10-2**, *Noise and Land Use Compatibility Matrix - California*.

TABLE 3.10-2
NOISE AND LAND USE COMPATIBILITY MATRIX - CALIFORNIA

Land Use	Community Noise Exposure CNEL (dBA)			
	Normally Acceptable[a]	**Conditionally Acceptable[b]**	**Normally Unacceptable[c]**	**Clearly Unacceptable[d]**
Residential – Low density, Single-Family, Duplex, Mobile Homes	50 – 60	55 – 70	70 – 75	75 – 85
Residential – Multiple Family	50 – 65	60 – 70	70 – 75	75 – 85
Transient Lodging – Motel, Hotels	50 – 65	60 – 70	70 – 75	75 – 85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 – 70	60 – 70	70 – 80	80 – 85
Auditoriums, Concert Halls, Amphitheaters	NA	50 – 70	NA	65-85
Sports Arenas, Outdoor Spectator Sports	NA	50 – 75	NA	70-85
Playgrounds, Neighborhood Parks	50 – 70	NA	67.5 – 75	72.5 – 85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 – 75	NA	70 – 80	80 – 85
Office Buildings, Business Commercial and Professional	50 – 70	67.5 – 77.5	75 – 85	NA
Industrial, Manufacturing, Utilities, Agriculture	50 – 75	70 – 80	75 – 85	NA

NOTES:

a. **Normally Acceptable –** Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
b. **Conditionally Acceptable –** New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.
c. **Normally Unacceptable –** New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and necessary noise insulation features included in the design.
d. **Clearly Unacceptable** – New construction or development should generally not be undertaken.

NA: Not Applicable

SOURCE: Office of Land Use and Climate Innovation, State of California General Plan Guideline Appendix D, 2017

California Department of Transportation

The State of California establishes noise limits for vehicles licensed to operate on public roads. For heavy trucks, the State passby standard is consistent with the federal limit of 80 dB. The State passby standard for light trucks and passenger cars (less than 4.5 tons gross vehicle rating) is also 80 dB at 15 meters from the centerline.

California's Airport Noise Standards

The State of California has the authority to establish regulations requiring airports to address aircraft noise impacts near airports. The State of California's Airport Noise Standards, found in Title 21 of the California Code of Regulations, identify a noise exposure level of 65 dB CNEL as the noise impact boundary around airports. Within the noise impact boundary, airport proprietors are required to ensure that all land uses are compatible with the aircraft noise environment or the airport proprietor must secure a variance from Caltrans.

California Aeronautics Act

The State Aeronautics Act (Public Utilities Code, Section 21670 et seq.) requires the establishment of Airport Land Use Commissions (ALUCs), which are responsible for developing airport land use compatibility plans (ALUCPs) for noise-compatible land uses in the immediate proximity of a commercial or public airport (Section 21675). ALUCs have two major roles: preparation and adoption of airport land use compatibility plans, which address policies for both noise and safety and review of certain local government land use actions and airport plans for consistency with the land use compatibility plan.

The Aeronautics Division of the California Department of Transportation has published the *California Airport Land Use Planning Handbook* (Caltrans 2011). The purpose of the *California Airport Land Use Planning Handbook* is to provide guidance for conducting airport land use compatibility planning. This handbook includes a section related to noise and states, "The basic strategy for achieving noise compatibility in the vicinity of an airport is to prevent or limit development of land uses that are particularly sensitive to noise. Common land use strategies are ones that either involve few people (especially people engaged in noise-sensitive activities) or generate significant noise levels themselves (such as other transportation facilities or some industrial uses).".

Within the Santa Barbara County Association of Governments (SBCAG) region, SBCAG serves as the ALUC and is responsible for protecting public health, safety and welfare by ensuring that vacant lands in the vicinity of airports are planned and zoned for uses compatible with airport operations. The Santa Barbara County Airport Land Use Plan was adopted in 2023 (SBCAG 2023).

Local

Santa Barbara Airport Land Use Compatibility Plans

The Santa Barbara County Airport Land Use Compatibility Plans (ALUCP) were adopted in January 2023 by SBCAG, serving as the Airport Land Use Commission (ALUC) for the county. These plans provide updated land use compatibility policies for the county's public-use airports, including Santa Barbara Municipal (SBA), Santa Maria Public (SMX), Lompoc (LPC), and Santa Ynez (IZA) Airports. The ALUCP includes detailed noise contour maps, safety zones, and compatibility criteria to guide local agencies in planning and development decisions within designated Airport Influence Areas (AIAs). The plan replaces the previous ALUCP adopted in 1993 and aims to promote the orderly growth of airports while safeguarding the welfare of residents in surrounding communities. Most 65 dB CNEL contours are contained within airport property boundaries, indicating minimal off-site noise exposure.

County of Santa Barbara Comprehensive Plan

The County of Santa Barbara has adopted noise policies in its Comprehensive Plan Noise Element (adopted 1979, republished May 2009). The Noise Element identifies major sources of noise, estimates the extent of their impact on the County, and identifies potential methods of noise abatement. The Noise Element contains the following recommended County policies that apply to the Project:

1) In the planning of land use, 65 dB Day-Night Average Sound Level should be regarded as the maximum exterior noise exposure compatible with noise-sensitive uses unless noise mitigation features are included in project designs.
2) Noise-sensitive land uses should be considered to include:

a) Residential, including single and multifamily dwellings, mobile home parks, dormitories, and similar uses.

b) Transient lodging, including hotels, motels, and similar uses.

c) Hospitals, nursing homes, convalescent hospitals, and other facilities for long-term medical care.

d) Public or private educational facilities, libraries, churches, and places of public assembly.

9) Noise level limits, applicable to new noise sources, should be incorporated into all commercial and industrial zoning districts and into conditional use permit requirements. Presently, the M-l, M-l-A, and M-l-B district regulations include noise level limits (70 dB, 50 dB, and 50 dB, respectively). All of these, interpreted as maximum limits never to be exceeded, are unrealistically low in relation to ambient levels normally present in industrial locations.

Eastern Goleta Valley Community Plan

The Eastern Goleta Valley Community Plan was adopted in October 2015 and amended most recently in February 2025. The Community Plan addresses noise conflicts and policies in the Environmental Resources and Constraints Chapter under Hazards and Noise Conflicts section. The following recommended policies may apply to the Project:

***Policy N-EGV-1.1*:** Noise impacts to interior noise-sensitive land uses, such as residential, educational, medical, lodging, public meeting spaces, or others specified by the Noise Element of the Comprehensive Plan, shall be minimized.

***Policy N-EGV-1.2*:** Levels and duration of noise in existing residential neighborhoods shall be maintained consistent with the Noise Element.

DevStd N-EGV-1A: Development shall be designed to limit the level of exterior noise measurable within interior spaces to 45 dBA, consistent with the Noise Element, and the duration of noise to reasonable hours with special consideration of construction and special event noise sources.

DevStd N-EGV-1B: (Exterior Noise) Prior to the issuance of building permits, site-specific exterior noise analyses shall be submitted to the Planning and Development Department to determine whether the project would result in residential receptors being exposed to exterior noise levels that would exceed the County's noise standard of 65 dB(A) Ldn. An acoustical study shall be required as part of the review of future residential development proposals. Noise reduction measures, including but not limited to building noise barriers, increased building setbacks, or other relevant noise attenuation measures, may be used to achieve the noise compatibility standards. Specific noise mitigation measures and their effectiveness shall be determined by the site-specific exterior noise analyses.

DevStd N-EGV-1D: Construction activities within 1,600 feet of sensitive receptors for any project that requires a Land Use Permit, Coastal Development Permit or Zoning Clearance shall be limited to the hours between 8:00 a.m. and 5:00 p.m., Monday through Friday.

DevStd N-EGV-1E: Stationary construction equipment that could generate noise exceeding 65 dB(A) at project site boundaries shall be shielded to County Planning and Development's satisfaction and shall be located a minimum of 200 feet from sensitive receptors.

Goleta Community Plan

The Goleta Community Plan was adopted in August 1993 and amended in October 1995. The community plan has adopted noise policies to protect human health and well-being as well as sensitive biological habitats. The noise section of the Resources and Constraints Chapter contains the following recommended policies that may apply to the Project:

> ***Policy N-GV-I*:** Interior noise-sensitive uses (e.g., residential and lodging facilities, educational facilities, public meeting places and others specified in the Noise Element) shall be protected to minimize significant noise impacts.

Los Alamos Community Plan

The Los Alamos Community Plan was adopted in February 2011. The community plan addresses noise to protect sensitive receptors in the community plan area, such residences, hospitals, libraries, health care facilities, hotels, and schools like Olga Reed Elementary school. The noise section of the Resources and Constraints Chapter contains the following recommended policies that may apply to the Project:

> ***Policy N-LA-1.1*:** Noise sensitive receptors (e.g., residential, transient lodging, hospitals, educational facilities, libraries, churches, etc.) should not be exposed to exterior noise levels exceeding 65 dB (CNEL), or interior noise levels exceeding 45 dB, as indicated on the Los Alamos Community Plan Noise Element Map. Projects which are located within the 60 dB (CNEL) and 65 dB (CNEL) noise contours should be reviewed at the time of application processing to confirm that the exterior noise level is less than 65 dB (CNEL).
>
> *Dev Std N-LA-1.1.3*: Development on assessor parcels 101-260-059 and 060 shall be designed and sited in order to minimize exterior noise levels as well as visual impacts.

Montecito Community Plan

The Montecito Community Plan was adopted in September 1992 and updated in December 1995. The community plan addresses noise to address potential effects of noise including hearing loss interference with communication, interference with sleep, annoyance, and adverse effects on human wellbeing. The noise section of the Resources and Constraints Chapter contains the following recommended policies that may apply to the Project:

> ***Policy N-M-1.1*:** Noise-sensitive uses (i.e., residential and lodging facilities, educational facilities, public meeting places and others specified in the Noise Element) shall be protected from significant noise impacts.
>
> *Development Standard N-M-1.1.1*: All site preparation and associated exterior construction activities related to new residential units including remodeling, demolition, and reconstruction, shall take place between 7:00 a.m. and 4:30 p.m., weekdays only.
>
> *Development Standard N-M-1.1.2*: Significant noise impacts shall be avoided upon development of new noise sensitive land uses (as defined by the Noise Element) through the provision of sound shielding and/or adequate design which provides sufficient attenuation or through proper siting of structures to avoid areas of elevated ambient noise.

Orcutt Community Plan

The Orcutt Community Plan was adopted in July 1997 and most recently amended in May 2024. The community plan addresses existing noise and aims to protect noise sensitive land uses from excessive

noise impacts from buildout of the community. The noise section notes that several of the undeveloped parcels in community area would be exposed to significant noise sources and therefore, future development will need to be designed to minimize the potential impacts from existing and projected high noise levels. The noise section of the Resources and Constraints Chapter contains the following recommended policies that may apply to the Project:

> ***Policy NSE-O-2*:** Construction noise in Orcutt shall be minimized during non-standard work hours.
>
> *DevStd NSE-O-2.1*: Standard construction working hours (i.e., 7 a.m. to 4:00 p.m., Monday-Friday) shall be required for development activities. Flexibility to allow extended hours on weekdays and/or occasional working hours on Saturdays should be determined on a case-by-case basis.
>
> *DevStd NSE-O-2.2*: Noise attenuation barriers, muffling of grading equipment and additional mitigation where deemed appropriate should be required for development where construction equipment generates noise levels in excess of 95 dB(A).

Toro Canyon Plan

The Toro Canyon Plan was adopted in February 2002. The planning document addresses noise impacts through the Land Use General section of the Community Development chapter of the plan. The following are recommended noise policies that may apply to the Project:

> ***Policy LUG-TC-5*:** (NON-LCP) The public shall be protected from noise that could jeopardize health and welfare.
>
> *DevStd LUG-TC-5.1*: (NON-LCP) Construction activities within 1,600 feet of residential receptors shall be limited to the hours between 8:00 A.M. and 5:00 P.M., Monday through Friday. Construction equipment maintenance shall be limited to the same hours.
>
> *DevStd LUG-TC-5.2*: (NON-LCP) Stationary construction equipment that could generate noise exceeding 65 dB(A) at project site boundaries shall be shielded to County P&D's satisfaction, and shall be located a minimum of two hundred (200) feet from sensitive receptors.

Santa Barbara County Code

Chapter 40 of the County Code, Nighttime Noise Restrictions, prohibits any loud or unreasonable noise, music, or percussion, or other sound between the hours of 10:00 p.m. and 7:00 a.m. on Sunday, Monday, Tuesday, Wednesday, and Thursday, and between the hours of 12:00 a.m. and 7:00 a.m. on Fridays and Saturdays. Exemptions to these restrictions include bells, chimes, or similar devices while being used for religious purposes, as well as outdoor gatherings, public dances, shows, sporting or entertainment events, provided that the event is conducted on commercial or institutional premises and pursuant to applicable rules and regulations. Chapter 14 of the County Code, referred to as the Santa Barbara County Grading Code, regulates construction noise within the County. Chapter 14 does not establish noise level limits; however, Section 14-22 restricts grading activities to daytime hours, which is generally considered the least noise-sensitive time. Section 14-22 states:

> *No grading work (except for emergency operations), which requires a grading permit under the provisions of this chapter shall take place between the hours of 7:00 p.m. and 7:00 a.m. (or as required within the land use permit), unless the director finds that such operation is not likely to cause significant public nuisance or must, by necessity, be accomplished at other times and authorizes such night operations in writing.*

3.10.4 Project Impact Analysis

Thresholds of Significance

CEQA Appendix G Significance Thresholds

Pursuant to Appendix G of the CEQA *Guidelines*, a significant noise impact would occur if the project would result in:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

b) Generation of excessive groundborne vibration or groundborne noise levels.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

County of Santa Barbara Significance Thresholds

In addition to the *CEQA Guidelines*, the County of Santa Barbara *Environmental Thresholds and Guidelines Manual* (Manual) (2024) contains criteria for determining the significance of noise impacts. The Environmental Thresholds and Guidelines Manual identifies noise-sensitive land uses as:

- Residential, including single- and multi-family dwellings, mobile home parks, dormitories, and similar uses.
- Transient lodging, including hotels, motels, and similar uses.
- Hospitals, nursing homes, convalescent hospitals, and other facilities for long-term medical care.
- Public or primary educational facilities, libraries, churches, and places of public assembly.

As per the Manual, the noise level standard for outdoor living areas of noise-sensitive land uses is 65 dBA CNEL. Outdoor living areas generally include backyards of single-family residences and individual patios or common outdoor activity areas of multi-family developments. The maximum noise exposure for indoor living areas in noise-sensitive land uses is 45 dBA CNEL. To reduce construction impacts, the Manual indicates that construction within 1,600 feet of sensitive receivers shall be limited to weekdays between the hours of 8:00 a.m. and 5:00 p.m., which is more restrictive than Section 14-22 of the County Code. The following threshold criteria apply to the Project:

- If existing exterior noise levels, including at outdoor living areas, experienced by sensitive receptors is below 65 dBA CNEL, and if the proposed project will generate noise that will cause the existing noise levels experienced by the sensitive receptors to exceed 65 dBA CNEL – either individually or cumulatively when combined with other noise-generating sources – then the proposed project is presumed to have a significant impact.
- If existing exterior noise levels, including at outdoor living areas, experienced by sensitive receptors exceeds 65 dBA CNEL, and if the proposed project will generate noise that will cause the existing noise levels experienced by the sensitive receptors to increase by 3 dBA CNEL – either individually or cumulatively when combined with other noise-generating sources – then the proposed project is presumed to have a significant impact.

- If existing noise levels experienced by sensitive receptors in interior livings areas is below 45 dBA CNEL, and if the proposed project will generate noise that will cause the existing noise levels experienced by the sensitive receptors in interior living areas to exceed 45 dBA CNEL – either individually or cumulatively when combined with other noise-generating sources – then the proposed project is presumed to have a significant impact.
- If existing noise levels experienced by sensitive receptors in interior livings areas exceeds 45 dBA CNEL, and if the proposed project will generate noise that will cause the existing noise levels experienced by the sensitive receptors in interior living areas to increase by 3 dBA CNEL – either individually or cumulatively when combined with other noise-generating sources – then the proposed project is presumed to have a significant impact.
- Noise from grading and construction activity proposed occur within 1,600 feet of sensitive receivers, including schools, residential development, commercial lodging facilities, hospitals, or care facilities. This is based upon an assumed average construction noise level of 95 dBA at a distance of 50 feet from the source, which would result in a noise level of approximately 65 dBA at a distance of 1,600 feet. To mitigate this impact, construction within 1,600 feet of sensitive receptors shall be limited to weekdays between the hours of 8:00 a.m. to 5:00 p.m. only. Noise attenuation barriers and muffling of grading equipment may also be required. Construction equipment generating noise levels above 95 dBA may require additional mitigation.

The operational and construction noise limits used in this analysis are set at reasonable levels at which a substantial noise level increase as compared to ambient noise levels would occur. Because these noise limits are tailored to specific uses (e.g., exterior and interior areas), they account for typical ambient noise levels associated with each use such that an increase in ambient noise levels that exceeds these limits would be considered a substantial increase above ambient noise levels.

Methodology

For the purposes of this Program EIR and to provide for a conservative and environmentally protective analysis, the future solar energy projects that would be enabled under the Project are modeled based on the category of tiers of solar energy system and facilities as described in Table 2-2, *Proposed Solar Energy System and Facility Tiers* of the Project Description. Four tiers, ranging from small roof or free-standing systems to utility-scale solar energy facilities would be allowed. Specific projects are not proposed in this Program-level EIR. Thus, for the purposes of this program-level assessment, solar energy facilities were grouped into two categories for modeling purposes, consisting of Tier 1 and Tier 2 projects (individual and small-scale solar energy projects) and Tier 3 and Tier 4 projects (community- and utility-scale solar energy projects). While no project-level information is available at the time of this program-level assessment, the nature and intensity of future installation projects could be represented by the two modeling scenarios analyzed. As such, for the purposes of analysis, construction activities and methods employed for the modeled projects have been quantitatively analyzed and are estimated to be reasonably comparable to those activities that would occur for future solar energy facilities in the County.

Construction equipment associated with future solar energy systems and facilities was based on review of solar projects in the County and elsewhere in California. The number of construction workers, haul trucks and vendor trucks that would be required would vary based on the phase of construction and activity taking place. This analysis takes into consideration the equipment and processes employed during construction of a future solar energy system or facility to quantitatively determine whether noise impacts could potentially exceed the County's applicable thresholds.

As described in Chapter 2, *Project Description*, Tier 1 projects are those up to and including 0.5 acres in size and Tier 2 projects are those greater than 0.5 acres and up to and including 5.0 acres. For the purposes of providing a conservative modeling assessment, Tier 1 and Tier 2 projects are modeled as a 5-acre project size with the following general assumptions (also see Appendix G). Projects smaller than 5.0 acres in size would typically result in less impacts than those disclosed herein for a 5-acre project. Construction phases would typically include site preparation, grading, and solar energy facility installation. Tier 1 and Tier 2 projects are assumed to have a daily maximum of up to 60 worker trips, 12 vendor truck trips, and 20 haul truck trips during grading activities. During the solar energy system installation phase, the daily maximum number of trips is anticipated to include 60 worker trips and 50 vendor one-way trips. It is assumed on-site construction equipment would be required throughout the construction duration, and may include and but not be limited to the use of graders, forklifts, backhoes, and cranes. While project-level information is not known at this time, including the size and precise location of potential future projects, construction activities for Tier 1 and Tier 2 projects could occur on all unincorporated County lands regardless of the zoning designation. The distance of noise sensitive receptor, such as residential uses, cannot be determined. However, for the purposes of this program-level assessment, it is conceivable that noise sensitive receptors could be located as close as 25 feet away from a future project's construction area.

As described in Chapter 2, *Project Description*, Tier 3 projects would be greater than 0.5 acres and up to and including 30.0 acres and Tier 4 projects would be greater than 30.0 acres. For the purposes of providing a conservative modeling assessment for larger solar energy system and facility projects, a project size of up to 600 acres is modeled with the following general assumptions (also see Appendix G). Projects less than 600 acres in size would typically result in less impacts than those disclosed herein for a 600-acre project. All Tier 3 projects would be less than 600-acres. Tier 4 projects do not have an upper bound size limit; however, 600 acres was selected for modeling purposes as it coincides with the current 600-acre Utility-Scale Solar Photovoltaic Overlay on lands zoned AG II. Construction phases would typically include site preparation, grading, and solar facility installation and construction. Tier 3 and Tier 4 projects are assumed to have a daily maximum of up to 120 worker trips, 100 vendor truck trips, and 50 haul truck trips during the grading phase. During the solar energy facility installation phase, the daily maximum number of trips is anticipated to include 120 worker trips and 100 vendor one-way trips. It is assumed on-site construction equipment would be required throughout the construction duration, and may include but not be not limited to graders, forklifts, backhoes, and cranes. While project-level information is not known at this time, including the size and precise location of potential future projects, construction activities for Tier 3 or 4 projects could occur on unincorporated County lands zoned for agriculture, public utilities, light or general industry, and professional or institutional uses. The County Code includes general regulations for setbacks and agriculture buffers, which may limit the distance of development to noise sensitive receptor locations, dependent on location and zoning. Therefore, noise impacts for the Tier 3 and Tier 4 projects were assessed with the assumption that sensitive noise receptors could be located as close as 100 feet away from a future project's construction area.

Once constructed, the Project's solar components would generally operate passively, with minimal employee trips, occasional maintenance, and periodic solar panel washing. Operational activities for any given solar generation site and associated facilities would not involve substantial noise sources. Thus, operational noise is analyzed qualitatively.

Project Impacts

This section identifies and discusses potential noise and vibration impacts associated with the Project. **Table 3.10-3**, *Summary of Noise Impacts*, provides a summary of the Project's potentially significant noise impacts. A detailed discussion of each impact follows.

TABLE 3.10-3
SUMMARY OF NOISE IMPACTS

Noise Impacts	Impact Classification	Mitigation Measures	Residual Impact
Impact NOI 1: Future solar energy facilities enabled by the Project could generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	Potentially Significant	MM NOI-1: Pile Driving Noise MM NOI-2: Construction Hours MM T-1: Construction Traffic Control Plan	Insignificant with Mitigation
Impact NOI 2: Future solar energy facilities enabled under the Project could result in a potentially significant impact regarding groundborne vibration damage to structures and human annoyance from construction and operation.	Potentially Significant	MM NOI-2: Construction Hours MM NOI-3: Pile Driving Vibration	Insignificant with Mitigation
Impact NOI 3: Future solar energy facilities enabled under the Project would not result in workers being exposed to excessive noise levels from a private airstrip or airport.	Insignificant	No mitigation required	Insignificant
Cumulative Impacts	Potentially Significant	MM NOI-1, MM NOI-2, MM NOI-3, MM T-1	Insignificant with Mitigation

Threshold a) The Project would result in a significant impact if the Project would generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Impact NOI 1: Future solar energy facilities enabled by the Project could generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Construction and Decommissioning

Noise impacts from construction activities are generally a function of the noise generated by construction equipment, equipment locations, the sensitivity of nearby land uses, and the timing and duration of the noise-generating activities. While the specific size and location of potential future solar energy projects are unknown, it is assumed that the nature and intensity of such future projects would be similar in scope and scale to those identified for the two categories of projects analyzed. As such, for the purposes of analysis in this CEQA document, construction activities and methods employed for the two categories of

solar projects have been quantitatively analyzed and would be comparable to those necessary for the installation of future solar energy projects.

On-Site Construction Noise

Construction of future solar energy facilities would require the use of mobile heavy-duty equipment with the potential to have high noise-level characteristics. Individual pieces of construction equipment expected to be used during construction of future solar energy facilities could produce maximum noise levels of approximately 80 dBA to 90 dBA Lmax and 76 dBA to 83 dBA Leq at a reference distance of 50 feet from the noise source, as shown in **Table 3.10-4**, *Construction Equipment Noise Levels*. The maximum noise levels would occur when equipment is operating under full power conditions and the equivalent noise levels account for the estimated usage factors. The estimated usage factors for the equipment are also shown in Table 3.10-4. The usage factors are based on the FHWA's Roadway Construction Noise Model User's Guide.[2]

TABLE 3.10-4
CONSTRUCTION EQUIPMENT NOISE LEVELS

Equipment	Estimated Usage Factor, %[a]	Maximum Noise Level at 50 feet from Equipment, dBA (Lmax)	Equivalent Noise Level at 50 feet from Equipment, dBA (Leq)
Air Compressor	40	80	76
Bore/Drill Rig	20	84	77
Concrete Saw	20	90	83
Dozer	40	85	81
Excavator	40	85	81
Impact Pile Driver	20	95	90
Paver	50	85	82
Paving Equipment	50	85	78
Roller	20	85	78
Tractor	40	84	80
Tractor/Loader/Backhoe	40	80	76

NOTES:

a. Estimated Usage Factor (%) refers to the percentage of time during a typical workday that a specific piece of construction equipment is actively operating at full power and producing noise.

SOURCE: FHWA Roadway Construction Noise Model User's Guide, 2006.

A summary of potential construction noise impacts at existing nearest sensitive receptors is provided in **Table 3.10-5**, *Estimated Construction Noise Levels at Existing Off-Site Sensitive Receptors*, with supporting calculations provided in Appendix G of this Program EIR. Calculations were based upon construction data consistent with the air quality and greenhouse gas (GHG) emissions analysis. Noise is a localized phenomenon and has the potential to adversely impact noise-sensitive receptors in a local area, and thus, it is appropriate to assess noise impacts based on the localized construction of a single project.

[2] Federal Highway Administration, Roadway Construction Noise Model User's Guide, 2006. https://www.gsweventcenter.com/Draft_SEIR_References/2006_01_Roadway_Construction_Noise_Model_User_Guide_FHWA.pdf.

TABLE 3.10-5
ESTIMATED CONSTRUCTION NOISE LEVELS AT EXISTING OFF-SITE SENSITIVE RECEPTORS

Receptor and Representative Distances to Project Site	Maximum Equivalent Construction Noise Level,[a] (Exterior) Hourly Leq from Equipment (dBA)	Maximum Equivalent Construction Noise Level with Pile Driving,[a] (Exterior) Hourly Leq from Equipment (dBA)	Exceeds 95 dBA Leq at 50 Feet?[b,c]	Potential to be Located Within 1,600 Feet of a Sensitive Receptor[d]
Tier 1 and Tier 2 Solar Energy Systems				
Noise-Sensitive Receptor (at 25 feet from construction area)	94.0	96.4	Yes	Yes
Noise-Sensitive Receptor (at 50 feet from construction area)	88.0	90.4	No	Yes
Tier 3 and Tier 4 Solar Energy Facilities				
Noise-Sensitive Receptor Location (at 50 feet from construction area)	94.8	94.8	No	Yes
Noise-Sensitive Receptor Location (at 100 feet from construction area)	88.8	88.8	No	Yes

NOTES:
a. Estimated construction noise levels represent the worst-case condition when noise generators are located closest to noise-sensitive receptor locations.
b. If "yes" is listed, a potentially significant impact would occur and mitigation would be required based on the Santa Barbara County Environmental Thresholds and Guidelines Manual (2024).
c. The County of Santa Barbara *Environmental Thresholds and Guidelines Manual* (2024) established the construction noise threshold of 95 dBA L_{eq} at a distance of 50 feet from the source.
d. A "yes" indicates that some future projects or portions of future projects could be located within 1,600 feet of a sensitive receptor.

SOURCE: ESA, 2025.

As shown in Table 3.10-5, exterior construction noise levels are estimated to reach a maximum of 88.8 to 94.0 L_{eq} at off-site noise-sensitive receptor locations, which could at times be located as close as 25 feet away for Tier 1 and Tier 2 type projects, but assumed to be at least 100 feet away for Tier 3 and Tier 4 projects from a construction area. However, future solar energy facilities may require impact pile driving for Tier 1, Tier 2, Tier 3, and Tier 4 projects. While Tier 1 projects may not typically require pile driving, it could be used for some ground mounted projects. With pile driving, exterior construction noise levels are estimated to reach a maximum of 90.4 to 96.4 L_{eq} at off-site noise-sensitive receptor locations, which could at times be located as close as 25 feet away for Tier 1 and Tier 2 projects. With pile driving, noise levels are estimated to reach a maximum of 88.8 L_{eq} at off-site noise-sensitive receptor locations at 100 feet for Tier 3 and Tier 4 projects. Project construction noise levels with the addition of the impact pile driving at sensitive receptors located within 50 feet would exceed the Santa Barbara County noise threshold of 95 dBA L_{eq}. Therefore, MM NOI-1 is required to include temporary construction noise barriers for future projects that would require pile driving occurring within 50 feet of noise-sensitive receptors. Additionally, some future solar energy projects could occur in proximity to residential uses or other noise-sensitive land uses, which could at times be located within 1,600 feet. The County's Manual (2024) limits construction activity within 1,600 feet of a sensitive receptor to occur between the hours of 8:00 a.m. and 5:00 p.m. Mondays through Fridays. However, the Project may occur in unincorporated areas of the County that may have a community area plan that specifies other construction noise hours, as seen in Orcutt Community Area Plan (construction limited to 7:00 a.m. to 4:00 p.m. Monday-Friday) and the Montecito Community Plan (construction limited to 7:00 a.m. and 4:30 p.m. on weekdays). Therefore, MM NOI-2 is included to require all future solar energy systems and facilities enabled by the Project that are not exempt from

CEQA to comply with the construction hour requirements in the County's Manual that avoids noise-sensitive times of day for noise-generating construction activities within 1,600 feet of noise-sensitive land uses or the allowable construction hours in the applicable community area plan of the project location, whichever is more stringent.

At the end of the operational life of the solar energy systems, the process of decommissioning would occur. This process involves several steps that may include site assessment, system disconnection, removal of panels and associated equipment (inverters, wiring, racking), transportation of materials, and proper recycling or disposal. Decommissioning may also include land restoration for ground-mounted systems. This process may involve on-site heavy-duty equipment and off-site vehicle trips similar to those assumed under Project construction. Therefore, the process of decommissioning would have similar noise levels as those assessed under construction.

Off-Site Construction Noise

Worker trips, vendor delivery trips, and haul truck trips would occur throughout the construction period. It is anticipated that construction activities that may occur under Tier 1 and Tier 2 projects would have a daily maximum of up to 60 worker trips, 12 vendor trips, and 20 one-way hauling trips during the grading phase. During the solar energy system installation phase, the daily maximum number of trips is anticipated to include 60 worker trips and 50 vendor one-way trips. In the case that the grading and solar facility installation phases would overlap, this would result in a maximum of up to 120 worker trips, 62 vendor trips, and 20 one-way hauling trips. This would result in an average daily trip increase along local roadways within each project vicinity of approximately 101 round trips or 202 one-way trips (i.e., 101 inbound and 101 outbound trips).

A doubling of traffic volumes along a given local roadway is required to generate a traffic-related noise level increase of approximately 3 dBA, which is a barely perceptible change in noise. A change of approximately 5 dBA is a readily perceptible change in noise. As previously mentioned, project-level information is unknown at this time, including the size and precise location of potential future projects. While some construction vehicles associated with future projects may use local roadways adjacent to residential neighborhoods, it is expected that the majority of project construction-related trips would travel along major roadways in the County. Future solar energy projects enabled under the Project may contribute to a temporary increase of traffic on local roadways within the County, particularly on roadways that have minimal or limited traffic volumes. Peak hour construction-related traffic noise was modeled assuming that all workers would arrive within a single hour at the beginning of the workday and the vendor and haul truck trips would be evenly distributed amongst an 8-hour workday. Noise levels from construction-related traffic from Tier 1 and Tier 2 projects (based on the representative model assumptions explained earlier) would result in a peak hour noise level of approximately 60.0 dBA Leq.

It is anticipated that construction activities that may occur under Tier 3 and Tier 4 projects would have a daily maximum of up to 120 worker trips, 12 vendor trips, and 50 one-way hauling trips during the grading phase. During the solar energy facility installation phase, the daily maximum number of trips is anticipated to include 120 worker trips and 100 vendor one-way trips. In the case that the grading and solar facility installation phases would overlap, this would result in a maximum of up to 240 worker trips, 112 vendor trips, and 50 one-way hauling trips. This would result in an average daily vehicle trip increase along local roadways within each project vicinity of approximately 201 round trips or 402 one-way trips

(i.e., 201 inbound and 201 outbound trips). Noise levels from construction-related traffic from Tier 3 and Tier 4 projects (based on the conservative model assumptions explained earlier) would result in a peak hour noise level of approximately 65.3 dBA Leq. It is important to note that these decibel values only account for the traffic volume model assumptions from future solar energy systems and facilities enabled by the Project and do not include any existing baseline or future baseline traffic volumes.

In unincorporated areas of the County where existing roadway noise levels would be comparable to those predicted during construction of future solar facilities enabled by the Project, temporary construction traffic could potentially result in a doubling of roadway traffic volumes. Consequently, roadway noise levels may increase to up to 63.0 Leq dBA to 68.3 Leq dBA, depending on the size and location of a project (based on the representative model assumptions explained earlier). Due to the larger volumes of construction vehicles required for Tier 2, Tier 3 and Tier 4 projects, and given that some future projects may be allowed on undeveloped land or existing developed land that may be near undeveloped areas, it can be expected that construction of some future projects could result in a temporary doubling of traffic on local roadways within the County, particularly on rural roadways that have minimal or limited traffic volumes. Roadways that have minimal or limited traffic volumes tend to be associated with proximity to undeveloped areas and tend to have a relatively low ambient noise environment. It is possible that the addition of construction vehicles and trucks on such roadways could generate a temporary doubling or more of traffic volumes and a temporary increase in traffic noise levels. As previously described, a doubling of traffic volumes along a given local roadway typically results in traffic-related noise level increase of approximately 3 dBA, which is a perceptible change in noise. However, such construction-related trips and associated noise would be anticipated to occur during non-noise-sensitive daytime hours. Specifically, construction-related truck trips would be anticipated during daytime hours when material supply vendor businesses and material receiver businesses (e.g., receiver landfill sites) are open. Thus, construction-related trips would temporarily and periodically contribute to daytime roadway noise levels but would generally not be anticipated to contribute to nighttime or 24-hour roadway noise levels. Therefore, with respect to the County thresholds for roadway noise (e.g., Ldn or CNEL), while construction-related trips may temporarily and periodically contribute to daytime roadway noise levels, construction-related trips would not generate 24-hour roadway noise for which the Ldn or CNEL noise metric is based.

Further, the future solar energy facilities enabled by the Project would incorporate MM T-1 (Section 3.11 of this EIR), which would include a designated detour route that would avoid or minimize to the extent practicable travel in residential neighborhoods or through residential roadways. Any perceptible increase in off-site traffic noise levels would be temporary and noise impacts would be insignificant.

Operational Noise

Project operations would generate only periodic on-site noise from occasional inspection, panel washing activities, and associated maintenance activities. Furthermore, Project operations would not include any substantial stationary noise sources. Off-site noise from mobile trips associated with inspection and maintenance workers would occur infrequently and would not contribute to an increase in daily vehicle trips that would result in increased noise levels on roadways. Therefore, onsite operation would not result in long-term increases in noise and operational vehicle trip increases would not generate a substantial increase in noise along local roadways. Impacts would be insignificant.

Mitigation Measures

MM NOI-1: Pile Driving Noise. For future solar energy system and facility projects with pile driving activities occurring within 50 feet of noise-sensitive receptors, temporary construction noise barriers shall be installed at the project site boundary or adjacent to pile driving equipment such that the barriers interrupt the line-of-sight to noise-sensitive receptors as practicable. The temporary barriers shall be made of a solid material or affixed with sound-deadening blankets or curtains. Open access points or gates shall be permissible to allow for adequate and safe worker, vehicle, and equipment access to the construction area and pile driving area.

MM NOI-2: Construction Hours. For all Tier 2, Tier 3, and Tier 4 Projects, the owner/applicant, including all contractors and subcontractors shall limit construction activity, including equipment maintenance and site preparation, to the hours between 8:00 a.m. and 5:00 p.m. (or as otherwise specified in Community Plan/Area: Montecito 7:00 a.m. and 4:30 p.m.; Hope Ranch 8:00 a.m. and 5:00 p.m.; Eastern Goleta Valley 8:00 a.m. and 5:00 p.m. if within 1,600 feet of a sensitive receptor; Toro Canyon 8:00 a.m. and 5:00 p.m. if within 1,600 feet of a residential receptor; Orcutt 7:00 a.m. and 4:00 p.m.; Los Alamos 7:00 a.m. and 4:00 p.m. or 8:00 a.m. and 5:00 p.m. if project is within 1,600 ft. of a sensitive receptor) Monday through Friday. No construction shall occur on weekends or State holidays. Non-noise generating interior construction activities such as plumbing, electrical, drywall and painting (which does not include the use of compressors, tile saws, or other noise-generating equipment) are not subject to these restrictions. Any subsequent amendment to the Comprehensive General Plan, applicable Community or Specific Plan, or Zoning Code noise standard upon which these construction hours are based shall supersede the hours stated herein.

MM T-1: Construction Traffic Control Plan. (See Section 3.11, *Transportation*, of this Draft PEIR).

Residual Impacts

Construction noise impacts from on-site construction activities would be insignificant with implementation of mitigation. Any perceptible increase in off-site traffic noise levels from construction traffic would be temporary and noise impacts would be insignificant and further reduced with implementation of MM T-1, MM NOI-1, and MM NOI-2 as specified in the measures.

Threshold b) The Project would result in a significant impact if the Project would generate excessive groundborne vibration or groundborne noise levels.

Impact NOI 2: Future solar energy facilities enabled under the Project could result in a potentially significant impact regarding groundborne vibration damage to structures and human annoyance from construction and operation.

Structural Damage

Construction and Decommissioning

Construction activities can generate varying degrees of groundborne vibration, depending on the construction procedures and the construction equipment used. The operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of the construction site varies depending on soil

type, ground strata, and construction characteristics of the receptor buildings. The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Groundborne vibration from construction activities rarely reaches levels that damage structures. The Caltrans guidance manual incorporates FTA standard vibration velocities for construction equipment operations (Table 18 of the Caltrans guidance manual). The PPV vibration velocities for the types of construction equipment that can generate perceptible vibration levels and that would be used for future solar energy systems and facilities enabled by the Project are listed in **Table 3.10-6**, *Vibration Source Levels for Construction Equipment*.

TABLE 3.10-6
VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

	Approximate PPV (in/sec)					Approximate RMS (VdB)				
Equipment	**25 Feet**	**50 Feet**	**60 Feet**	**75 Feet**	**100 Feet**	**25 Feet**	**50 Feet**	**60 Feet**	**75 Feet**	**100 Feet**
Large Bulldozer	0.089	0.031	0.024	0.017	0.011	87	78	76	73	69
Loaded Trucks	0.076	0.027	0.020	0.015	0.010	86	77	75	72	68
Drill Rig	0.089	0.031	0.024	0.017	0.011	87	78	76	73	69
Fork Lift	0.047	0.016	0.013	0.009	0.006	81	72	70	67	63
Jackhammer	0.035	0.012	0.009	0.007	0.004	79	70	68	65	61
Pile Driver (Impact – Typical)	0.644	0.228	0.173	0.124	0.081	104	98	96	95	92
Small Bulldozer	0.003	0.001	0.0008	0.0006	0.0004	58	49	47	44	40

SOURCE: FTA, Transit Noise and Vibration Impact Assessment, September 2018; ESA, 2025.

Because vibration level in RMS is best for characterizing human response to building vibration and vibration level in PPV is best used to characterize potential for damage, this construction vibration impact analysis assesses the potential for building damages using vibration levels in PPV (inch/sec). Potential human annoyance is assessed in the next subsection using vibration levels in VdB.

Because vibration impacts occur normally at or within buildings, the distance to the nearest sensitive uses, for vibration impact analysis purposes, is measured between the nearest off-site sensitive use buildings and the closest area where construction equipment would be used for future solar energy systems and facilities enabled by the Project. As shown in Table 3.10-6, pile drivers generate approximately 0.644 in/sec PPV when measured at 25 feet. FTA guidelines indicate that a vibration level of 0.5 inch/sec PPV is considered safe for buildings consisting of reinforced concrete, steel, or timber (no plaster). Therefore, this would exceed the threshold for construction vibration damage. For a non-engineered timber and masonry building, the construction vibration damage criterion is 0.2 inch/sec PPV. As a conservative analysis, the FTA 0.2 PPV (in/sec) is used as a threshold of significance.

Based on the vibration data provided in Table 3.10-6, vibration velocities from construction equipment would range from approximately 0.003 to 0.644 inches per second PPV at 25 feet from the source of activity. At a distance of 100 feet, the vibration velocities from construction equipment would range from approximately 0.0004 to 0.081 inches per second PPV. The nearest off-site buildings that could be subjected to construction-related vibration structural damage may include buildings within 25 feet away

of the closest area where construction equipment would be used for future solar energy systems and facilities enabled by the Project. When pile driving is required within 60 feet of nearby building structures, the vibrations would be over the threshold recommended by FTA guidelines. Other vibration-generating equipment would normally operate at least 25 feet or more from the nearest off-site buildings. There are currently no widely effective methods to fully mitigate groundborne vibration generated by pile driving activities, due to the high-impact, impulsive nature of the equipment and the efficient propagation of vibration through various soil types. Thus, based on the vibration data provided in Table 3.10-6, if an off-site building(s) were to be located within 60 feet of the pile driving activity, the building would potentially be exposed to vibration levels greater than the FTA recommended vibration threshold of 0.2 inches/sec and could cause structural damage and impacts would be potentially significant. Other construction equipment activity occurring within 25 of an off-site building would not surpass the recommended FTA vibration threshold of 0.2 inch/sec and therefore would have insignificant impacts in regard to structural damage. It is generally expected that vibration-generating construction equipment would be typically located more than 25 feet away from off-site structures, due to general setback requirements and required buffer zones for various land uses, as specified in the County Code.

At the end of the operational life of the solar systems, the process of decommissioning would occur. This process involves several steps that may include site assessment, system disconnection, removal of panels and associated equipment (inverters, wiring, racking), transportation of materials, and proper recycling or disposal. Decommissioning may also include land restoration for ground-mounted systems. This process may involve on-site heavy-duty equipment and the associated vibration levels to those assumed under Project construction. However, it is not expected that pile driving would occur as a part of the decommissioning process. Therefore, the process of decommissioning would have vibration levels consistent with equipment in Table 3.10-6. The maximum vibration levels that may occur under decommissioning would be 0.089 inch/sec PPV at 25 feet, which would be below the FTA 0.2 PPV inch/sec threshold. As such, vibration impacts associated with decommissioning of the future solar energy facilities enabled under the Project would be insignificant.

Operation

The operation of future solar energy systems and facilities enabled by the Project would include typical solar panels or substation equipment which would not produce vibration. In addition, the primary sources of transient vibration would include passenger and worker vehicle circulation within the installation areas for periodic inspection and maintenance activities. Groundborne vibration generated by each of the above-mentioned activities would generate approximately up to 0.005 in/sec PPV adjacent to a future solar energy project.[3] The potential vibration levels from all operational sources at the closest existing sensitive receptor locations would be less than the 0.2 in/sec PPV significance threshold for potential residential building damage. As such, vibration impacts associated with operation of the future solar energy facilities enabled under the Project would be insignificant.

[3] This vibration estimate is based on data presented in the USDOT Federal Transit Administration, 2018; which is included in Appendix G of this Draft EIR.

Human Annoyance

Construction

Sensitive vibration receptors typically include residences, schools, motels and hotels, libraries, religious institutions, hospitals, nursing homes, and parks. Off-site non-residential uses such as retail and commercial uses are not considered vibration sensitive receptors for human annoyance under CEQA. Groundborne noise specifically refers to the rumbling noise emanating from the motion of building room surfaces due to vibration of floors and walls and is perceptible only inside buildings.4 For typical buildings, groundborne vibration results in groundborne noise levels approximately 25 to 40 decibels lower than the velocity level.[5] According to the FTA *Noise and Vibration Manual*, most of the studies of groundborne vibration in this country have focused on urban rail transit and the problems with groundborne vibration and noise that are common when there is less than 50 feet between a subway structure and building foundations. Although project construction would not create on-going and continuous groundborne vibration and noise like that of an urban rail transit system, project vibration levels would be compared to the FTA's *Transit Noise and Vibration Impact Assessment* (FTA 2018) vibration criteria of 78 VdB for residential uses during daytime hours.

Nearby vibration-sensitive uses for potential human annoyance may be as close as 25 feet from the potential future solar project locations, with other sensitive receptors at greater distances. For Tier 1 and Tier 2 Projects with receptors at a distance of 25 feet, the maximum vibration level associated with pile driving would be approximately 104 VdB. For Tier 3 and Tier 4 Project construction associated with pile driving with receptors located at a distance of 100 feet, the maximum vibration level would be approximately 92 VdB. The temporary construction vibration levels for projects in all four tiers would exceed the FTA's 78 VdB threshold for occasional events at the nearest receptor locations during daytime hours. However, it is noted that vibrations associated with construction would be temporary in nature and not continuous, with the majority of the vibration associated with pile driving. Once all pile driving is completed, vibration levels would be less than referenced above. Additionally, future solar energy systems and facilities enabled by the Project would be required to implement MM NOI-2, which would require all non-exempt projects to limit construction activities to the daytime hours of 8:00 a.m. and 5:00 p.m. Mondays through Fridays or other construction hours established by an applicable Community Area Plan, subject to location. Most human annoyance from vibration is generally limited to nighttime hours when people may be sleeping. The requirement of MM NOI-2 would ensure that construction occurs only during daytime hours. Additionally, vibration dissipates rapidly with distance due to the energy spreading and absorption by surrounding materials and it is not expected that any human annoyance caused by construction vibration would occur where sensitive receptors are located at further distances, because locations of future projects are not known, impacts could potentially be significant.

As previously mentioned, decommissioning would occur at the end of the operational life of the solar systems. This process involves several steps that may include site assessment, system disconnection, removal of panels and associated equipment (inverters, wiring, racking), transportation of materials, and proper recycling or disposal. Decommissioning may also include land restoration for ground-mounted systems. This process may involve on-site heavy-duty equipment and the vibration levels and human annoyance to those assumed under Project construction. It is not expected that decommissioning would

4 Federal Transit Administration, Noise and Vibration Manual, 2018, Page 112,

5 Federal Transit Administration, Noise and Vibration Manual, 2018, Page 119.

include pile driving or the vibration levels associated with that equipment. As discussed above, human annoyance in regard to construction vibration would generally be limited to vibration occurring during nighttime hours when people normally sleep. Therefore, because the decommissioning of future solar energy systems and facilities under the Project would be limited to daytime construction hours established by the County and applicable Community Area Plans through MM NOI-2, the Project would not result in decommissioning vibrations that would harmfully impact sensitive receptors. Impacts would be insignificant.

Operation

Operation and maintenance of solar energy facilities would include limited worker vehicle trips that would not be anticipated to generate excessive groundborne noise or vibration. Project operational vibration levels would be substantially less than during construction. As such, human annoyance related to groundborne vibration and noise impacts associated with the long-term operation and maintenance of solar energy facilities would be insignificant.

Mitigation Measures

MM NOI-2: Construction Hours. (See Impact NOI 1, above).

MM NOI-3: Pile Driving Vibration. Future solar energy system and facility projects are required to limit pile driving activities to at least 60 feet away from any off-site buildings or structures.

Residual Impacts

With implementation of MM NOI-2 and MM NOI-3, which would limit construction hours and ensure that all pile driving activities are occurring at least 60 feet away from structures or buildings, impacts would be reduced to insignificant.

Threshold c) The Project would result in a significant impact for a Project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, if the Project would expose people residing or working in the Project area to excessive noise levels.

Impact NOI 3: Future solar energy facilities enabled under the Project would not result in workers being exposed to excessive noise levels from a private airstrip or airport.

The County has public and private airports, which include Lompoc and Santa Ynez airports that are owned by the County, Santa Barbara Municipal Airport, which is operated by the City of Santa Barbara; and Santa Maria Public Airport, which is operated by the Santa Maria Public Airport District. The New Cuyama Airport (L88), is a privately owned airstrip which is open to the public for use.

As previously described, the specific locations of future solar energy systems and facilities enabled by the Project are not currently known, but could be located within 2 miles of the County's various airports. Construction associated with these future non-exempt projects would be temporary in nature and would be limited to the construction hours established by the County or applicable Community Area Plans, as

required by MM NOI-2. As such, although construction workers may be present near airport operations, they would not experience continuous or long-term exposure to elevated aircraft noise levels. The operation of future solar energy projects would have a limited amount of on-site workers, primarily for periodic maintenance, vegetation management, and panel washing. These activities would be infrequent, of short duration, and are not expected to result in exposure to excessive or sustained aircraft noise levels that could be considered harmful.

Furthermore, the utility-scale solar facilities (Tier 3 or 4 projects) would be allowed on lands zoned for agriculture, public utilities, light or general industry, and professional or institutional uses. According to SBCAG's ALUCP (2023), compatible noise levels for utility land uses, like solar energy facilities enabled under the Project, are acceptable up to 75 dB CNEL. According to the airport noise compatibility policy maps, all noise levels of 75+ dB would occur within the airport property boundaries. The Santa Barbara Municipal Airport Noise Compatibility Policy Map shows that the 75+ dB noise contour from the airport operations would be within approximately 1,000 feet of the airport runway. The Santa Maria Public Airport Noise Compatibility Policy Map shows that the 75+ dB noise contour from the airport operations would be within approximately 500 feet of the airport runway. The Santa Ynez Airport Noise Compatibility Policy Map shows that the 65+ dB noise contour from airport operations would be within approximately 750 feet from the airport runway. The Lompoc Airport Noise Compatibility Policy Map shows that the 65+ dB noise contour from airport operations would be within approximately 750 feet from the airport runway. Therefore, all noise levels of 75+ dB CNEL would occur on airport property boundaries and it is not likely that future project solar energy project would be situated within the County's airports' boundaries. Since future solar energy project could experience 75+ dB noise levels from the airports, exposure of workers to long-term noise levels exceeding the thresholds of compatibility established by the SBCAG would not result.

Construction/decommissioning and operation of future solar energy systems and facilities enabled by the Project would not expose people to excessive airport-related noise levels. Therefore, impacts would be insignificant.

Mitigation Measures

Impacts would be insignificant and no mitigation measures are required.

Residual Impacts

Impacts would be insignificant.

3.10.5 Cumulative Impacts Analysis

As discussed above, future solar energy systems and facilities enabled by the Project may require, at times, noise-generating construction activity within 1,600 feet of a noise-sensitive receptor. Related projects may also result in noise-generating construction activity within 1,600 feet of a noise-sensitive receptor. Thus, the Project could result in a cumulatively considerable contribution to cumulative noise impacts. Future solar energy systems and facilities enabled by the Project would be required to implement MM NOI-1 and MM NOI-2, which would reduce noise impacts from on-site construction activities to insignificant. Related projects would also be required to comply with the County of Santa Barbara *Environmental Thresholds and Regulation Guidelines Manual*, specifically ensuring that if noise-

generating construction activities would occur within 1,600 feet of a noise-sensitive receptor, such activities would only be permitted to occur during the hours of 8:00 a.m. and 5:00 p.m. Monday through Friday so long as construction noise does not exceed 95 dBA L_{eq} at 50 feet from the source. Should any related project within the vicinity exceed 95 dBA L_{eq} at 50 feet, such projects would be required to implement additional mitigation measures such as sound barriers, enhanced equipment mufflers, and other noise-reducing measures so as not to create excessive construction noise.

With regard to mobile-source noise, as discussed for the Project, where existing roadway noise levels would be similar to the levels predicted for traffic noise along roadway segments from the solar energy projects plus related projects, such combined noise levels could exceed a noise level that would indicate the potential for adverse impacts. The construction of Tier 2, Tier 3 or Tier 4 future solar energy systems and facilities enabled by the Project could result in a doubling of off-site traffic noise levels which would increase roadway noise levels by approximately 3 dBA. However, as with the Project, construction-related truck trips and associated noise from related projects would be anticipated to occur during non-noise sensitive daytime hours when material supply vendor businesses and material receiver businesses (e.g., receiver landfill sites) are open. Thus, construction-related trips would temporarily and periodically contribute to daytime roadway noise levels but would generally not be anticipated to contribute to nighttime or 24-hour roadway noise levels. With respect to the County thresholds for roadway noise (e.g., Ldn or CNEL), while construction-related trips may temporarily and periodically contribute to daytime roadway noise levels, construction-related trips would not generate 24-hour roadway noise for which the Ldn or CNEL noise metric is based. MM NOI-2 would require future solar projects enabled by the Project to limit construction activities to less sensitive daytime hours. Further, MM T-1 would require future solar projects enabled by the Project to avoid or minimize the use of residential neighborhoods or roadways. Related projects subject to County Planning and Development Department discretionary review would also be required to implement similar feasible measures to comply with noise standards.

Thus, the Project along with past, present, and reasonably foreseeable probable future projects would not result in on-site construction noise, adversely affecting a substantial number of people and cumulative impacts would be mitigated to insignificant for on-site and off-site construction noise impacts.

With regard to vibration, future solar energy systems and facilities enabled by the Project that require pile driving nearby to sensitive receptors or structures may result in groundborne vibration damage or human annoyance during construction. The Project would not be expected to generate any groundborne vibration during operation. However, groundborne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Man-made vibration issues are, therefore, usually confined to short distances from the source (i.e., 100 feet or less). Although ground borne vibration rapidly attenuates, there could be other construction projects located within close proximity to the future solar energy facilities enabled under the Project that could result in a groundborne construction vibration impact. The implementation of MM NOI-2 and MM NOI-3 would limit construction hours in accordance with the County's recommendations and ensure that all pile driving occurs at least 60 feet away from buildings and structures. This would reduce all impacts related to human annoyance and structure damage to an insignificant level. There would be no expected potential for operational-period impacts with respect to groundborne vibration from all past, present, and reasonably foreseeable probable future projects.

While future solar energy project along with all other past, present, or reasonably foreseeable probable future projects could located within the vicinity of the County's airports, all projects located within airport influence areas would be required to be consistent with the ALUCP policies. Future projects would be potentially located within two miles from the County's various airports or within their sphere of influence.

The SBCAG's ALUCP Table 3-1 identifies land use by category, including residential, commercial, and industrial land use. The elements of the Project generally fall within the utility land use compatibility categories. A portion of the County's cumulative projects would be residential or commercial in nature. The ALUCP recommends avoiding the development of new residential uses within areas exposed to CNEL 65 dB to 70 dB, due to the potential for significant aircraft noise exposure. For commercial land uses within CNEL 70 dB to 75 dB, the ALUCP considers such uses conditionally compatible, provided that appropriate interior noise reduction measures are implemented to achieve acceptable interior noise levels. Although utility-related activities (such as those associated with solar energy development) may occur in these areas, they are generally outdoor enterprises with limited staffing requirements. Cumulative projects located in airport influence areas would need to adhere to ALUCP policies to avoid significant long-term aircraft noise impacts to workers associated with the cumulative projects. As such, people residing or working in the cumulative projects that would occur within the County's airport spheres of influence would not be exposed to excessive noise from airport operations. Cumulative impacts would be insignificant.

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3.11 Transportation

3.11.1 Introduction

This section describes potential transportation impacts from implementation of the Project. It includes a discussion of the existing transportation facilities within and adjacent to the Project area, which primarily includes rural agricultural land within the unincorporated regions in Santa Barbara County. Also discussed are the applicable regulations pertaining to the proposed Project. Where applicable, development standards included in the Project which may address transportation issues are presented. As the Project would allow the development of solar systems and facilities on sites not yet identified throughout the County, a program-level analysis was undertaken. Relevant policies and regulations are described to provide context to the programmatic analysis. This section also includes a discussion of the existing roadway network and alternative transportation, such as public transit and bicycles which are limited in the rural areas and in some urban areas.

3.11.2 Environmental Setting

State Routes and Highways

U.S. Highway 101 traverses many areas of the County and several State Routes (SR) including all or parts of SR 1, 33, 135, 144, 154, 166, 176, 192, 217, 224, 225, and 246. These roadways serve different rural areas of the County as shown in **Figure 3.11-1**, *Transportation Network*. The most prominent routes within the project areas are described in more detail below.

U.S. Highway 101

U.S. Highway 101 provides north-south interregional travel and traverses rural lands in the County along the Gaviota Coast, Orcutt Community Plan, and Santa Ynez Valley areas and intervening hills and mountains and connects with San Luis Obispo County to the north. U.S. Highway 101 runs for approximately 90 miles within Santa Barbara County as primarily a limited-access freeway, especially within urban areas, though there are segments along the Gaviota Coast with driveway access and connects with Ventura County to the south.

State Route 1

SR 1 is an interregional north-south route that extends approximately 80 miles from its intersection with U.S. Highway 101 just north of Gaviota, through rural lands south of the City of Lompoc, joining with SR 135 through rural agricultural lands north to the Santa Maria Valley to San Luis Obispo County.

State Route 135

SR 135 connects U.S. Highway 101 on the south to SR 1 in the north and runs through extensive rural lands between the unincorporated communities of Los Alamos and Orcutt. It provides the primary transportation corridor through the rural San Antonio Creek Valley.

State Route 154

SR 154 is an east-west route that serves regional and interregional travel, spanning approximately 33 miles through rural lands in Los Padres National Forest (LPNF) and the Santa Ynez Valley. SR 154

serves as a primary transportation corridor through the Santa Ynez Valley and connects with SR 246, the other major transportation corridor across rural lands in the Santa Ynez Valley. SR 154 then continues to the lower foothills of the Santa Ynez Mountains to San Marcos Pass, then travels down the coastal side of the mountains to U.S. Highway 101.

State Route 166

SR 166 extends for 63 miles through the County serving extensive rural areas and connecting the City of Guadalupe in the west. The route begins at the junction of SR 1 in Guadalupe, continues easterly through to the junction of SR 33 in the Cuyama Valley, and continues to Kern County.

State Route 246

SR 246 is located entirely within Santa Barbara County and extends approximately 24 miles as the primary east-west route between the City of Lompoc on the west and the Santa Ynez Valley to the east. This route connects U.S. Highway 101 with SR 154 and SR 1, serving tens of thousands of acres of rural land and their communities.

Transit and Railway

Public passenger rail service is provided in the County by Amtrak and runs along the coast, connecting the County with Ventura County, Los Angeles, and San Diego to the south, and the City of San Luis Obispo and the Bay Area to the north (Amtrak 2025).

There are a total of five stops or rail stations in the County in the cities of Goleta, Santa Barbara, and Carpinteria in South County, and at Surf Station and the City of Guadalupe in the North County. The two Amtrak lines serving these stations include the Pacific Surfliner and the Coast Starlight. Santa Barbara County destinations served by the Pacific Surfliner include Lompoc-Surf, Guadalupe, Goleta, Santa Barbara, and Carpinteria. The Connecting Amtrak Thruway bus service is offered from the train stations to the University of California Santa Barbara (UCSB) campus, Solvang-Santa Ynez Valley, and Santa Maria. The Pacific Surfliner runs four times daily in each direction. Coast Starlight destinations in Santa Barbara County include the city of Santa Barbara. Coast Starlight runs once daily in each direction.

Santa Barbara Metropolitan Transit District (MTD) provides public transit service in the South Coast Region. Santa Barbara MTD provides fixed-route service in the cities of Santa Barbara, Carpinteria, and Goleta and the unincorporated areas of Isla Vista, Montecito, and Summerland (Santa Barbara MTD 2025).

The San Luis Obispo Regional Transit Authority (SLORTA) Route 10 provides deviated fixed-route service within the Cuyama Valley and to Orcutt via the Cuyama Transit (SLORTA 2025).

Bicycle and Pedestrian Network

Santa Barbara County has over 338 miles of bikeways, but very few of these serve the rural areas, with two major routes through the County, and the California Pacific Coast Bike Route (PCBR) and the California Coastal Trail (CCT). Bikeways in the County include the following categories, defined by the State (SBCAG 2021):

- **Class I:** A Class 1 bikeway, or a bike path, is a multi-purpose trail that is completely separated from motor traffic.



Path: U:\GIS\GIS\Projects\2023\xxx\D202300299.Santa_Barbara_Cty_Solar_Amendments_PEIR\03_Project\Bio.aprx Transportation. WMcCullough 4/24/2025

SOURCE: ESA, 2025; Santa Barbara County, 2025

Santa Barbara County Utility-Scale Solar Amendments

Figure 3.11-1
Transportation Network

ESA

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- **Class II:** A Class II bikeway, or bike lane, is an on-street lane dedicated to one-way bicycle travel adjacent to motorized travel lanes.
- **Class III:** Class III bikeways, or bike routes, are on-street shared facilities. Class III bikeways serve to provide continuity to other bicycle facilities or designate a preferred route through high demand corridors. These routes are typically demarcated using sharrows, or road markings, and/or signage.
- **Class IV:** Class IV bikeways, also known as cycle tracks, are exclusive bicycle infrastructure that are separated and protected from motorist traffic. Class IV bikeways can be separated from motor traffic lanes in various ways, including grade separation, posts, barriers, or on-street parking.

Within the unincorporated area, the County is developed with approximately 25.6 miles of Class I bikeways, 63 miles of Class II bicycle lanes, 3.6 miles of Class III bike routes, and 1 mile of Class IV cycle tracks (County of Santa Barbara 2023). The majority of the current bicycle facilities are located in the suburban areas of the South Coast. In the more rural areas of the County, a Class I bikeway along SR 246 links the communities of Solvang and Santa Ynez and a Class II on-road bike path exists along Refugio Road. Existing and planned regional bike paths include the CCT, a planned public trail system that would extend from the Guadalupe-Nipomo Dunes in the north to the Rincon State Park at the Ventura County/Santa Barbara County line in the south, with limited off-road segments along the rural Gaviota Coast. Over 60 miles of North County shoreline lack developed CCT segments. The PCBR follows SR 1 road shoulder from the Santa Barbara-San Luis Obispo County border to U.S. Highway 101 at the Gaviota Pass. The PCBR then follows U.S. Highway 101 south along the Gaviota Coast and through Goleta, Santa Barbara, and Carpinteria to the Santa Barbara-Ventura County border.

The 1,200-mile Juan Bautista de Anza National Historic Trail (Anza Trail) is part of the National Parks System. The National Park Service is working toward the creation of a continuous, 1,200-mile non-motorized recreation trail. Approximately 300 miles of recreation trail have been certified so far; these certified trail segments are independently operated. The Anza Trail follows U.S. Highway 101 beginning south in Carpinteria through the rural Gaviota Coast before curving north and following SR 1. Following SR 1, the Anza Trail runs through Lompoc, the Vandenberg Air Force Base, west of Mission Hills, through Vandenberg Village, before terminating in Guadalupe at the San Luis Obispo/Santa Barbara County line. The California Missions Trail is unmarked, but extends 100 miles linking the missions of Santa Barbara, Santa Ines, and La Purisima (Lompoc).

3.11.3 Regulatory Framework

Federal

There are no federal regulations related to transportation which apply to the Project.

State

Public Resources Code Section 21099

Public Resources Code Section 21099 directs the CEQA lead agencies to analyze traffic impacts using vehicle miles traveled (VMT) as the standard. Public Resources Code Section 21099 resulted in the focus of transportation analysis shifting from level of service (LOS) to VMT and the reduction of GHG emissions through the creation of multimodal transportation networks and the promotion of a mix of land uses to

reduce VMT. Measurements of transportation impacts may include "vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated."

Caltrans

Caltrans has jurisdiction over state highways and sets maximum load limits for trucks and safety requirements for oversized vehicles that operate on highways. Santa Barbara County is under the jurisdiction of Caltrans District 5. The following Caltrans regulations apply to the potential transportation and traffic impacts of the Project:

- **California Vehicle Code, Division 15, Chapters 1-5 (Size, Weight, and Load).** Includes regulations pertaining to licensing, size, weight, and load of vehicles operated on highways.
- **California Streets and Highways Code, §§660–711, 670–695.** Requires permits from Caltrans for any roadway encroachment during truck transportation and delivery; includes regulations for the care and protection of state and county highways and provisions for the issuance of written permits; and requires permits for any load that exceeds Caltrans weight, length, or width standards for public roadways.

Regional

Regional Active Transportation Plan

SBCAG adopted a Regional Active Transportation Plan in 2015 to integrate the bicycle and pedestrian planning of the region's nine-member governments and improve the active transportation network in the County. The plan is also intended to establish eligibility criteria for funding through Active Transportation Program (ATP) grants for projects. The major goals of the plan are to:

1. **Enhance Mobility:** Promote increased bicycling and walking to reduce vehicle trips, vehicle miles traveled, auto congestion, and vehicle emissions regionwide.
2. **Increase Connectivity:** Promote increased bicycling and walking to reduce vehicle trips, vehicle miles traveled, auto congestion, and vehicle emissions regionwide.
3. **Promote Equity for All Users in All Communities:** Increase bicycle and pedestrian network coverage within RTP/SCS communities of concern.
4. **Improve Safety and Public Health:** Encourage well-designed bicycle and pedestrian infrastructure to improve multi-modal safety and promote improvements in public health.

Santa Barbara U.S. Highway 101 Comprehensive Multimodal Corridor Plan

The Santa Barbara U.S. Highway 101 Comprehensive Multimodal Corridor Plan, adopted in July 2022, is an update of the Hybrid Multimodal Corridor Plan adopted in December 2019. The purpose of the Santa Barbara U.S. Highway 101 Comprehensive Multimodal Corridor Plan is to find long-term mobility solutions to relieve congestion along the U.S. Highway 101 corridor in Santa Barbara County. The plan identifies improvements associated with the U.S. Highway 101 Corridor to accomplish the goal.

Local

County of Santa Barbara Active Transportation Plan

In addition to SBCAG's Regional ATP, the County has also adopted their own ATP. The County's local ATP assesses existing conditions, identifies gaps in the existing network, assesses user needs, incorporates

public and stakeholder input, and identifies projects that promote a safer and more convenient active transportation network serving the unincorporated communities. The County published the Draft ATP in March 2023 for public review, and the Final ATP was adopted by the County Board of Supervisors in May 2023. The ATP includes the following goals to guide active transportation planning in the unincorporated county:

> **Goal 1:** Enhance the multi-modal transportation network for all unincorporated areas in Santa Barbara County, with an emphasis on increasing safety around schools and key destinations for people walking, bicycling, or rolling. Goal 2: Hear directly from the community to understand local travel patterns and challenges, and how travel options can be improved for people of all ages and abilities. Goal 3: Identify and prioritize active transportation investments, including infrastructure and programs, that improve access, equity, and mobility while reducing collisions and emissions.
>
> **Goal 4:** Promote and encourage people to choose walking, bicycling, or rolling through the creation of a comfortable, connected, and accessible active transportation network that connects both rural and urban areas throughout the region and encourages alternatives to single occupancy vehicle trips.

Fiscal Year 2024-2029 Capital Improvement Program

The County's Capital Improvement Program (CIP) is a multi-year planning tool to identify and implement short-term and long-term capital needs. Capital projects in the CIP include repairs, rehabilitation, and replacement of critical facilities countywide. The plan also addresses improvements and non-routine maintenance to County-owned facilities, roads, bridges, and flood control facilities owned and managed by the Santa Barbara County Flood Control and Water Conservation District. The recommended Fiscal Year 2024-2029 CIP includes a total of $128.45 million in projects in Fiscal Year 2024-2025 for General Services, which includes Facility Improvements, Department of Public Works (including Road Maintenance, Safety, Flood Control/Water Resources, and Resource Recovery & Waste Management), and Community Services. As part of the CIP, the County's current Road Maintenance Annual Plan (RdMAP) is the means by which the Transportation Division accomplishes its mission of "Providing a Clear Path, Smooth Ride, and a Safe Trip to the Traveling Public."

Santa Barbara County Comprehensive Plan – Circulation Element

State law requires that any development in the County must be consistent with the County's Comprehensive Plan. The Circulation Element of the Plan applies to all roadways and intersections within the unincorporated area of the County. In addition, community or area plans contain policies that would be applicable for those roadways and intersections located within an area included in an adopted community or area plan. The Circulation Element of the County's Comprehensive Plan provides specific policies related to traffic and transportation implications of proposed development and establishes guidelines to determine the project-related traffic impacts on County roadways. The following policies are provided in the Circulation Element:

A) The roadway classifications, intersection levels of service, and capacity levels adopted in this Element shall apply to all roadways and intersections within the unincorporated area of the County, with the exception of those roadways and intersections located within an area included in an adopted community or area plan. Roadway classifications, intersection levels of service, and capacity levels adopted as part of any community or area plan subsequent to the adoption of this Element shall supersede any standards included as part of this Element.

B) Individual community and area plans adopted subsequent to this Element shall strive to achieve a balance between designated land uses and roadway and intersection capacity. These community and area plans shall identify areas where increased traffic may create noise levels that could potentially exceed the policies and standards of the Noise Element of the Comprehensive Plan and, to the extent feasible, include policies, land use changes, and other mitigations to reduce these impacts to insignificance.

C) The County shall continue to develop programs that encourage the use of alternative modes of transportation including, but not limited to, an updated bicycle route plan, park and ride facilities, and transportation demand management ordinances.

D) The County shall maintain a 7-year Capital Improvement Plan. The Plan shall be updated by the Public Works Department and presented to the Planning Commission and the Board of Supervisors for review at a public hearing before each body on an annual basis. The Plan shall contain a list of transportation projects to be undertaken ranked in relative priority order and include estimated cost, and if known, estimated delivery year for each project.

E) A determination of project consistency with the standards and policies of this Element shall constitute a determination of project consistency with the Land Use Element's Land Use Development Policy #4 with regards to roadway and intersection capacity.

3.11.4 Project Impact Analysis

Thresholds of Significance

CEQA Guidelines

Pursuant to Appendix G of the CEQA Guidelines, except as provided in Public Resources Code Section 21099, a project would result in significant transportation effects on the environment if it would:

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;

b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or

d) Result in inadequate emergency access.

County of Santa Barbara Environmental Thresholds

As indicated in the County's Environmental Thresholds and Guidelines Manual (Manual), the County uses the CEQA Guidelines Appendix G threshold questions provided above. The Manual provides information on how to interpret and apply the four transportation threshold questions.

Methodology

Programs, Plans, Ordinance, and Plan Consistency

The plan, ordinance, and policy consistency analysis assesses whether the Project and associated future solar development would conflict with an adopted plan, ordinance, or policy addressing the circulation system (including transit, roadways, bicycle, and pedestrian facilities as required under CEQA) that is adopted to protect the environment. In general, transportation policies or standards adopted to protect the environment are those that support multi-modal transportation options and a reduction in VMT. A project

that does not implement a program, plan, policy, or ordinance would not necessarily result in a conflict or an impact. Many of these programs must be implemented by the County over time and over a broad area. It is the intent of this threshold to ensure that proposed projects and plans do not preclude the County from implementing adopted programs, plans, and policies.

This analysis considers whether the Project would be consistent with applicable plans, policies, and regulations addressing the circulation system. This analysis is qualitative given that the exact location and nature of future solar facility developments are unknown at this time.

The Project does not fall into the primary transportation policy planning framework, which is focused on urban areas, particularly on reducing employee, residential, and commercial based trips below existing levels. Sources utilized in the development of this section are outlined in Section 3.11.3, Regulatory Framework, above. Plan and policy consistency are based on whether the future development of solar facilities would result in environmental impacts to transportation as outlined in the applicable plan.

VMT Methodology and Project Assumptions

Santa Barbara County includes guidelines for determining VMT impacts in the *Santa Barbara County Environmental Thresholds and Guidelines Manual (2024)*. The County has a VMT Tool and a VMT User Guide that are available on the County's website. The tool applies the screening criteria and determines whether certain projects meet any of the applicable screening criteria. For projects that do not fall within the typical land use or transportation project categories, County guidelines state that, for projects that serve the region, the VMT analysis can compare the project's total VMT to existing VMT or compare the project's net increase in total VMT to the study area VMT.

With respect to VMT, the increase in vehicle trips that would result from Project implementation is associated primarily with construction activities during installation of the solar energy facilities. The ongoing operations and maintenance of the facilities is not anticipated to substantially increase the level of traffic. In addition, CEQA Guidelines Section 15064.3(a) specifies that, in the context of the transportation analysis, VMT refers to the amount and distance of automobile travel attributable to a project. The Office of Land Use and Climate Innovation's Technical Advisory further explains that the term "automobile" in Section 15064.3(a) "refers to on-road passenger vehicles, specifically cars and light trucks." Therefore, VMT is not applicable to heavy duty truck trips and would not be used to evaluate truck trips during construction. VMT would however apply to cars and light trucks used by workers.

Geometric Design Feature or Incompatible Use Hazards

This analysis evaluates whether implementation of the Project would result in temporary roadway hazards such as conflicts between vehicles, bicycles, and pedestrians. Additionally, this analysis evaluates whether there would be long-term operational hazards related to design features such as curved roads with inadequate sight distances, unsafe separation of vehicle, bicycle, and pedestrian traffic, or inadequate pedestrian facilities (e.g., incomplete sidewalks, lack of striped pedestrian crossings, etc.).

Emergency Access

Emergency access throughout the County along public roads is addressed programmatically below. Analysis of access to individual project sites and potential limits to access for emergency personnel would be speculative at this time, as no data or site plans are available. Many of the future solar facilities would

not involve substantive effects on the functionality of existing transportation systems, or would involve only minor alterations to existing conditions or operations that would not be anticipated to affect emergency access to and from solar project sites. Construction of future solar facilities pursuant to the Project could have temporary effects on levels of traffic congestion which could have a negligible effect on emergency access or on transportation facilities such as temporary closures or temporary closure of bicycle or pedestrian facilities.

Project Impacts

This section provides an analysis of potential impacts associated with transportation that could occur as a result of the Project. **Table 3.11-1**, *Summary of Transportation Impacts*, provides a summary of the Project's impacts related to transportation. A detailed discussion of each impact follows.

TABLE 3.11-1
SUMMARY OF TRANSPORTATION IMPACTS

Transportation Impacts	Impact Classification	Mitigation Measures	Residual Impact
Impact T-1: The Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	Insignificant	No mitigation required	Insignificant
Impact T-2: The Project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).	Insignificant	No mitigation required	Insignificant
Impact T-3: The Project would not substantially increase hazards due to a geometric design feature or incompatible uses.	Insignificant	No mitigation required	Insignificant
Impact T-4: The Project could result in inadequate emergency access.	Potentially Significant	MM T-1: Construction Traffic Control Plan	Insignificant with mitigation
Cumulative Impacts	Potentially significant	MM T-1	Insignificant with mitigation

The primary focus in the analysis is on Tier 3 and 4 facilities since, due to their size and scale, these would be the most impactful of the tiers proposed from a transportation perspective. The temporal scope of the analysis assumes that such facilities would be constructed, operated, maintained (and decommissioned) within a 30-year timeframe.

Criterion a) The Project would result in a significant impact if the Project would conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

Impact T-1: The Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

The CEQA Guidelines state that a project would have a potentially significant impact if the project would conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities for the purpose of avoiding or mitigating an adverse

environmental impact. Relevant programs and policies are discussed above under Section 4.11.3, *Regulatory Framework*. Additionally, the Project's consistency with land use policies is discussed in Section 3.9, *Land Use and Planning*.

Construction and Decommissioning

The Project would include amendments to the County Comprehensive Plan, Coastal Land Use Plan, County LUDC, Montecito LUDC, Article II – Coastal Zoning Ordinance, and Uniform Rules to establish the land use and zoning regulations for the allowance of solar energy systems and facilities. Implementation of the Project would be anticipated to result in additional development of solar energy systems, including rooftop systems (Tier 1), ground-based systems (Tier 1, Tier 2, and Tier 3), and utility-scale systems (Tier 4). The development of these systems would result in temporary construction impacts, with the potential to include vehicle traffic, lane closures, and temporary impedance of bicycle, pedestrian, or transit facilities. All such construction impacts would be temporary in nature and would be required to be undertaken in conformance with existing County plans, ordinances, and policies. Decommissioning activities would be similar in timing, intensity, and scale as construction activities and would also be required to conform with applicable policies and regulations.

Operation and Maintenance

Maintenance of solar facilities would involve activities such as vegetation control and panel cleaning, as well as occasional repairs or replacement of component parts which would involve minor amounts of vehicle trips to the Project sites. While traffic would be anticipated to be associated with the ongoing operation and maintenance of systems developed as a result of the Project, it would be limited such that solar energy systems developed pursuant to the Project would not interfere with programs, plans, ordinances or policies currently in place addressing the County's circulation system, including the Regional Active Transportation Plan, the County's Active Transportation Plan, or the Santa Barbara County Comprehensive Plan. While land uses would be modified throughout the County as a result of future development that would occur under the Project, these modifications would not have a substantive permanent impact on County transportation facilities, such that they would impede the accomplishment of long-term transportation goals. Impacts to the circulation system that would occur as a result of a conflict with existing regulations brought on by the Project would be insignificant.

Mitigation Measures

Since the Project would not conflict with plans, ordinances, or policies addressing the circulation system, no mitigation is required.

Residual Impacts

The Project would not conflict with a plans, ordinances, or policies addressing the circulation system and impacts would be insignificant.

Criterion b) The Project would result in a significant impact if the Project would conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).

Impact T-2: The Project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

Construction

Consistent with CEQA Guidelines Section 15064.3(b), the Project is analyzed as a construction project for the purposes of VMT considerations, in that most vehicle trips generated by the future development of solar facilities as a result of the Project would occur during construction. The number of vehicle trips generated during construction cannot be quantified at this time. Construction activity at project sites would vary based on the type of solar energy system project. Tier 1 projects would individually result in minimal traffic and minimal site modification. However, installation of Tier 1 systems may require the use of cranes for loading equipment onto structures. Tier 2 and Tier 3 projects could require the transportation of sizeable equipment for ground-based systems and may also require the use of cranes or lifts in construction as well as forklifts for the unloading of solar equipment from freight vehicles. Tier 4 projects would be anticipated to require the same equipment as Tier 2 and Tier 3 projects but may also require site modification such as grading and excavating, for which additional personnel and equipment would result in additional temporary construction VMT. However, as indicated above, the analysis of VMT would only include cars and light trucks and would exclude trucks and/or heavy construction equipment.

Construction-related increases in VMT would occur intermittently throughout the County. In pre-project conditions, it would be reasonable to assume that the construction workers who would have constructed solar energy systems pursuant to implementation of the Project would be employed elsewhere on different project sites for which temporary construction VMT would be generated. Further, some systems would still be constructed without implementation of the Project. Based on lack of evidence to the contrary, this analysis assumes that, if the Project did not occur, future roadway conditions would include construction trips and VMT generation similar to what would occur if the Project were to be implemented. Though implementation of Tier 3 and Tier 4 solar facilities might introduce a slightly larger number of automobile trips than what would otherwise occur, the trips would still be relatively insignificant. While some construction workers might travel to the project sites from outside of the County, these trips would be minimal compared to pre-Project conditions. Project implementation alone would not introduce a large amount of VMT beyond what would occur otherwise. Therefore, construction resulting from implementation of the proposed Project would result in insignificant VMT impacts.

Operation and Maintenance

As discussed above under *VMT Methodology and Project Assumptions*, the VMT analysis for projects that are region-serving can compare the project's total VMT to existing VMT in the County. As the future solar energy systems and facilities that would be developed as a result of the Project would provide energy throughout the County and are therefore region-serving under the County's VMT criteria, operational VMT for the Project can be compared against existing VMT levels. The maintenance trips, which would be made by solar energy system and facility maintenance workers, would occur on a periodic basis between sites. Further, many Tier 1, Tier 2, and Tier 3 systems could require repair or maintenance far less frequently (potentially less than annually), relative to Tier 4 systems, for which performance monitoring would likely

result in periodic calibration or repair of system equipment. Larger facilities may require more continuous on-site presence from maintenance workers for operation and maintenance activities. Regardless, the overall anticipated operation and maintenance of systems developed as a result of the Project would not be anticipated to have a substantive impact on regional VMT as traffic levels associated with operation and maintenance of the solar facilities would not be large enough to require a quantitative analysis of traffic operations or VMT. Baseline VMT levels currently include maintenance activities that occur for existing solar energy systems in the County or in surrounding areas. There would not be a significant increase in VMT from the baseline condition, and operational impacts would be insignificant.

Mitigation Measures

Since the Project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b), no mitigation is required.

Residual Impacts

The Project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b) and impacts would be insignificant.

Criterion c) The Project would result in a significant impact if the Project would substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Impact T-3: The Project would not substantially increase hazards due to a geometric design feature or incompatible uses.

Construction, Operation, and Maintenance

The future solar energy systems and facilities that could occur as a result of the Project would not be anticipated to include design features or use vehicles with incompatible uses that would create hazardous conditions on roadways surrounding the Project sites.

Project driveways and internal access roads would be provided as part of the construction of the Tier 3 and Tier 4 solar facilities, and road access improvements may be required to provide safe ingress and egress from the adjacent or nearest road. In addition, and as needed, gates, security lighting, and signage would typically be required or installed at the site entrances, and fencing would be placed around the utility-scale solar facilities to ensure that no hazardous conditions are introduced by the future solar facilities. All such site improvements would be designed and constructed to County standards, ensuring maintained access for all modes of transportation near project sites. Further, proposed Tier 1 and Tier 2 facilities would occur in more urban areas where there would be less potential for incompatible uses such as rural roads with use by farm equipment, livestock, horseback riding, or residential roads with heavy pedestrian or recreational use. Periodic vehicle and truck maintenance activities would not introduce incompatible uses or interfere with existing site access. Therefore, the Project would result in insignificant impacts related to hazardous conditions from geometric design features or incompatible uses.

Mitigation Measures

Future development of solar facilities that would occur as a result of the Project would not substantially increase hazards due to a geometric design feature or incompatible uses. Therefore, no mitigation measures would be required.

Residual Impacts

The Project would not substantially increase hazards due to a geometric design feature or incompatible use and impacts would be insignificant.

Criterion d) The Project would result in a significant impact if the Project would result in inadequate emergency access.

Impact T-4: The Project could result in inadequate emergency access.

Construction, Operation, and Maintenance

All designated access roads would need to provide sufficient emergency access to the future solar facilities that would be developed as a result of the Project. Additional traffic during construction or operation of the solar facilities could have a significant impact on potential evacuation routes in an emergency if the additional traffic would affect the ability of evacuating vehicles near the site to leave and emergency vehicles to circulate to and from the sites, particularly in or near Single Egress Residential Developments and rural areas where there may be limited road connectivity and capacity. Currently, the County requires a Traffic Control Plan for solar projects in the Utility-Scale Solar Photovoltaic Overlay area. While the overlay will be removed, the requirement for a Traffic Control Plan would be retained for community-scale (Tier 3) and utility-scale (Tier 4) facilities. However, Tier 2 facilities could be up to 5 acres in size and as such could result in potentially significant impacts during construction if road detours or closures were to occur. Therefore, a Traffic Control Plan, as described under Mitigation Measure T-1 for Tier 2 would be warranted, if determined necessary, to ensure construction impacts would be insignificant. The Traffic Control Plan, which would apply to Tiers 2, 3, and 4, would be submitted to the County and approved by the Public Works Transportation Division. The Traffic Control Plan would address emergency access to ensure that evacuating vehicles and emergency vehicles would be able to adequately bypass traffic associated with construction of the solar facilities during all phases due to the limited nature of vehicle traffic on extensive County roadways during construction and operation. Access road improvements would be implemented, as necessary to meet emergency access requirements, before the solar facility operation. Therefore, though emergency access would be maintained through all phases of a future solar energy project, the impact would be potentially significant.

Mitigation Measures

Mitigation Measure T-1: Construction Traffic Control Plan. As required by the County for Tier 3 and 4 solar facilities and as determined necessary for Tier 2 solar systems, the applicant shall prepare and implement a traffic control plan to reduce construction-related impacts on roadway operation, safety hazards, alternative transportation, parking, and emergency access. Construction traffic control plans typically include the following components, which shall be included as necessary depending on the scale of the project:

1. A street layout showing the location of construction activity and surrounding streets that designates detour routes to avoid or minimize to the extent practicable travel on residential or neighborhood streets, including special signage.
2. A tentative start date and construction duration period for each phase of construction.
3. The name, address, and emergency contact number for those responsible for maintaining the traffic control devices during the course of construction.

Additionally, the construction traffic control plan should include the following components, as necessary:

1. Provide access for emergency vehicles at all times.
2. Avoid creating additional delay at intersections currently operating at congested conditions, either by choosing routes that avoid these locations or limiting construction activities to nonpeak hours.
3. Maintain access for driveways and private roads, except for brief periods of construction, in which case property owners will be notified.
4. Provide adequate off-street parking areas at designated staging areas for construction-related vehicles.
5. Maintain pedestrian and bicycle access and circulation during construction where safe to do so. If construction encroaches a sidewalk, a safe detour will be provided for pedestrians at the nearest crosswalk. If construction encroaches on a bike lane, warning signs will be posted that indicate bicycles and vehicles are sharing the roadway.
6. Use traffic controls that include flag persons wearing Occupational Safety and Health Administration-approved vests and using a “Stop/Slow” paddle to warn motorists of construction activity.
7. Maintain access to transit services and ensure that public transit vehicles are detoured.
8. Post standard construction warning signs in advance of the construction area and at any intersection that provides access to the construction area.
9. Post construction warning signs in accordance with local standards or those set forth in the California MUTCD (Caltrans 2010) in advance of the construction area and at any intersection that provides access to the construction area.
10. During lane closures, notify local police and fire departments, Sheriff, and Office of Emergency Management of construction locations to ensure that alternative evacuation and emergency routes are designed to maintain response times during construction periods, if necessary.
11. Provide written notification to contractors regarding appropriate routes to and from construction sites, and weight and speed limits for local roads used to access construction sites. Submit a copy of all such written notifications to the local agencies with jurisdiction.

Residual Impacts

Implementation of MM T-1 would reduce potential impacts related to emergency access to insignificant.

3.11.5 Cumulative Impacts Analysis

Project impacts along with potential impacts from past, present, and reasonably foreseeable future projects inform the cumulative impacts analysis. Such cumulative projects range from the Countywide Recreation Master Plan, the County's 2023-2031 Housing Element, to the Agricultural Enterprise Ordinance. In addition, although concentrated within urban areas, countywide growth of a projected 26,000 units in the eight cities and unincorporated urban areas of the County could increase travel within the County, including through the rural lands on roads such as U.S. Highway 101 and SR 154.

Future solar facilities, in combination with related projects in the County, would not result in a cumulative conflict with relevant programs, plans, ordinances, or policies addressing the circulation system. The Project would not conflict with the County's transportation system, and would not introduce significant long-term vehicle traffic from employees or residents that, combined with the future increase in County traffic from other projects, would conflict with transportation goals and improvements.

Concurrent development of the solar facilities that would occur as a result of the Project combined with pending or approved planning projects, and residential, commercial, and agricultural development within or adjacent to the sites would increase countywide VMT and could exacerbate hazardous traffic conditions. In particular, the growth anticipated under the County's Housing Element, along with Housing Elements for incorporated cities, have the potential to generate substantial VMT throughout the County, with particular increases in traffic along commuter highways that traverse the rural areas such as U.S. Highway 101 through the Gaviota Coast, Buellton, and Santa Ynez Valley.

This generation of substantial VMT has the potential to combine with traffic generated by implementation of the Project. However, as described for Impact T-2, VMT generated by the future solar development that could occur as a result of the Project would not be anticipated to have a substantive impact on regional VMT. Thus, the operation of solar energy systems developed pursuant to implementation of the Project would not be anticipated to have a cumulatively considerable impact.

As described for Impact T-3, solar energy systems and facilities developed pursuant to implementation of the Project would not be anticipated to require improvements to transportation infrastructure that would result in hazardous conditions, based on the nature of solar energy system projects. Further, solar energy system and facility projects would not have project attributes that would be incompatible with other types of land uses in the County. Regarding emergency access, the Project, in conjunction with cumulative development projects, would be assessed on an individual project basis to determine that adequate site access is provided and that all projects would comply with County and fire department road development standards. Additionally, a construction traffic control plan would be implemented as required under MM T-1, as applicable. Therefore, with mitigation as proposed, the Project would not contribute to cumulatively significant transportation impacts.

3.12 Utilities and Service Systems

3.12.1 Introduction

This section describes potential impacts on utilities and service systems, as related to future solar facilities enabled under the Project. Utilities analyzed in this section include water, wastewater, electricity, natural gas and telecommunications, and solid waste. The information and analysis in this section are based on information in existing plans as well as previous studies and EIRs. Lands under federal jurisdiction (such as the Los Padres National Forest and Vandenberg Space Force Base) are not included in the study area. State lands, including those of the University of California, Santa Barbara (UCSB), are also excluded from consideration as these lands are not subject to County land use plan requirements.

During the public scoping period, the County received comments from the City of Carpinteria pertaining to the Project's potential direct and cumulative impacts on water supply as well as potential implications to regional efforts under the Sustainable Groundwater Management Act.

3.12.2 Environmental Setting

Water Infrastructure and Supply

Communities in the county rely on a range of water supplies. Some communities receive surface water, including source supplies from the State Water Project (SWP) and Santa Ynez River; others rely more on groundwater. Most communities receive both treated surface and groundwater. Desalinated ocean water is also used to provide a small portion of the county's water supply. The Montecito Water District receives deliveries of 117 acre-feet per month of desalinated water produced by the Charles E. Meyer Desalination Plant, owned and operated by the City of Santa Barbara (MWD 2025).

Water Purveyors

Water supply services in the unincorporated regions of the county are provided by sixteen water purveyors consisting of municipal agencies, special districts, and private water companies. **Table 3.12-1**, *Water Service Providers and Supply in Santa Barbara County*, describes the providers and information regarding water supply. Approximately 75 percent of the water is sourced through groundwater supplies. Approximately 25 percent of the county's municipal water supply is sourced from surface water supplies, with 15 percent of this sourced from local reservoirs, and the remaining 10 percent purchased or imported water from the SWP (County of Santa Barbara 2019a).

Groundwater

Groundwater has historically accounted for the highest proportion of water use in the County, supplying approximately 75 percent of domestic, commercial, industrial, and agricultural water, according to the County's Integrated Regional Water Management Plan (IRWMP). Fluctuations in groundwater levels correspond to variations in weather patterns, with water levels increasing in wet years and decreasing in drought years. Some communities in the IRWMP region are relatively more dependent on groundwater, including Cuyama Valley, Los Alamos, Mission Hills, Vandenberg Village, and Lompoc.

TABLE 3.12-1
WATER SERVICE PROVIDERS AND SUPPLY IN SANTA BARBARA COUNTY

Water Supplier	Source Proportion	Source of Water Supply
Carpinteria Valley Water District	Surface water (81%) Groundwater (19%)	SWP; Cachuma Project; Carpinteria Valley GW Basin
City of Buellton	Groundwater (80%) Purchased water (20%)	Buellton Upland and Santa Ynez Riparian GW Basins; SWP
City of Guadalupe	Purchased water (55%) Groundwater (45%)	SWP; Santa Maria Valley GW Basin
City of Lompoc	Groundwater (100%)	Lompoc GW Basin
City of Santa Barbara	Surface water (64%) Desalination (26%) Recycled water (9%) Groundwater (2%)	Cachuma Project; Gibraltar Reservoir, Devils Canyon Creek, Mission Tunnel, recycled wastewater; desalination; Santa Barbara GW Basin; Foothill GW Basin
City of Santa Maria	Twitchell Yield (39%) Purchased water (29%) Groundwater (14%)	Twitchell Reservoir; SWP; Santa Maria GW Basin
City of Solvang	Purchased water (69%) Groundwater (31%)	SWP; Santa Ynez (Upland and Riparian) GW Basins
Golden State Water District - Orcutt	Groundwater (88%) Purchased water (12%)	Santa Maria GW Basin; SWP
Goleta Water District	Surface water (81%) Groundwater (7%) Recycled water (7%) Purchased water (5%)	Cachuma Project; Goleta North/Central GW Basin; SWP; Goleta Water (recycled water)
La Cumbre Mutual Water Company	Groundwater (54%) Purchased water (46%)	Goleta North/Central Groundwater Basin, Foothill Groundwater Basin, and SWP
Cuyama CSD	Groundwater (100%)	Cuyama Valley GW Basin
Los Alamos CSD	Groundwater (100%)	San Antonio GW Basin
Mission Hills CSD	Groundwater (100%)	Lompoc GW Basin
Montecito Water District	Surface water (63%) Desalination (32%) Groundwater (5%)	Jameson Lake, Fox and Alder Creeks, Doulton Tunnel, Montecito GW Basin; desalination
Santa Ynez River Water Conservation District, Improvement District 1	Purchased water (60%) Groundwater (40%)	Cachuma Project, SWP, Santa Ynez (Upland and Riparian) Basins
Vandenberg Village CSD	Groundwater (100%)	Lompoc GW Basin

NOTE: Water supply source proportion estimates are rounded to the nearest percentage point.

SOURCES: County of Santa Barbara Integrated Regional Water Management Plan 2019a, Agriculture Enterprise Ordinance Environmental Impact Report 2024a, Montecito Water District 2025.

Groundwater is managed at the basin level mostly by groundwater sustainability agencies (GSAs), consistent with the Sustainable Groundwater Management Act requirements. GSAs have formed for all high- and medium-priority groundwater basins in the County. There are also a few adjudicated groundwater basins in the County not managed by a GSA. These include the Goleta, Foothill, and Santa Barbara groundwater basins. The basins in the county with adopted groundwater management plans include Buellton Uplands, Carpinteria, Cuyama Valley, Montecito, and the San Antonio Creek Valley, and the Santa Ynez River groundwater basins. Santa Barbara County Water Agency monitors groundwater conditions by collecting data on groundwater levels, generally located on unincorporated County lands. **Table 3.12-2**, *Groundwater in Santa Barbara County*, summarizes the groundwater basins in the County, basin prioritization, and the status of the GSPs, as applicable.

TABLE 3.12-2
GROUNDWATER IN SANTA BARBARA COUNTY

Groundwater Basin	SGMA Basin Prioritization	GSP Status	DWR Bulletin 118 Basin No.
Carpinteria	High	Submitted February 2024. In review.	3-018
Montecito	Medium	Submitted May 2023. In review	3-049
Santa Barbara	Very Low	N/A – adjudicated	3-017
Foothill	Very Low	N/A	3-053
Goleta	Very Low	N/A adjudicated	3-016
Santa Ynez River Valley	Medium	Approved January 18, 2024.	3-015
San Antonio Creek Valley	Medium	Approved January 18, 2024	3-014
Santa Maria Valley	Very Low	N/A adjudicated	3-012
Cuyama Valley	High (critically over drafted)	Approved May 23, 2023.	3-013

NOTE: N/A= not applicable. Adjudicated groundwater basins are not subject to SGMA requirements.
SOURCES: County of Santa Barbara Water Agency 2024a.

Most groundwater basins in the County have historically been in overdraft conditions, although a few are balanced or have experienced a surplus during recent wet years. Recent water level measurements indicate that starting in 2018, the rate of decline has decreased, or water levels have increased in most basins. Groundwater levels in south coast basins remain above historic lows. Gains in groundwater storage for various basins have also occurred over several recent wet rain years (County of Santa Barbara 2024a).

Surface Water Storage

Four major reservoirs in the County are managed for water supply, groundwater recharge, flood control, recreation, and ecological purposes. Most of the surface water supplies used in the Southern portion of the County are along the Santa Ynez River. These are Lake Cachuma, Gibraltar Reservoir, and Jameson Reservoir. In recent years, all of these reservoirs have experienced a decrease in storage capacity due to sedimentation. Situated in the Santa Ynez Mountains, Lake Cachuma was designed as a gravity flow system and has a current (2025) storage capacity of 193,305-acre feet (COMB 2025). This represents a capacity reduction of more than 10 percent from its initial design capacity when constructed in 1956. Siltation at the lower intake gate has impeded the functionality of the gravity system in recent years. Gibraltar Reservoir, owned and operated by the City of Santa Barbara, is the source of about one-third of

the City of Santa Barbara's water supply. Jameson Reservoir has a storage capacity of 4,587 acre-feet and accounts for, on average, approximately 20 to 30 percent of the water supply for the unincorporated communities of Montecito and Summerland. Twitchell Reservoir, under federal ownership, is managed by the Santa Maria Water Conservation District. The reservoir and dam were designed to provide the Santa Maria Valley with water, while also providing flood protection. However, in recent years, sedimentation has increased, leading to a reduced capacity. Efforts are currently underway to ensure the continued safe operation of the reservoir's water release works and extend the useful life of the reservoir (County of Santa Barbara 2019a; Montecito WD 2025).

Wastewater

In accordance with the California Water Code and the State Water Resources Control Board (SWRCB), the Central Coast Regional Water Quality Control Board (RWQCB) issues discharge permits for municipalities and special districts that operate wastewater treatment plants (WWTPs). County or incorporated city service districts manage all of the individually operated septic or on-site wastewater treatment systems (OWTS). The County delegates the management of wastewater systems to 16 wastewater service providers/districts, which serve at least some portion of unincorporated County lands (mostly within urbanized areas) within each district or treat wastewater collected by neighboring districts. In addition, there are Community Service Districts (CSDs) not affiliated with city or county operations that include the Cuyama CSD, Los Alamos CSD, Mission Hills CSD, Montecito CSD, and Summerland Sanitary District. Of the WWTPs that serve the unincorporated areas of the County, each is operating within its permitted capacity, and the systems currently operate on average at 57.5 percent of the overall permitted treatment capacity of all facilities (County of Santa Barbara 2024b).

Stormwater Drainage

The County maintains maps depicting public and private storm drain facilities, including creeks and infrastructure within the unincorporated urban areas of Santa Barbara County. Storm drains typically flow into creeks that have already passed through a variety of land uses, including open space, agricultural, urban, and industrial. The County-Wide Integrated Stormwater Resource Plan is a watershed-based plan intended to improve stormwater management in the County, which recognizes stormwater as a resource for the enhancement of water supply reliability (County of Santa Barbara 2021).

Electric Power, Natural Gas, and Telecommunications

Electric Power

Santa Barbara County is located in portions of two electrical utility service areas: Pacific Gas and Electric Company (PG&E) serves the northwestern portion of the county (including Santa Ynez, Los Alamos, Los Olivos, Buellton, Santa Maria, and Vandenberg Village); and Southern California Edison (SCE) serves most of the south coast (including Goleta Valley, Santa Barbara, Montecito, Summerland, and Carpinteria). The City of Lompoc provides power through its own electric division.

The split in the County electrical transmission grids (between PG&E and SCE) has several consequences. Reliability and backup capability are reduced due to the County being located at the end of each utility's network of transmission lines. With that position, any major grid disruption, whether planned as a preventative measure or unplanned due to natural or human-caused disaster, is likely to result in loss of

electrical service to county residents. Additionally, most of the electricity enters the county from only one direction in the north in PG&E's service area (the Diablo Canyon nuclear generation plant) and from the south in SCE's service area. As a result, a small number of extremely important transmission lines are essential to maintaining the power supply to the whole county (County of Santa Barbara 2019b).

Electrical transmission lines are under the jurisdiction of the California Public Utilities Commission (CPUC) and the California Energy Commission (CEC). The transmission grid is designed to carry electricity over large distances, connecting large utility-scale power plants to load centers, such as cities, businesses, and residential communities. The transmission lines can conduct more power at higher voltages (220 kilovolts [kV] and 115 kV), compared to lower voltage lines, while also reducing transmission power losses across distances. Substations and switchyards serve to transform or step down the voltages (to 60/66 kV level) to convey electricity to the regional and local distribution grid, powering homes and businesses.

Natural Gas

Natural gas services within the county are provided entirely through Southern California Gas Company (SoCalGas). SoCalGas is the largest distributor of natural gas in the United States, serving more than 21 million consumers across 24,000 square miles of Central and Southern California. In addition to the traditionally produced natural gas, SoCalGas now has contracts in place to procure renewable natural gas converted from organic waste products distributed through its pipeline network (SoCalGas 2025).

Telecommunications

Telecommunications providers in the County include Frontier Communications, Comcast Cable Management, LLC, Cox Communications, Starlink, Xfinity, Verizon, T-Mobile, AT&T, HughesNet, Advanced Wireless, Viasat, and a variety of other internet service providers. Santa Barbara County is currently developing a broadband network to provide last-mile fiber optic telecommunications within utility easements in the county (SBCAG 2024).

Solid Waste Management

County Resource Recovery and Waste Management Division

The County Public Works Department Division of Resource Recovery and Waste Management (RRWMD) is responsible for planning and implementing waste collection and recycling programs in the County. The RRWMD provides an integrated system for managing waste comprised of recycling and green-waste collection; programs for residential and small business hazardous waste; safe collection of sharps and pharmaceuticals; electronic waste collection and recycling; and public education. RRWMD operates four recycling and transfer stations, one household hazardous waste collection center, the Tajiguas Landfill, and handles the administration of 10 closed landfills. In addition, the RRWMD is responsible for administering the franchise agreements for the collection of solid waste materials from residents and businesses in the unincorporated areas of the County by private solid waste collection firms, and enforcement of local solid waste management rules.

Waste Processing and Disposal Facilities

There are three active landfills within the unincorporated County: the County-owned and operated Tajiguas Landfill (located on the Gaviota Coast), the City of Santa Maria Regional Landfill, and the City of Lompoc

Landfill. In addition to these landfills, residents and businesses are served by several regional recycling and transfer stations. **Table 3.12-3**, *Solid Waste Facilities in Santa Barbara County*, summarizes the County's solid waste facilities, including permitted and remaining capacities and acceptable waste types.

TABLE 3.12-3
SOLID WASTE FACILITIES IN SANTA BARBARA COUNTY

Waste Facility	Max Permitted Capacity	Maximum Permitted Throughput	Remaining Capacity	Acceptable Waste Types
Tajiguas Landfill	23,300,000 cy	1,500 tpd	1,944,330 cy	Tires, sludge, mixed municipal, industrial, C&D, asbestos, agricultural
Santa Maria Regional Landfill	15,278,400 cy	8,820 tpw	2,845,000 cy	Tires, shreds, tires, cut, mixed municipal, metals, industrial, green materials, C&D, agricultural
City of Lompoc Sanitary Landfill	7,970,000 cy	400 tpd	1,139,600 cy	Mixed municipal, C&D
South Coast Recycling and Transfer Station	595 tpd	550 tpd	NA	Agricultural, mixed municipal, C&D, tires
Santa Ynez Valley Recycling and Transfer Station	320 tpd	212 tpd	NA	Wood waste, mixed municipal, metals, green materials, C&D
New Cuyama Transfer Station	302 cy	8 tpd	NA	Mixed municipal
Ventucopa Transfer Station	89 cy	5 tpd	NA	Mixed municipal

NOTES: cy= cubic yards; tpd= tons per day; tpw= tons per week; C&D= construction and demolition debris; NA=not applicable; remaining capacity data is not applicable to transfer stations.

SOURCE: California Department of Resources Recycling and Recovery, 2025a-f

3.12.3 Regulatory Framework

Federal

Energy Policy Act

The Energy Policy Act, codified in 42 U.S. Code, Section 13201 et seq. was established in 2005 to ensure jobs for the future with secure, affordable, and reliable energy. The Act addresses energy production in the United States, including energy efficiency, renewable energy, oil and gas, coal, tribal energy, nuclear matters and security, vehicles and motor fuels, hydrogen, electricity, energy tax incentives, hydropower, geothermal energy, and climate change technology (GovInfo 2005). Title II of the Act applies to renewable energy.

State

SB 610 Water Supply Assessment

Senate Bill 610 (SB 610), codified in Chapter 643, Statutes of 2001 amended state law, effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by counties and cities in California. The statute requires detailed information regarding water availability to be provided to the city and county decision-makers prior to approval of specified large development projects. The statute also requires detailed information to be included in the administrative

record that serves as the evidentiary basis for an approval action by the city or county on such projects. The measure recognizes local control and decision-making regarding the availability of water for projects and the approval of projects. Under SB 610, water supply assessments (WSAs) must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined by Water Code 10912 [a]) subject to CEQA. For the purposes of this section of the state Water Code, a "project" means any of the following:

(1) A proposed residential development of more than 500 dwelling units.

(2) A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.

(3) A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.

(4) A proposed hotel or motel, or both, having more than 500 rooms.

(5) A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.

(6) A mixed-use project that includes one or more of the projects specified in this subdivision.

(7) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

Among the "project types" subject to SB 610 WSA requirements are those that would occupy more than 40 acres or demand an amount of water equivalent to or greater than the amount of water required for a 500 dwelling unit project. Depending on the size and the estimated water demand, SB 610 water supply assessment requirements may be applicable to the development of utility-scale solar facilities.

Sustainable Groundwater Management Act

In 2014, the Sustainable Groundwater Management Act (SGMA) was signed into law by Governor Brown. SGMA requires governments and water agencies of high and medium priority groundwater basins to manage overdrafting to bring the basins to balanced levels of pumping and recharge. SGMA empowers local agencies to form Groundwater Sustainability Agencies to manage basins and requires development and implementation of Groundwater Sustainability Plans for high- and medium-priority groundwater basins in California.

California Government Code 4216 Regional Notification System

Section 4216 of the California Government Code protects underground structures during excavation. Under this law, excavators are required to contact a regional notification center at least 2 days prior to excavation of any subsurface installations. In the Project area, Underground Service Alert of Southern California (DigAlert) is the regional notification center.

California Public Utilities Commission General Order 131(E)

The California Public Utilities Commission (CPUC) revised its rules in January 2025 related to the planning and construction of electric generation, transmission, power, and distribution line facilities, and substations located in California. Pursuant to Section III.C of General Order 131(E) (with limited exceptions), a permit to construct is not required for the construction of electrical distribution lines or

substation or switchyard expansion, upgrade, or modification with a high side voltage under 50 kilovolts (kV). However, for projects described in Section III.C.1 of the General Order, "to ensure safety and compliance with local building standards, the utility must first communicate with, and request the input of, local authorities regarding land use matters and obtain any non-discretionary local permits required for the construction and operation of these projects" (CPUC 2025). Power lines designed to operate between 50 and 200 kV are under the CPUC's jurisdiction. The CPUC's local consultation requirement would apply to interconnections to the public electrical grid.

California Integrated Waste Management Act

The Integrated Waste Management Act of 1989 as amended and codified in Public Resources Code Section 40050 et seq. was enacted to reduce, recycle, and reuse solid waste generated in the state. The Act requires all California cities, and unincorporated portions of counties, and approved regional solid waste management agencies to divert 50 percent of the total waste stream from landfill disposal and requires each city and county to promote source reduction, recycling, and safe disposal or transformation. The Act resulted in the creation of the California Integrated Waste Management Board, which is now known as the California Department of Resources Recycling and Recovery (CalRecycle). The Act also establishes a comprehensive statewide system of permitting, inspections, and maintenance for solid waste facilities, and authorizes local jurisdictions to impose fees based on the types and amounts of waste generated.

Title 22 Universal Waste Rules

Title 22 of the California Code of Regulations (CCR) discusses an array of requirements with respect to the disposal and recycling of hazardous and universal wastes. Specific standards and requirements are included for the identification, collection, transport, disposal, and recycling of hazardous wastes. Additional standards are included for the collection, transport, disposal, and recycling of universal wastes, where universal wastes are defined as those wastes identified in Section 66273.9 of Title 22 CCR, including batteries, electronic devices, mercury-containing equipment, lamps, cathode ray tubes, and aerosol cans. Requirements include recycling, recovery, returning spent items to the manufacturer, or disposal at an appropriately permitted facility. Division 4.5 of Title 22 also provides restrictions and standards relevant to waste destination facilities and provides authorization requirements for various waste handlers. Title 22 includes California's Universal Waste Rule, along with other requirements for waste handling and disposal.

Construction and Demolition Waste Materials Diversion Requirements

Signed in 2002, the Construction and Demolition Waste Materials Diversion Requirements (SB 1374) were codified in PRC Section 42919. SB 1374 requires that jurisdictions include in their annual AB 939 report a summary of the progress made in diverting construction and demolition solid waste. The legislation also requires that CalRecycle adopt a model ordinance for diverting 50 to 75 percent of all construction and demolition waste from landfills (CalRecycle 2023).

Title 24 California Green Building Standards

Part 11 of Title 24, the title that regulates the design and construction of buildings, establishes the California Green Building Standards (CalGreen) Code. The purpose of the CalGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts and encouraging sustainable construction practices in the following categories: Planning and design, energy efficiency, water efficiency and conservation, material conservation and

resource efficiency, and environmental quality. The CalGreen Code establishes minimum standards to be met before a building can be approved. CalGreen Code mandates locally permitted new building construction, demolition, certain additions, and alteration projects to recycle and or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition debris generated during the cycle of a project.

Title 27 California Code of Regulations

Title 27 CCR defines regulations for the treatment, storage, processing, and disposal of solid waste. The State Water Resources Control Board maintains and regulates compliance with CCR Title 27. Compliance with Title 27 would be enforced by the Central Coast Regional Water Quality Control Board (Region 3).

California Health and Safety Code Section 25150.7

The state requirements for the use, reuse, handling, and disposal of treated wood waste are identified in the California Health and Safety Code Section 25150.7 to ensure the protection of public health and the environment.

Local

Strategic Energy Plan for Santa Barbara County

In 2018, the County took the initiative to commission a county-wide Strategic Energy Plan (SEP). The goal of the SEP is to develop strategies to tackle community-wide barriers to local renewable development, as well as to identify high-priority sites for distributed and utility-scale renewable energy development, thereby improving electricity reliability and resiliency for residents and businesses in the County. The Cities of Goleta and Carpinteria chose to join this initiative to support these objectives while also addressing their own local goals (County of Santa Barbara 2019b). The County's SEP is central to the Project objectives, described in Chapter 2.

In addition to the SEP, the County has developed a climate action plan (CAP) to establish achievable goals and measurable actions to reduce greenhouse gas emissions in the unincorporated areas of the County. As described in Section 3.7, *Greenhouse Gas Emissions*, California has established goals to achieve 100 percent carbon-free electricity by 2045 and to reduce GHG emissions to 80 percent below 1990 levels by 2050. At a local level, the County has a near-term target of 50 percent below 2018 levels by 2030 (County of Santa Barbara 2024c).

Santa Barbara County Comprehensive Plan

The County's Comprehensive Plan contains a number of policies related to utilities and service systems. These are included in the Coastal Land Use Plan, Land Use Element, Conservation Element, and Energy Element, as described below.

Coastal Land Use Plan

The County's Coastal Land Use Plan (CLUP) contains goals, policies and objectives adopted to ensure adequate provision of public facilities.

> ***Policy 2-6*:** Prior to issuance of a development permit, the County shall make the finding, based on information provided by environmental documents, staff analysis, and the applicant, that

adequate public or private services and resources (e.g., water, sewer, roads) are available to serve the proposed development.

Land Use Element

The Comprehensive Plan Land Use Element, as amended in 2024, contains development policies applicable to the Project's utilities and service systems analysis (County of Santa Barbara 2024c).

> ***Land Use Development Policy 4*:** Prior to issuance of a development permit, the County shall make the finding, based on information provided by environmental documents, staff analysis, and the applicant, that adequate public or private services and resources (i.e., water, sewer, roads, etc.) are available to serve the proposed development. The applicant shall assume full responsibility for costs incurred in service extensions or improvements that are required as a result of the proposed project.
>
> ***Land Use Development Policy 5*:** Within designated urban areas, new development other than that for agricultural purposes shall be serviced by the appropriate public sewer and water district or an existing mutual water company if such service is available.

Conservation Element

The Conservation Element of the County's Comprehensive Plan contains the following recommendations related to water resources and land development (County of Santa Barbara 2010).

- The County and the cities should support the Regional Water Quality Control Board in its establishment of discharge requirements for point source waste discharges, to protect surface and groundwater supplies.
- The use of streams from which groundwater recharge takes place should be regulated to ensure that the recharge capability of the channels is not impaired.
- Land use and development upstream from surface reservoirs should be regulated and monitored by the County Department of Public Works and the County Planning & Development (P&D) Department to minimize the production of water-polluting wastes.
- The County should initiate a study of land development in areas relying on septic tanks to assess the impact of alternate densities on water quality.
- Based on the adopted Water Quality Control Plan for the Central Coastal Region, the County and the cities should review their policies for the protection of local water resources to determine what changes may be necessary.

Energy Element

The Energy Element of the County's Comprehensive Plan contains long-term planning guidelines to encourage energy efficiency and the long-term use of alternative energy sources in the County (County of Santa Barbara 2024d). The following policies related to resource efficiency and recycling are pertinent to the Project.

> ***Policy 4.1*: *Construction*.** Encourage recycling and reuse of construction waste to reduce energy consumption associated with extracting and manufacturing virgin materials.
>
> ***Policy 4.2*: *Recycled Materials*.** The County shall require adequate areas for collecting and loading recyclable materials in development projects, and shall further address recycling logistics in its zoning ordinance.

***Policy 4.3*: *Reuse of Asphalt*.** Promote reuse of asphalt removed from roads and paved structures within the county and use of recycled materials in roadway and paved surface construction.

***Policy 4.4*: *Procurement of Recycled Products*.** The County shall procure products made from recycled materials to the maximum extent feasible, and as budget constraints allow.

***Policy 4.5*: *Waste Collection and Recycling Programs*.** The County shall continue to support the programs associated with efficient waste collection and recycling, public school education, and composting.

***Policy 4.6*: *Water/Energy-Efficient Irrigation – Agriculture*.** The County shall continue to support the programs of the Soil Conservation Service, Resource Conservation District, U.C. Cooperative Extension/Farm Advisor, utility companies, and others that address efficient irrigation because of their associated energy benefits.

***Policy 4.7*: *Interior Water-Efficient Plumbing Fixtures*.** The County shall encourage water purveyors and water customers to continue their efforts to install more efficient options to increase energy benefits associated with reduced pumping, distribution, heating and treatment of water and wastewater.

***Policy 4.8*: *Water Efficient Landscaping*.** The County shall require (per Government Code, Section 65590, Article 10.8) water-efficient landscape design and irrigation systems in new and renovated developments and at public parks and facilities. [Energy-savings are accrued through reduced water pumping and treatment, and reduced disposal and maintenance.]

Community Plans

In addition to the Comprehensive and Coastal Land Use Plan policies described above, some community plans have additional goals or policies specific to utilities. These additional goals and policies are presented below.

Eastern Goleta Valley Community Plan

The Eastern Goleta Valley Community Plan contains the following goal, objectives and policies related to water, wastewater and solid waste management (County of Santa Barbara 2017).

Goal 6: Water is conserved, and wastewater treatment and solid waste management systems are designed and managed sustainably.

Objective WAT-EGV-1: Maintain an adequate, safe water supply and protect groundwater basins from overdraft and quality degradation.

***Policy WAT-EGV-1.1*:** For projects that would result in a net increase in water use, there shall be a sufficient supply of water to serve existing commitments plus the proposed project.

***Policy WAT-EGV-1.2*:** The County, in its land use planning decisions, shall consider the most recent water resources analyses for all areas served by the Goleta Water District and local purveyors. The County shall work cooperatively with the Goleta Water District and local purveyors in the review of development proposals.

***Policy WAT-EGV-1.3*:** When applicable, the County shall grant permits only if the long-term potable water supplies of the agency that would serve a project are determined by that agency to be sufficient to meet new demand. The provision of water service to new customers shall not compromise existing customers or the maintenance of required drought buffers,

consistent with the water provider's legislative and/or regulatory requirements, the 1991 and 1994 SAFE Water Supplies Ordinances of the Goleta Water District, and the Wright Judgment. County permits shall be granted following completion of the water service application process overseen by the appropriate water provider.

***Policy WAT-EGV-1.4*:** (INLAND) Efforts to comprehensively monitor the condition of private wells shall be encouraged.

***Policy WAT-EGV-1.4*:** (COASTAL) The County shall protect the quality and quantity of groundwater resources. New groundwater wells and replacement wells that are not intended to serve agricultural purposes shall not be permitted where the project site can be or is already serviced by a public water district or an existing mutual water company. All new groundwater wells or replacement wells shall be metered and water use shall be monitored by the property owner and reported to the County.

***Policy WAT-EGV-1.5*:** Groundwater recharge areas shall be protected from the adverse effects of urban and non-urban land uses.

***Policy WAT-EGV-1.6*:** (INLAND) Creek channelization or other impermeable paving which significantly reduces groundwater recharge shall be discouraged.

Objective WAT-EGV-2: Ensure water use efficiency.

***Policy WAT-EGV-2.1*:** In order to minimize water demand, development shall utilize water conserving landscaping and low flow irrigation and plumbing to the maximum extent feasible.

***Policy WAT-EGV-2.2*:** Water-conserving plumbing devices shall be required of discretionary development.

***Policy WAT-EGV-2.3*:** The County may grant discretionary permits for development using desalinated water only if the source of desalination is from an established public water purveyor. Desalinated water from private sources designed to serve a single project or geographic area within service boundaries of established public water purveyors shall not be a source of water for approvable development.

Objective WAT-EGV-3: Encourage the use of recycled/reclaimed water sources where safe and efficient.

Objective WW-EGV-1: Ensure wastewater is treated, and is safe for local watershed ecosystems.

***Policy WW-EGV-1.1*:** To ensure wastewater achieves a level of treatment to best ensure public health and welfare, development shall connect to the sewer system of the respective sanitary district wherever feasible.

Objective RRC-EGV-1: Maximize solid waste diversion and minimize solid waste generation.

***Policy RRC-EGV-1.1*:** Opportunities for resource recovery and landfill solid waste diversion shall be provided.

Gaviota Coast Plan

The Gaviota Coast Plan contains the following policies and development standards related to infrastructure, water, wastewater, and solid waste (County of Santa Barbara 2016). For a discussion of energy policies, including those related to renewable energy production facilities, see Section 3.6, Energy.

f. Infrastructure Policies

***Policy TEI-13*: *Wastewater Treatment*.** Development and infrastructure shall achieve a level of wastewater treatment compatible with local and State guidelines, in order to best serve the public health and welfare.

***Policy TEI-14*: *Surface and Groundwater Pollution*.** Pollution of surface and groundwater shall be avoided. Where contribution of potential pollutants of any kind is not prohibited and cannot be avoided, such contribution shall be minimized to the maximum extent practical.

***Policy TEI-16*: *Tajiguas Landfill*.** *(INLAND)* Any changes to operations at the Tajiguas Landfill necessary for the management of our community's solid waste should strive to reduce environmental impacts to the Gaviota Coast Plan Area. To reduce impacts, waste delivered to the Tajiguas Landfill should be consolidated and the landfill should only accept waste generated from communities within Santa Barbara County. The County should pursue additional resource recovery projects/programs prior to, or concurrent with, any plan to expand municipal solid waste disposal capacity through landfilling.

***Policy TEI-17*: *Service Extensions*.** Annexation to a water or sanitary district or extensions of sewer lines shall not be permitted within the Plan area unless required to prevent adverse impacts on an environmentally sensitive habitat, or to protect public health.

***Policy TEI-18*: *Water Wells*.** *(COASTAL)* New groundwater wells and replacement wells that are not intended to serve agricultural purposes shall not be permitted where the project site is already serviced by a public water district or an existing mutual water company.

h. Infrastructure Development Standards

***Dev Std TEI-2*: *Onsite Wastewater Treatment Systems*.** Onsite wastewater treatment systems (OWTS) shall comply with the Santa Barbara County Local Agency Management Program (LAMP), Chapter 18C of the County Code and where applicable, Regional Water Quality Control Board standards. Adherence to these standards and applicable zoning regulations shall constitute a finding of consistency with Land Use Development Policy 4 and Coastal Land Use Plan Policy 2-6.

***Dev Std TEI-6*: *Groundwater Effluence*.** Measures to decrease the amount of nitrates filtering through soil to groundwater shall be required, such as the following:

1. Shallow-rooted non-invasive plants (maximum root depth of four feet) shall be planted above all leach fields to encourage evapotranspiration of effluent and uptake of nitrates. Impervious surfaces, such as paved driveways, shall not be constructed above leach fields. If site constraints require a driveway to be located above a leach field in order to ensure reasonable use of the property, turf block or other suitable pervious surface shall be used.

***Dev Std TEI-7*: *Onsite Wastewater Treatment System Locations*.** (INLAND) Onsite wastewater treatment systems and other potential sources of water pollution shall be a minimum of 100 feet from the edge of either side of top-of-bank or existing edge of riparian vegetation, whichever is further. Modifications to existing and new sources of potential water pollution shall meet this buffer to the maximum extent feasible. This standard applies unless supplanted by Environmental Health Services Standards.

***Dev Std TEI-8*: *New Onsite Wastewater Treatment Systems*.** Development shall not be approved where individual or documented cumulative impacts of onsite wastewater treatment systems for new development would cause pollution of creeks.

Santa Ynez Valley Community Plan

The Santa Ynez Valley Community Plan (County of Santa Barbara 2009) contains the following development standards related to water, wastewater, and solid waste that may apply to the Project.

Goal WAT-SYV-1: Protect the quality of surface and ground waters from degradation; maintain adequate, safe water supplies; and protect groundwater basins from prolonged overdraft.

***Policy WAT-SYV-1*:** Development in the Santa Ynez Valley Planning Area shall incorporate appropriate water efficient design, technology and landscaping.

Goal WW-SYV: Ensure adequate wastewater treatment and disposal throughout the planning area.

***Policy WW-SYV-1*:** Development and infrastructure shall achieve a high level of wastewater treatment, in order to best serve the public health and welfare.

***Policy RSW-SYV-1*:** Resource conservation and recovery shall be implemented in the SYVCPA to divert the waste stream from area landfills to the maximum extent feasible. Diversion shall be maximized through source reduction, recycling and composting.

Action RSW-SYV-1.1: The County shall strive to enhance public awareness of opportunities to source reduce, recycle and compost using programs identified in the Source Reduction and Recycling Elements.

Action RSW-SYV-1.2: The County, in conjunction with the local waste hauler, shall continue to encourage a residential, commercial, and industrial recycling program throughout the SYVCPA, including yard waste collection, composting and conservation programs.

Action RSW-SYV-1.3: The County shall encourage developers to use recycled building materials such as composites, metals, and plastics to the greatest extent feasible.

Santa Barbara County Integrated Regional Water Management Plan

The Santa Barbara Integrated Regional Water Management Plan (IRWMP) establishes a water management planning framework that can be modified as needed to respond to changing conditions. The IRWMP aims to support regional cooperation among water resource managers to resolve issues related to water and wastewater, including ensuring the adequacy of supplies and services, protecting and improving surface water and groundwater quality and protecting and enhancing ecosystems (County of Santa Barbara 2019).

Groundwater Sustainability Plans

There are five Groundwater Sustainability Agencies in Santa Barbara County (DWR 2025a), each with a groundwater sustainability plan (DWR 2025b).

Carpinteria Groundwater Sustainability Agency

The Groundwater Sustainability Plan for the Carpinteria Basin (Carpinteria GSA 2023) includes the following groundwater sustainability goals:

1) Long-term groundwater elevations are adequate to support existing and future reasonable and beneficial uses throughout the Basin.
2) A sufficient volume of groundwater storage remains available during drought conditions and recovers during wet conditions (as defined using minimum thresholds expressed in terms of water levels).

3) Groundwater production, and projects and management actions undertaken through SGMA, do not degrade water quality conditions to support ongoing reasonable and beneficial uses of groundwater for agricultural, municipal, domestic, industrial, and environmental purposes.

4) Groundwater production, and projects and management actions undertaken in response to SGMA will mitigate against the significant advance of brackish or saline groundwater into areas of the aquifer currently used for production and supply.

Cuyama Basin GSA

Groundwater levels in portions of the Cuyama groundwater basin have been declining for many years, although other areas in the Cuyama Basin are relatively stable. The Cuyama Basin GSA was formed to address groundwater sustainability pursuant to SGMA. The sustainability goal of the Cuyama Basin Groundwater Sustainability Plan is to maintain a sustainable groundwater resource for beneficial users of the Basin now and into the future consistent with the California Constitution (Cuyama Basin GSA 2025).

Montecito Groundwater Basin GSA

The Montecito Groundwater Basin GSA's sustainability goal is to prevent undesirable results[1] and optimize long-term use of the groundwater basin for the benefit of all stakeholders. This will be achieved through a collaborative, knowledge-based process informed by locally-defined quantitative criteria, ongoing monitoring and modeling, and incremental, data-supported management actions as needed to prevent seawater intrusion and ensure sustainable groundwater levels, storage, and quality (Montecito Groundwater Basin GSA 2023).

San Antonio Basin GSA

The San Antonio Basin GSA has groundwater management jurisdiction over the San Antonio Creek Valley in the northern part of Santa Barbara County. The goal identified in the GSP is to sustainably manage the groundwater resources of the Basin for current and future beneficial uses of groundwater, including Barka Slough (Slough), through an adaptive management approach that builds on best available science and monitoring and considers economic, social, and other objectives of Basin stakeholders (San Antonio Basin GSA 2021).

Santa Ynez River Valley Basin Management Area GSAs

The sustainability goal for the Santa Ynez River Valley Groundwater Basin is to sustainably manage the groundwater resources in the Western, Central, and Eastern Management Areas to ensure that the Basin is operated within its sustainable yield for the protection of reasonable and beneficial uses and users of groundwater. Sustainable groundwater management is designed to ensure that: 1) long term groundwater elevations are adequate to support existing and future reasonable and beneficial uses throughout the Basin; 2) a sufficient volume of groundwater storage remains available during drought conditions and recovers during wet conditions; 3) groundwater production and projects and management actions undertaken through SGMA do not degrade water quality conditions in order to support ongoing reasonable and beneficial uses of groundwater for agricultural, municipal, domestic, industrial, and environmental purposes (Santa Ynez River Valley GSA 2022).

[1] In the Context of SGMA and California Water Code Section 354.28, "undesirable results" is defined as any combination of: chronic lowering of groundwater levels; reduction in groundwater in storage; seawater intrusion; degraded water quality; land subsidence; or depletions of interconnected surface water.

Santa Barbara County Local Agency Management Plan

Santa Barbara County's Local Agency Management Plan (LAMP) was established to address specific conditions for the permit, inspection, and reporting for on-site wastewater treatment systems (OWTS). The overall authority for the OWTS lies with the State Water Resources Control Board. In June 2012, the SWRCB adopted the state's Water Quality Control Policy for the Siting Design, Operation, and Maintenance of OWTS. The risk based tiered approach of the OWTS policy established minimum standards for new and replacement OWTS and allows local agencies to develop customized programs to address conditions specific to their jurisdictions. Under the LAMP, construction setbacks are among the design standards in effect for OWTSs. Supplemental treatment (and a renewable operating permit) is required in certain circumstances in special problem areas where conventional on-site sewage systems pose an exceptional risk to public health (County of Santa Barbara 2025).

Santa Barbara County Construction and Demolition Debris

The County has a number of policies in place to promote recycling and reuse of construction waste. In 2011, the County adopted the State's Green Building Standards, which require a minimum of 65 percent of construction waste generated from a construction project to be recycled. Among the requirements in place at the County level are requirements that a construction waste management plan be prepared for most development projects (County of Santa Barbara Resources Recovery and Waste Management Division 2025).

Santa Barbara County Code, Chapter 17 – Solid Waste Systems

Chapter 17 of the County Code of Ordinances addresses solid waste systems. Section 17-23, Construction and Demolition Waste, states that the County specifically requires construction and demolition waste to be recycled to the minimum required by CalGreen Standards to assist the County in maintaining compliance with AB 939, the Integrated Waste Management Act, and to conform with adopted CalGreen Standards.

3.12.4 Project Impact Analysis

Thresholds of Significance

CEQA Guidelines

Pursuant to Appendix G of the CEQA Guidelines, potentially significant impacts would occur to utilities and service systems if the Project would:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;

b) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or

e) Not comply with federal, state, or local management and reduction statutes and regulations related to solid waste.

County of Santa Barbara Environmental Thresholds

The County has established thresholds for environmental review through the Environmental Thresholds and Guidelines Manual (Thresholds Manual) (County of Santa Barbara 2021). The following solid waste thresholds from the County Thresholds Manual are provided to supplement the solid waste evaluation criteria in the CEQA Guidelines Appendix G. The following thresholds specify the local standards for this evaluation of construction and operational solid waste capacity and outline the threshold for cumulative solid waste effects. The Thresholds Manual assumes an annual 1.2 percent increase in solid waste generation (4,000 tons per year) over a 15-year period. Therefore, a project would be considered to result in a significant impact to landfill capacity if it would generate five percent or more of the expected annual increase in waste generation thereby using a significant portion of the remaining county landfill capacity. The numerical value associated with the five percent increase is 196 tons per year.

- **Construction and demolition threshold:** Any construction, demolition, or remodeling project of a commercial, industrial or residential development that is projected to create more than 350 tons of construction and demolition debris is considered to have a significant impact on public services. Although the amounts of waste generated by a project vary widely, the following estimates of projects that will reach the threshold of significance are provided, based on USEPA guidance:
    a. Remodeling projects over 7,000 square feet for residential projects and 17,500 square feet for commercial/industrial projects.
    b. Demolition projects over 11,600 square feet for residential buildings and 7,000 square feet for commercial/industrial buildings.
    c. New construction projects over 47,000 square feet for residential buildings and 28,000 square feet for commercial/industrial buildings.
- **Operational effects threshold:** If a proposed project generates 196 or more tons per year after reduction and recycling efforts, impacts would be considered significant and unavoidable.
- **Cumulative effects threshold:** Projects with a specific impact as identified above (196 tons/year or more) would also be considered cumulatively significant, as the project-specific threshold of significance is based on a cumulative growth scenario. However, as described in the Thresholds Manual, as landfill space is already extremely limited, mitigation should be recommended for projects which generate between 40 and 196 tons of solid waste per year to reduce adverse cumulative impacts. Projects which generate less than 40 tons per year of solid waste would not be considered to have an adverse effect.

Methodology

As described in Chapter 2, *Project Description*, the County proposes to amend several land use plans and regulations to allow the development of utility-scale and smaller solar facilities on agricultural (and other) lands in unincorporated Santa Barbara County. However, as noted, future project-level siting and design details as well as the timing of potential future solar development are not known. The impact analysis, therefore, does not evaluate potential impacts on utilities on a project- or site-specific level. The analysis provided in this Program EIR addresses the potential for the Project to directly or indirectly affect utilities and service systems, mainly focused on electrical, telecommunications, water supply, and solid waste.

The analysis assumes that Tier 3 and Tier 4 solar energy facilities would typically disturb more than one acre of land, and would therefore be required to obtain NPDES discharge coverage under the Construction Stormwater General Permit, which would require preparation of a stormwater pollution prevention plan (SWPPP) and include site-specific best management practices to reduce construction site runoff.

Project Impacts

This section identifies and discusses potential utilities and service systems impacts that could occur as a result of the development of future solar energy facilities. **Table 3.12-4**, *Summary of Utilities and Service System Impacts*, provides a summary of the Project's potential impacts related to utilities and service systems. A detailed discussion of each impact follows.

TABLE 3.12-4
SUMMARY OF UTILITIES AND SERVICE SYSTEMS IMPACTS

Utilities and Service Systems Impacts	Impact Classification	Mitigation Measures	Residual Impact
Impact UT-1: Future solar energy facilities enabled under the Project could require relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power or telecommunication facilities, the construction of which could cause significant environmental effects.	Insignificant	None required	Insignificant
Impact UT-2: Future solar energy facilities enabled under the Project could result in a water demand in excess of local or regional supplies.	Potentially Significant	MM UT-1: Water Supply Assessment	Insignificant with Mitigation
Impact UT-3: Future solar energy facilities enabled under the Project would not generate demand for wastewater treatment in exceedance of local or regional wastewater systems' capacity.	Insignificant	None required	Insignificant
Impact UT-4: Future solar energy facilities that would occur under the Project could generate solid waste in excess of state or local standards or in excess of the capacity of local infrastructure, impair the attainment of solid waste reduction goals, and potentially conflict with federal, state, or local management and reduction statutes and regulations related to solid waste.	Potentially Significant	MM UT-2: Solid Waste Management and Diversion Plan	Insignificant with Mitigation
Cumulative Impacts	Potentially Significant	MM UT-1: Water Supply Assessment MM UT-2: Solid Waste Management and Diversion Plan	Insignificant with Mitigation

Threshold a) The Project would result in a significant impact if the Project would require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

Tier 1 and 2 systems considered under the Project would not entail or require construction of water, wastewater treatment, stormwater drainage, or natural gas facilities due to the size of the systems. Minor alterations to existing telecommunications and electrical systems may be required to facilitate interconnections for the solar energy systems. Tier 1 and 2 systems would generally not result in an expansion of these utilities, nor would the telecommunications and electrical interconnections result in any significant environmental effects. Therefore, impacts associated with Tier 1 and 2 energy systems would be insignificant.

The analysis focuses on the potential effects associated with Tiers 3 and 4, as these solar energy facilities would entail a larger overall footprint on potentially undisturbed land (greater than 5 acres up to 30 acres, and greater than 30 acres, respectively). Solar photovoltaic (PV) projects do not require the use of natural gas for the power generation process. For this reason, no natural gas facilities are necessary as a result of the Project, nor would the Project result in the relocation or construction of new or expanded natural gas facilities that would cause an adverse environmental effect.

Community-scale (Tier 3) and utility-scale (Tier 4) solar energy facilities would require interconnections to the electrical grid and, depending on the size and location have the potential to require expansion of water, wastewater, stormwater, electrical and telecommunications infrastructure, the construction of which could cause environmental effects, as discussed below.

Impact UT-1: Future solar energy facilities enabled under the Project could require relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, or telecommunication facilities, the construction of which could cause significant environmental effects.

Construction and Decommissioning

Water, Wastewater, and Stormwater Drainage

Community-scale (Tier 3) solar energy facilities due to their moderate size (up to 30 acres) are unlikely to require the construction of extensive water, wastewater, or stormwater drainage infrastructure. Grading, ground disturbance, and minor site alteration would result in insignificant impacts.

Utility-scale (Tier 4) solar energy facilities may require more extensive water, wastewater, or stormwater drainage infrastructure. If, for example, an operation and maintenance (O&M) building were proposed as part of a solar energy facility, water lines and plumbing may be needed. Construction or expansion of water or wastewater conveyance piping would entail ground disturbance and site alteration, which could generate runoff or erosion. The addition of impervious surfaces and development of access roads could also change the drainage patterns of the site. This could lead to erosion, siltation, slope instability and potentially generate polluted runoff. This analysis assumes that solar energy facilities involving disturbance of one or more acres of land would adhere to National Pollutant Discharge Elimination

System (NPDES) and similar requirements to control erosion and limit pollutants from entering stormdrains (or municipal stormwater collection systems). Any solar energy facilities requiring a County grading permit would be required to provide a site plan to demonstrate drainage and include specific stormwater retention systems or other measures to manage site runoff. County Standard Condition of Approval (Geo-02) requires implementation of an erosion and sediment control plan to reduce runoff associated with construction. The County's standard conditions of approval regarding stormwater would reduce stormwater contamination and runoff that could otherwise result in pollution and stormwater capacity exceedances. Proposed improvements would be required to conform to County development standards intended to limit runoff and control erosion and may be permitted, subject to County review. For these reasons, stormwater drainage exceedances would be unlikely to occur and related impacts would be insignificant.

If an on-site wastewater treatment system (e.g., in rural areas outside of the sphere of influence for sewer connections) is proposed as part of a solar energy facility, such systems would require conformance with County LAMP standards to ensure that septic systems (or other OWTS) are sited and designed with adequate buffers to protect waterways, neighboring properties and other resources. If connections to a public sewer system or lateral extensions are proposed, such work would be expected to comply with all County, regional, and state requirements governing such connections. Separate independently enforceable conditions and permits would also be in effect for these sanitary systems.

Similar to construction, during decommissioning, excavation and removal of structures could change drainage patterns and site conditions. However, because a decommissioning and site reclamation plan would be required to be implemented, revegetation would occur. Restoration of contours and revegetation of the site would limit runoff and generally control erosion. Adherence to development standards and County requirements would reduce adverse impacts to insignificant levels.

Electric Power and Telecommunications

Future solar energy facilities would be likely to require the installation of temporary poles to convey temporary power connections during construction. With the exception of these temporary overhead pole connections, no electrical power facilities would be required during construction or decommissioning. A typical solar energy facility construction project would utilize power service from a local utility such as PG&E or SCE depending on the location within the County. Power would likely be provided through a temporary connection to existing infrastructure. Solar facilities considered under the Project may include ancillary telecommunications connections, such as the inclusion of fiber cable installation or last-mile internet connections to convey data or facilitate remote monitoring. Typically, these systems involve underground placement of fiber optic cable in conduits or collocating cables on poles in a shared configuration. It is possible that service interruptions could occur during construction, limited to the timeframe required to connect a solar facility or ancillary telecommunications lines to the electrical grid. Typically, affected residents and businesses would receive notification from the electrical service providers prior to such interruptions. The temporary construction impacts associated with electrical and telecommunications connections would be insignificant.

Operation and Maintenance

Depending on the height of proposed structures, some indirect environmental effects on telecommunication systems could occur. For example, meteorological towers (often constructed to track weather for utility-

scale solar facilities) could interfere with microwave or radio frequencies if such structures are placed within the line-of-sight path relative to these frequencies. This analysis assumes that the conditional use permit process would review the siting and design for future solar energy projects to determine if conflicts exist based on local details. Review of site-specific details would help to reduce potential signal interference-related impacts.

Once operational, the solar energy facilities would contribute to the renewable energy generation goals outlined in the County's Strategic Energy Plan and CAP. Future electrical connections that would occur from the development of solar energy facilities resulting from the Project could result in potential environmental impacts, as discussed in the various resource sections of this Program EIR. It is possible that the Project could indirectly generate the need for new or expanded electrical transmission or telecommunications infrastructure, which is under the jurisdiction of the CPUC. However, such actions would not be under that County's jurisdiction and are beyond the scope of this EIR. Impacts related to the Project's new and expanded electrical and telecommunications facilities would be insignificant.

Mitigation Measures

Since impacts related to new and expanded water, wastewater, stormwater drainage, electrical and telecommunications facilities would be insignificant, no mitigation measures would be required.

Residual Impacts

Impacts would be insignificant.

Threshold b) A significant impact to water would occur if sufficient water supplies were not available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.

Impact UT-2: Future solar energy facilities enabled under the Project could result in a water demand in excess of local or regional supplies.

Construction and Decommissioning

Because this is a program-level analysis and no specific project is proposed at this time, it is speculative to determine a certain amount of water demand for construction. However, based on other utility-scale solar facilities and similar to other typical construction projects, water would likely be needed for dust control and other construction-related purposes such as site work, grading, or concrete work for structural foundations. A large utility-scale solar facility may require up to approximately 300 acre-feet of water over the course of 12 months of construction (Fresno County 2021, 2024).[2] Smaller facilities would require less water (for dust control and other purposes) compared to larger facilities. This water would not necessarily require advanced treatment; thus, it could be supplied through reclaimed, desalinated, or recycled water (if locally available). Consistent with County Standard Condition of approval WatCons-05, reclaimed water shall be used for all dust control activities during grading and construction when available. This requirement will be noted on the grading plans and monitored by compliance staff to ensure non-potable water is used. This standard condition would reduce construction-related potable

[2] This is provided for informational purposes only. Based on construction water demand estimates of utility scale solar facilities in Fresno County between 1,000 and 2,000 acres (facilities producing 200 MW of energy generation capacity).

water demand. Construction and decommissioning activities occur within discrete timeframes, so this water demand would be considered temporary. In addition, it is possible that alternative dust control techniques could be employed to conserve water resources. Construction and decommissioning-related water demand would result in insignificant impacts.

Operational Water Demand

A consideration of operational water demand is important, especially in southern California, where periodic drought conditions present water management challenges. As described in the setting, groundwater levels are variable in the County. Some communities are more dependent than others on groundwater. Therefore, the level of impact would vary depending on local water availability, the scale of the proposed facility, and multiple other factors. Operational water demand would be considered ongoing throughout the life of a solar facility and would be primarily associated with panel cleaning requirements to keep the systems operating at peak functionality. If a utility-scale solar facility includes an O&M building with sinks, showers, or other plumbing, the operational water demand would be marginally higher. Water requirements depend on the scale and size of the facility and also on the specific geography of the site. Water demand could be higher in coastal areas subject to fog, as more intensive panel cleaning may be needed in these areas. In coastal areas, the likelihood of salt and scale deposits upon the panel surfaces would be higher than in other (inland) locations due to prevalent fog in the coastal zone, which tends to transfer salts from the sea to land surfaces. Other external factors like humidity, temperature, wind speed, panel orientation, and regional characteristics such as proximity to traffic emissions (smog or air pollution), and proximal vegetation play a role in particle accumulation on the surface of solar panels. It is noteworthy that new technologies for panel cleaning are being developed and deployed at utility-scale solar facilities to reduce water demand, maintenance requirements, and improve panel functionality (Benny 2024). Although there are uncertainties about whether water would be the main method of cleaning solar panels, this analysis assumes (as a worst-case scenario) that water would be required for panel cleaning.

Even at the program level of analysis, some generalizations can be made as to how much water a project could require once operational. Based on the water demand factor outlined in the Bureau of Land Management (BLM) Western Solar Plan, utility-scale solar facilities can require an average water demand in the range of 0.05-0.35 acre-feet per year (AFY) per MW of solar power generated (BLM 2024). As discussed in the regulatory setting section, SB 610 requires a water supply assessment for projects meeting certain criteria. Pursuant to California Water Code, Section 10912, a project means (among other things) "a proposed industrial park planned to house more than 1,000 persons, occupying more than 40 acres, or having more than 650,000 square feet of floor area." Utility-scale solar facilities occupying more than 40 acres could meet this definition. Additionally, other definitions of a project within California Water Code, Section 10912 could also trigger the need for a WSA due to water use equivalence. If, for example, a solar facility were to use an amount of water comparable to that of a 500-unit residential complex, a WSA would be required for that project. Assuming an average water demand factor of 60 gallons per capita per day,[3] a 500-unit complex may have an average water demand of 72,600 gallons per year (or lower for communities subject to water conservation requirements). This water demand is equivalent to more than 8 AFY.

[3] Source used for assumed water demand factor: https://www.omnicalculator.com/ecology/water-demand.

Consistent with the SEP, the County's solar program (the subject of this Program EIR) aims to add approximately 75 MW of solar generation capacity to the County's renewable energy portfolio. Using the water demand factor described above, the associated water demand for the solar program (conservatively assuming the goal of 75 MW is entirely fulfilled by utility-scale solar facilities) could create a cumulative water demand of between 3.75 AFY and 26.25 AFY, which would be over the threshold (500-unit equivalent use or 8 AFY). Therefore, a WSA may be needed for individual projects with a water demand of 8 AFY that trigger this requirement or collectively (cumulatively) contribute to water demand exceeding normal, single dry, and multiple dry water years. In addition, pursuant to County Standard Water Service Conditions (WatServ-01, WatServ-02, as applicable) the owner/applicant shall provide a "can and will serve" letter or preliminary water service determination from the applicable water district if such connections would be required for a given solar facility.

Utility-scale solar energy facilities could result in water demands in exceedance of local or regional supplies, resulting in a potentially significant impact related to water demand. To limit potential individual and cumulative effects on water supply and to reduce potential impacts and allow the County to track water demand at a program level, the following mitigation measure is required for utility-scale solar facilities 40 acres in size (or larger).

Mitigation Measures

MM UT-1: Water Supply Assessment. Utility-scale solar energy facilities (Tier 4) proposed on sites with a footprint of 40 acres (or larger) in size shall demonstrate that the project's water demand can be met through local or regional supplies. The applicant/owner shall provide a Can and Will Serve letter or other similar commitment from the water provider or a water supply assessment (WSA). The WSA shall be subject to County review and shall demonstrate that the project would have sufficient water supplies available to serve the project's operational water demand and reasonably foreseeable future development during normal, dry, and multiple dry years over a 20-year projection. The WSA shall meet the standards outlined by Senate Bill (SB) 610 and California Water Code 10912 (or updated State requirements as applicable) and include analysis of reasonable effects on surface and groundwater supplies. A WSA associated with a project must include a discussion of the availability of an identified water supply under normal-year, single-dry-year, and multiple-dry-year conditions over a 20-year forecast, accounting for the projected water demand of the project in addition to other existing and planned uses of the identified water supply.

Residual Impacts

The implementation of MM UT-1 would provide supplemental information to the County to aid in their review and tracking of future solar energy project proposals with respect to water demand and sufficiency of supply. The County would use the information to assess the cumulative water demands associated with the solar energy program (relative to supply in normal, dry, and multiple dry years). The County can only approve projects that adequately demonstrate through Standard Water Service Conditions (WatServ-01, WatServ-02) and the submitted WSAs, when applicable, that sufficient water supplies are available to serve the projects' water demands. With the implementation of MM UT-1, impacts associated with water demand would be reduced to insignificant levels.

Threshold c) A significant impact would occur if the wastewater treatment provider which serves or may serve the project determines that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Impact UT-3: Solar energy facilities enabled under the Project would not generate demand for wastewater treatment in exceedance of local or regional wastewater systems' capacity and would have an insignificant impact.

Construction and Decommissioning

Wastewater demand associated with construction or decommissioning would typically include service and treatment of portable toilets. Typically, when utility-scale facilities are constructed, a contractor provides temporary sanitary units (portable toilets) to accommodate construction personnel throughout the duration of construction. Staff levels required to construct or decommission a solar energy facility would generally depend on the size and scale of the facility. Depending on the specific size and scale of the facility, construction or decommissioning could be completed within 12-18 months for a typical project. Sanitary units would be serviced by a wastewater treatment facility permitted to treat the waste. The level of service and treatment required would be similar to that of other similar-sized construction projects. There are numerous local wastewater treatment plants and CSDs in the County, capable of receiving the temporary wastewater generated during construction. As described in the environmental setting, of the WWTPs that serve the unincorporated areas of the County, each is operating within its permitted capacity, and there are no WWTPs in the county currently operating at full capacity. Therefore, the temporary demand associated with construction or decommissioning would not be likely to exceed local wastewater treatment capacities. Construction or decommissioning-related impacts would be insignificant.

Operation and Maintenance

Once operational, solar energy facilities may include an O&M building with plumbing to serve O&M staff. Depending on the size and scale of the facility, remote monitoring could also be in place in lieu of permanent staff. If on-site O&M staff is planned for, and the solar facilities require sewer connections, these facilities could either be connected to a public wastewater collection system or a septic system may be installed in rural or remote locations, consistent with local standards. Facilities could be scaled, designed, and sited to accommodate O&M requirements such that demand would not be in excess of treatment capacity. Depending on the proximity to public sewer conveyance systems, larger facilities may opt to apply for sewer connections if located within the sphere of influence for wastewater treatment. In rural locations, on-site waste systems may be considered, such as septic systems or packaged systems. The on-site wastewater treatment system (OWTS) or septic/packaged systems would be required to adhere to local and state standards for public health and safety, including any effective setbacks to protect neighboring property, wells, surface and groundwater quality, wetlands, and other environmental resources.

In either case, operational solar facilities could generate wastewater; however, the level of demand would not be anticipated to exceed the capacity of local or regional wastewater treatment plants. As noted, there are no WWTPs in the County currently operating at full capacity. Local operational wastewater treatment is at an average of 57.5 percent of capacity in the County. Because future solar facilities would have a range of options for wastewater treatment and the local average capacity for treatment is relatively low, it

is unlikely that the facilities would exceed local treatment capacity. Therefore, impacts during the operations phase would be insignificant.

Mitigation Measures

Future solar energy systems and facilities that would occur as a result of the Project would not generate demand for wastewater treatment in exceedance of local or regional wastewater systems' capacity. Impacts would be insignificant.

Residual Impacts

Impacts to wastewater treatment would be insignificant.

Threshold d and e) The Project would result in a significant impact if the project would generate solid waste in excess of state or local standards (the construction threshold is defined as 350 tons; the operational threshold is defined locally as 196 or more tons per year over 15 years) or in excess of the capacity of local infrastructure, impair the attainment of solid waste reduction goals, or conflict with federal, state, or local management and reduction statutes and regulations related to solid waste.

Impact UT-4: Future solar energy facilities that would occur under the Project could generate solid waste in excess of state or local standards or in excess of the capacity of local infrastructure, impair the attainment of solid waste reduction goals, and potentially conflict with federal, state, or local management and reduction statutes and regulations related to solid waste.

It is anticipated that solid waste would be generated during construction and decommissioning, and to a lesser degree during the operations and maintenance phase. Solid waste associated with the construction of a typical solar energy facility could include debris such as concrete, wood scraps, plastics, construction packaging, scrap metal, and soil spoils. The quantity of solid waste produced during construction and decommissioning would depend on the size and scale of the solar energy system or facility and the anticipated construction duration.

Construction and Decommissioning

Future solar energy projects would be subject to the CalGreen Code and the County C&D debris recycling requirements, which are intended to assist the County in compliance with the state (AB 939) solid waste reduction goals. Consistent with the CalGreen standard for construction demolition debris, the County requires that a minimum of 65 percent of nonhazardous waste, scrap, and debris generated by construction work covered under the building permit be reused or recycled. Mitigation measures are required to ensure that future utility-scale solar facilities appropriately track and manage solid waste in a manner that maximizes materials reuse, recycling and solid waste diversion during construction and decommissioning activities.

Most of the typical waste generated during construction would be non-hazardous. Waste would be recycled when feasible and non-recyclable waste would be placed into dumpsters located on-site or managed by the contractor, consistent with C&D requirements. The majority of waste in this phase would be non-hazardous and could be accommodated by local landfills. A typical large utility-scale solar facility may generate as much as 22 cubic yards of solid waste per week during the construction phase. Such

waste would consist primarily of construction packaging materials such as cardboard, wood pallets, copper wire, scrap metal, common trash, and wood wire spools. Non-recyclable construction waste would be placed into commercial trash dumpsters located on-site or transferred by a contractor to the landfill. Dumpsters or the collected solid waste would be transported by a registered commercial service and delivered to a landfill, such as the Tajiguas Landfill or one of the other active solid waste facilities within the county (listed on Table 3.12-2) capable of receiving such waste.

Using a solid waste generation factor of 22 cy per week, over the course of a year (assuming a 12-month construction duration), this quantity of waste would amount to 1,144 cy (or over 1,600 tons). [4] This example conservatively assumes that the maximum estimated waste generation would occur every week to represent a worst-case scenario for solid waste. Not all solar facilities would generate this quantity of waste. As described in Section 3.0.4, smaller utility-scale facilities may not trigger this threshold. Depending on their size, scale, and duration of construction, a utility-scale solar energy facility could generate solid waste in excess of the County's established threshold of 350 tons. Construction-related impacts could be potentially significant.

The decommissioning process would mirror solar energy facility construction. Materials dismantled during decommissioning would be recycled or sold for reuse to the maximum extent feasible. A reclamation plan would be required to be prepared by an applicant in accordance with the proposed zoning ordinance development standards. This plan would specify how above-ground structures on a given facility site would be dismantled, including probable destination for reclaimed components. Decommissioning would be subject to County C&D requirements for reuse and recycling, consistent with state CalGreen standards. Because the size and scale of solar facilities are not known, the solid waste resulting from dismantling may trigger the county threshold of 350 tons. Impacts related to solid waste could be potentially significant.

Operation and Maintenance

A typical utility-scale solar facility would not generate large quantities of solid waste. Depending on the level of staff present on site, solid waste may include trash items, packaging, or materials discarded during repairs or maintenance activities. Most solar facilities are not open to the public and, accordingly, do not generate the quantities of waste that a public-facing business with customers would. A typical solar facility with less than 20 staff members, for example, may generate up to 2 cubic yards (cy) per week. This level of solid waste demand could easily be accommodated by the Tajiguas Landfill or any of the other solid waste facilities listed on Table 3.12-2, capable of receiving such waste. As extrapolated through an annual operational timeframe, the estimated quantity of solid waste[5] would be well below the County threshold of 196 tons per year. Therefore, solid waste impacts associated with the operation and maintenance phase would be insignificant.

[4] 22 cubic yards of waste over a 12-month (52-week) construction timeframe equates to 1,144 cubic yards of waste. Converted to tons using a conversion factor of cy x 1.4 = tons, results in an estimated 1,601.6 tons of waste over 12 months.

[5] Two cubic yards of waste over a 52-week annual operational timeframe equates to 104 cubic yards of waste. Converted to tons using the conversion factor cy x 1.4 = tons, results in an estimated 145.6 tons of solid waste annually.

Mitigation Measures

Future solar energy systems and facilities that would occur as a result of the Project could generate construction- or decommissioning-related solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. To reduce potentially significant impacts, the following mitigation measure is required:

> **MM UT-2: Solid Waste Management and Diversion Plan:** The applicant/owner shall prepare and submit a solid waste management and diversion plan to the County for review and approval before the start of construction and decommissioning (as applicable). The solid waste diversion plan shall outline how the applicant/ owner will sort, measure, and record the disposal of solid waste to ensure that at least 65 percent of inert materials will be recycled, reused, or otherwise diverted from the landfill. The plan shall detail reporting requirements to the County. Measures in the plan shall include, but not be limited to, the following:
>
> - Training for construction workers in materials recycling;
> - Provision of space and/or bins for appropriate storage of recyclable materials on-site;
> - Establishment of a recyclable materials pick-up area; and
> - Development of a recordation system tracking tool that details and quantifies the amount of solid waste generated during construction, solid waste recycled, and solid waste delivered to the solid waste disposal facility. The tracking shall be reported on a monthly basis throughout construction to demonstrate the amount of solid waste generated by the project and the proportion diverted.
>
> If it is determined, through consultation with Santa Barbara County, that proposed construction and decommissioning activities would not trigger the project-specific threshold of 350 tons of solid waste, documentation of the consultation shall be provided to the County in lieu of the mitigation measure's solid waste diversion plan and reporting requirements.

Residual Impacts

With mitigation implemented, the impacts regarding solid waste would be reduced to an insignificant level.

3.12.5 Cumulative Impacts Analysis

As described in Section 3.12.4 above, potentially significant impacts resulting from the Project would include those related to water and solid waste demand. Mitigation Measures UT-1 and UT-2 would be required to reduce such impacts to insignificant levels. The incremental insignificant impacts, when considered along with the water and solid waste demand impacts of cumulative projects (identified in Table 3.01-1) could result in cumulatively considerable impacts. For example, residential development considered under the County's Housing Element Update would contribute to water demand, which, when combined with water demand to construct future solar energy facilities enabled under the Project, could result in an increased cumulative demand. However, the water demand of the Project is mainly associated with construction and would be temporary. Additionally, mitigation would be implemented to reduce impacts. Therefore, the Project's incremental contribution to cumulative water demand would be insignificant.

Solid waste would be generated by the Project along with the cumulative projects. When considered together, the project's incremental contribution to solid waste could result in a cumulatively considerable amount of solid waste, resulting in capacity issues at local and regional landfills. The Project and the cumulative projects would be required to adhere to county and state (CalGreen) building standards, which require 65 percent diversion for construction and demolition debris. As discussed, many of the components of the Project would be recyclable or retain resale value and could be reused following their primary use term. As described, the Project would be required to demonstrate diversion of solid waste by preparing a solid waste diversion plan, subject to County review. Other cumulative projects would also be held to the same standards requiring diversion of solid waste. For these reasons, the cumulative impact would be insignificant.

As discussed, impacts related to the Project's new and expanded electrical and telecommunications facilities would be insignificant. As discussed in Section 3.2.4 (in the context of visual resources) community-scale and utility-scale solar facilities (considered under Tiers 3 and 4, respectively) would require a connection to the electricity grid. Depending on the location, development of solar facilities and other cumulative renewable energy projects would likely contribute to an enhanced need for transmission infrastructure necessary to deliver the energy generated by solar to the electrical grid, especially given the limited number of transmission lines in the county. Although transmission infrastructure is not under County jurisdiction (and outside the scope of this programmatic review), the Project could indirectly spur the need for future energy grid enhancements, which would contribute to reasonably foreseeable cumulative effects on utilities and service systems. The Project's incremental contribution to cumulative impacts associated with electrical and telecommunications facilities would be insignificant.

3.13 Wildfire

3.13.1 Introduction

This section identifies and evaluates potential impacts that could occur as a result of the Project related to wildfire. More specifically, the analysis addresses the potential to impair an adopted emergency response plan or emergency evacuation plan, exacerbate wildfire risks, or expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. This section includes the physical and regulatory setting, the thresholds and methodology used to evaluate the significance of potential impacts, and the results of the impact assessment.

The County received comments regarding wildfire during the public scoping period (refer to **Appendix A**, *Scoping*, for these comments). The City of Carpinteria requested an evaluation of potential direct and cumulative impacts of wildfire related to construction and operation of large-scale solar energy facilities.

3.13.2 Environmental Setting

Wildfire is defined as an unplanned, unwanted wildland fire that can result from human-made or natural causes (Government Code §51177). Wildland fires affect grass, forest, and brushlands, as well as any structures on these lands, creating potential for injury, loss of life, and property damage. Fuel sources, topography, and climate are the primary factors influencing the degree of risk. For this analysis of wildfire risk, emergency response and evacuation, and post-fire pollution and runoff-related impacts, the study area includes the Project area and the surrounding parcels and related access roads, structures, and vegetation. Specific natural areas or wildlands in Santa Barbara County include but are not limited to, the Los Padres National Forest (LPNF), or undeveloped ranchland, particularly in the Santa Ynez Mountains or San Rafael Mountains. Of critical concern within Santa Barbara County is the wildland-urban interface (WUI), where wildfire can burn buildings and infrastructure (County of Santa Barbara, 2023). This section describes the physical setting for wildfire and wildfire risk.

Wildland fire behavior is dependent upon fuels (e.g., vegetation), weather (e.g., wind, temperature, and humidity), and topography (e.g., slope, elevation, and aspect). The combination of these factors, described below, influences the degree of risk if a fire occurs. Santa Barbara County experiences annual cycles of elevated fire danger due to its highly flammable vegetation, mountainous terrain, low annual precipitation, and high velocity “sundowner” and Santa Ana winds. The Santa Ynez Mountains and other wildland areas are subject to dry conditions during fire season, high winds, and high temperatures that contribute to dry conditions and an elevated threat of wildfire year-round.

The County’s mountainous terrain and limited road access to these areas can sometimes prevent easy access by firefighting equipment. Weather, as manifested in temperature, humidity, and wind affects the probability, severity, and duration of wildfires. In particular, high winds can cause a wildfire to rapidly advance through already dry vegetation, posing a major challenge to firefighting and may even at times limit the safe use of aircraft, which can greatly reduce firefighting capacity. Certain conditions are typically present for a wildfire hazard to occur: a large source of fuel must be present, the weather must be conducive (i.e., generally hot, dry, and windy), and fire suppression sources may be unavailable or insufficient to easily suppress and control the fire, although in some instances of high winds (e.g.,

sundowner winds) and dry fuels such suppression may not be able to provide full protection (County of Santa Barbara, 2023). These contributing factors to wildfire spread are described below.

Topography

Topography, which describes the shape of the land, can include descriptions of elevation (height above sea level), slope (the steepness of the land), aspect (the direction a slope faces), and features such as canyons and valleys. Topography can strongly influence fire behavior, including the speed at which a fire moves through an area. Fire typically moves more quickly when it travels uphill than when it travels either downhill or across flat terrain. As heat rises in front of a fire, it preheats and dries upslope fuels, resulting in their rapid combustion (Bennett 2017).

Topography affects the movement of air, and thus the fire, over the ground surface. The terrain can also change the speed at which the fire travels, and the ability of firefighters to reach and extinguish the fire (County of Santa Barbara, 2023). Topography in the Project area varies, including foothills, rocky terrain, valley space, and developed agricultural areas. See **Figure 3.13-1**, *Topography in the Project Area*, and **Figure 3.13-2**, *Topography in Tier 3 and Tier 4 Areas*, for a visual character of the Project land area as it pertains to the various tiers allowed by the Project.

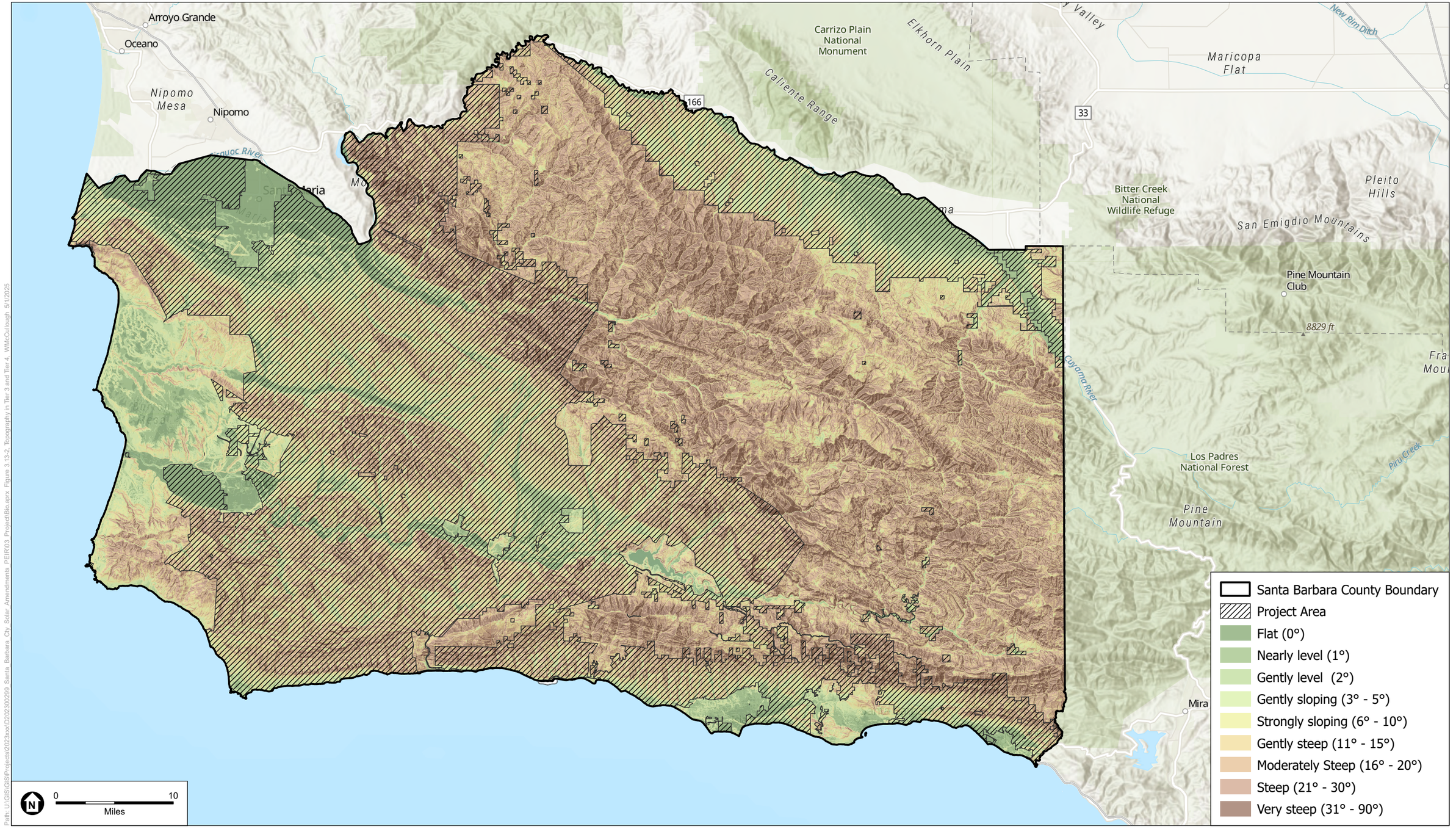
Vegetation/Fuels

Fuel is the material that feeds a fire and is a key factor in wildfire behavior. Fuel sources are diverse and include dead tree leaves, twigs, branches, and standing trees; live trees and brush; and dry grasses. Additional fuel sources can include human-made structures such as homes, buildings, and other associated combustible materials. The amount of fuel—known as fuel loading and expressed in tons per acre—and its vertical and horizontal arrangement affect fire intensity and the ability of surface flames to spread. The size and the moisture and chemical content of fuels also influence combustion and fire behavior (Bennett 2017). Typical vegetation in the Project area includes grassy vegetation, trees, chapparal, and agricultural grazing land (County of Santa Barbara, 2010).

Weather/Climate

Weather conditions such as wind, temperature, and humidity also contribute to fire behavior. Fuels located in hotter and drier temperatures are more susceptible to ignition and catch fire more readily than fuels located in moister and/or cooler temperature conditions.

Weather conditions in the Project area are consistent with the Mediterranean climate of the greater Santa Barbara County region. Santa Barbara County's climate is typically warm and dry in summer and cool and wet in winter. Most of the county's rivers, creeks, and streams remain dry during the summer months. The proximity of the Pacific Ocean tends to moderate Santa Barbara's climate and temperatures near the coast, while adjacent steep mountain ranges paralleling the coast produce a significant "orographic effect." This occurs when storms approaching the county from the Pacific Ocean are forced upward against the mountains resulting in an increased precipitation release with the increased topographic elevation. Average annual precipitation ranges from a minimum of about 8 inches in the Cuyama Valley to over 36 inches at the apex of the Santa Ynez Mountains. Snow is common at the county's highest elevations, in excess of 6,600 feet above sea level. Climate studies have determined that drought periods occur regularly and may last as long as a decade or more. In addition, temperatures as high as 109 degrees and as low as 20 degrees Fahrenheit have been recorded within the last 60 years (County of Santa Barbara, 2025a).



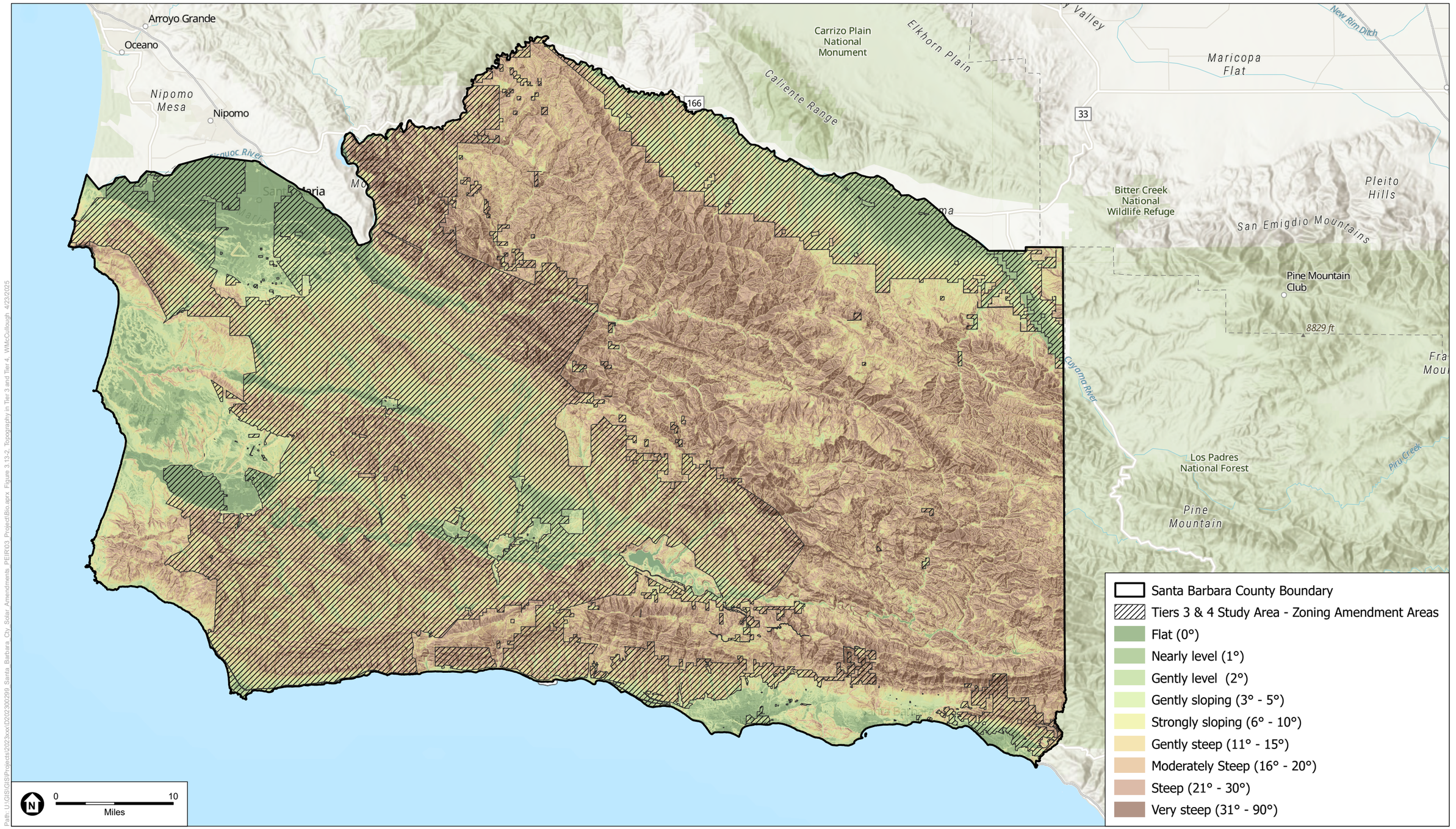
Path: U:\GIS\GIS\Projects\2023xxx\D202300299_Santa_Barbara_Cty_Solar_Amendments_PEIR\03_Project\Bio.aprx Figure 3.13-2_Topography in Tier 3 and Tier 4_WMcCullough 5/1/2025

SOURCE: ESA, 2025

Santa Barbara County Utility-Scale Solar Amendments

Figure 3.13-1
Topography in the Project Area

ESA



Path: U:\GIS\GIS\Projects\2023xxx\D2023002999_Santa_Barbara_Cty_Solar_Amendments_PEIR\03_Project\Bio.aprx Figure 3.13-2 Topography in Tier 3 and Tier 4, WMcCullough 4/23/2025

SOURCE: ESA, 2025

Santa Barbara County Utility-Scale Solar Amendments

Figure 3.13-2
Topography in Tier 3 and Tier 4 Areas

ESA

Fire History

As discussed in Section 3.8, *Hazards and Hazardous Materials,* between 2012 and 2022, Santa Barbara County experienced nine major fires. Four of these fires (i.e., Thomas, Cave, Sherpa, and Whittier) directly threatened the heavily populated Santa Barbara front country. Four of the fires (i.e., Thomas, Sherpa, Alisal, and Whittier) resulted in destroyed structures, with over 1,000 structures destroyed in the Thomas Fire, mostly in neighboring Ventura County (County of Santa Barbara, 2025b). Aside from the structural damage from these fires, debris flow as a result of the post slope stability also contributed to several deaths.

Since the 1950s, the greater Santa Barbara area averaged one large fire per decade; however, the number of large fires within and adjacent to the County has increased substantially over the last decade. Local documented fire history starts with the Refugio Fire in 1955 that burned 79,428 acres, including both slopes of the Santa Ynez mountain range from Gaviota to San Marcos Pass. More recently, in 2024, there were 14 documented wildfires in Santa Barbara County (County of Santa Barbara, 2025b). Some of the large wildfires in Santa Barbara County recent history include (County of Santa Barbara, 2025b):

- The Thomas Fire in 2017, which burned 281,350 acres[1], took 39 days to contain. It burned 1,063 structures, and the sundowner winds were present.
- The Zaca Fire in 2007, which burned 240,359 acres, took 62 days to contain. It burned 1 structure, and the sundowner winds were not present.
- The La Brea Fire in 2009, which burned 97,815 acres, took 14 days to contain. It burned 2 structures, and the sundowner winds were present.
- The Paint Fire in 1990, which burned 4,424 acres, took 5 days to contain. It burned 641 structures, and the sundowner winds were not present.
- The Tea Fire in 2008, which burned 1,946.3 acres, took 5 days to contain. It burned 221 structures and the sundowner winds were present.
- The GAP Fire in 2008, which burned 9,544.7 acres, took 27 days to contain. It burned 4 structures and the sundowner winds were present.
- The Jesusita Fire in 2009, which burned 8,734 acres, took 13 days to contain. It burned 160 structures and the sundowner winds were present.
- The Rey Fire in 2016, which burned 32,572.1 acres, took 29 days to contain. It burned no structures and the sundowner winds were not present.

Wildfire and Air Quality

As wildfires burn fuel, large amounts of carbon dioxide, black carbon, brown carbon, and ozone precursors are released into the atmosphere.[2] Wildfires also emit a substantial amount of volatile and semi-volatile organic materials and nitrogen oxides that form ozone and organic particulate matter. These emissions can lead to harmful exposures for first responders, nearby residents, and populations in regions

[1] A portion of these acres were in neighboring Ventura County.

[2] Black carbon, also known as soot, is a short-lived climate pollutant and a major component of particulate matter pollution, formed through the incomplete combustion of fuels like fossil fuels, wood, and biomass. Brown carbon is a type of light-absorbing organic aerosol, primarily emitted through biomass burning, that contributes to climate change and impacts air quality. Ozone precursors are chemical compounds that react in the presence of sunlight to form ground-level ozone.

that are farther from the wildfires (NOAA 2022). Exposure to these pollutants can cause asthma attacks, coughing, and shortness of breath, and chronic exposure to these pollutants can increase the risk of developing chronic health conditions. Section 3.3, *Air Quality*, contains additional information about air emissions and contaminants.

California Department of Forestry and Fire Protection: Fire Hazard Severity Zones

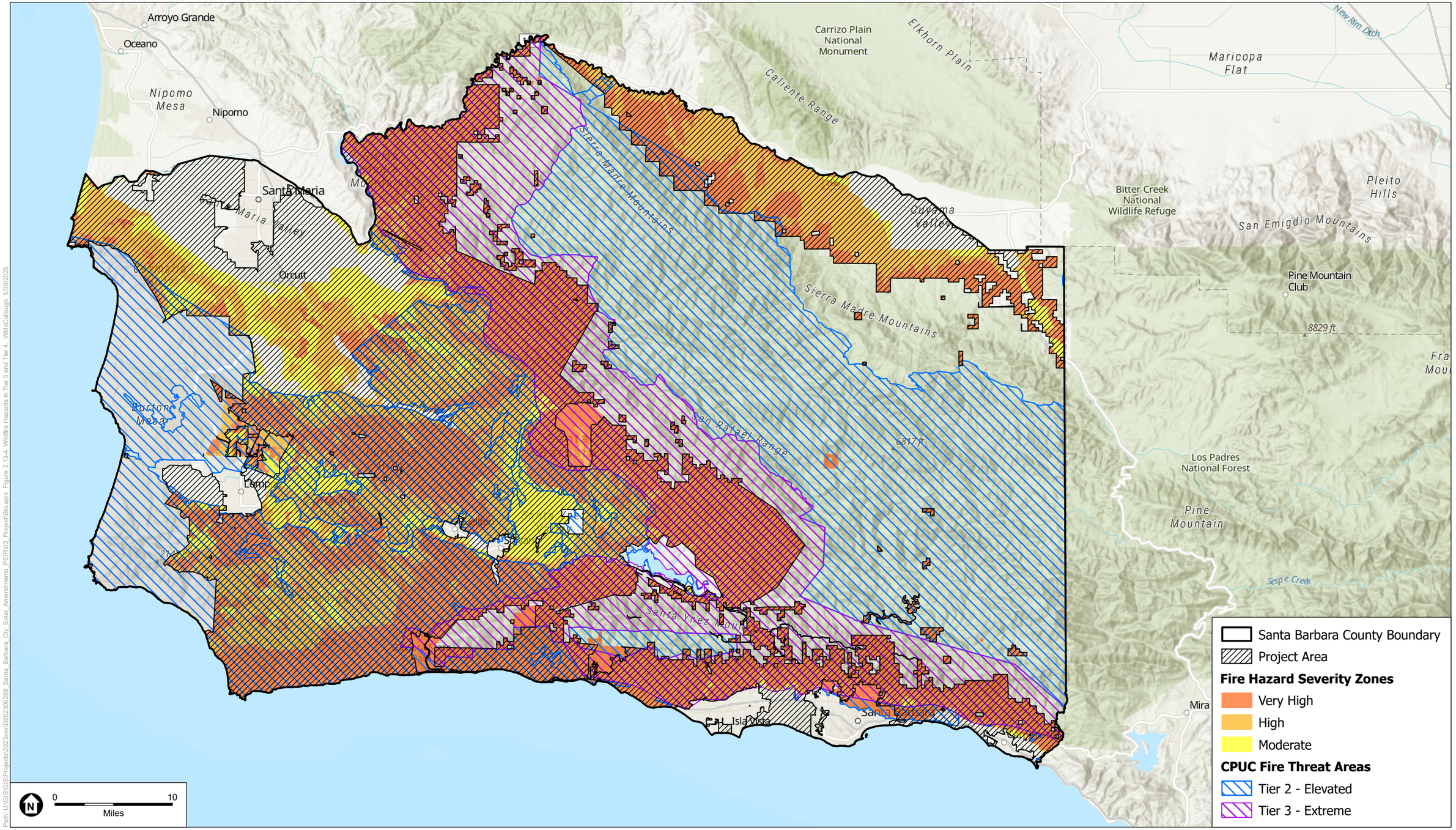
The State of California (through the California Department of Forestry and Fire Protection [CAL FIRE]) has the primary responsibility for the prevention and suppression of wildland fires in State Responsibility Areas (SRAs). CAL FIRE has designated and mapped Fire Hazard Severity Zones (FHSZ) in SRAs, which range from "moderate" to "very high," to indicate risk and severity of wildfire. Santa Barbara County contains a variety of FHSZ classifications, and these designations form the basis for this analysis. In addition, Public Resources Code Sections 4201–4204, as discussed below, require CAL FIRE to prepare fire hazard severity zone maps for all lands within SRAs and to make recommendations for such zones in Local Responsibility Areas (LRAs). Each zone encompasses relatively homogeneous lands and is to be based on fuel loading, slope, fire weather, and other relevant factors present, including areas where winds have been identified as a major cause of wildfire spread. These maps are developed using a science-based and field-tested model that assigns a hazard score based on the factors that influence fire likelihood and fire behavior. Many factors are considered such as fire history, existing and potential fuels (natural vegetation), predicted flame length, blowing embers, terrain, and typical fire weather for the area.

LRAs can include incorporated cities, more densely populated areas, desert areas, or agriculture lands with fire protection typically provided by city fire departments, fire protection districts, counties, and/or joint agreements with CAL FIRE. In LRAs, CAL FIRE does not have the jurisdiction to officially designate FHSZs and has, rather, published maps for recommended FHSZs, which cities and counties are encouraged to adopt into their local plans. There are three levels of hazard in the SRAs: moderate, high, and very high. Wildfire is an ongoing concern in Santa Barbara County, particularly among the foothills and forested lands. **Figure 3.13-3**, *Wildfire Hazards in the Project Area*, depicts these adopted Cal FIRE designations in relation to the Project area as of June 2, 2025.[3]

California Public Utilities Commission–Designated Wildfire Hazard Zones

Pursuant to its fire safety rulemaking, the California Public Utilities Commission (CPUC) mapped high-fire-threat areas where more stringent inspection, maintenance, vegetation clearance, and wire clearance requirements (as required by CPUC General Orders 95, 165, and 166, described below) would be implemented because of the elevated risk for power line fires. The CPUC High Fire Threat District Map identifies elevated risk for fires associated with utilities based on criteria such as fire hazards associated with historical power line–caused wildfires and current fuel conditions. The map scores geographic areas based on where fires start, as opposed to where potential fires may cause impacts. Figure 3.13-3, *Wildfire Hazards in the Project Area*, and **Figure 3.13-4**, *Wildfire Hazards in Tier 3 and Tier 4 Areas*, depict these CPUC designations in relation to the Project area and tiered components. As shown in the figures, the Project area contains a mixture of CalFIRE and CPUC fire hazard designation zones. This includes high and very high FHSZs as determined by CalFIRE and Tier 3 extreme threat areas as mapped by the CPUC.

[3] CAL FIRE released updated FHSZ maps in the spring of 2025, and the County Board of Supervisors revised and adopted the updated maps on June 3, 2025. The updated maps were reviewed as part of this Project's CEQA analysis, but the updated mapping information was not available in time to incorporate into Figure 3.13-3 prior to release of this Draft Program EIR.



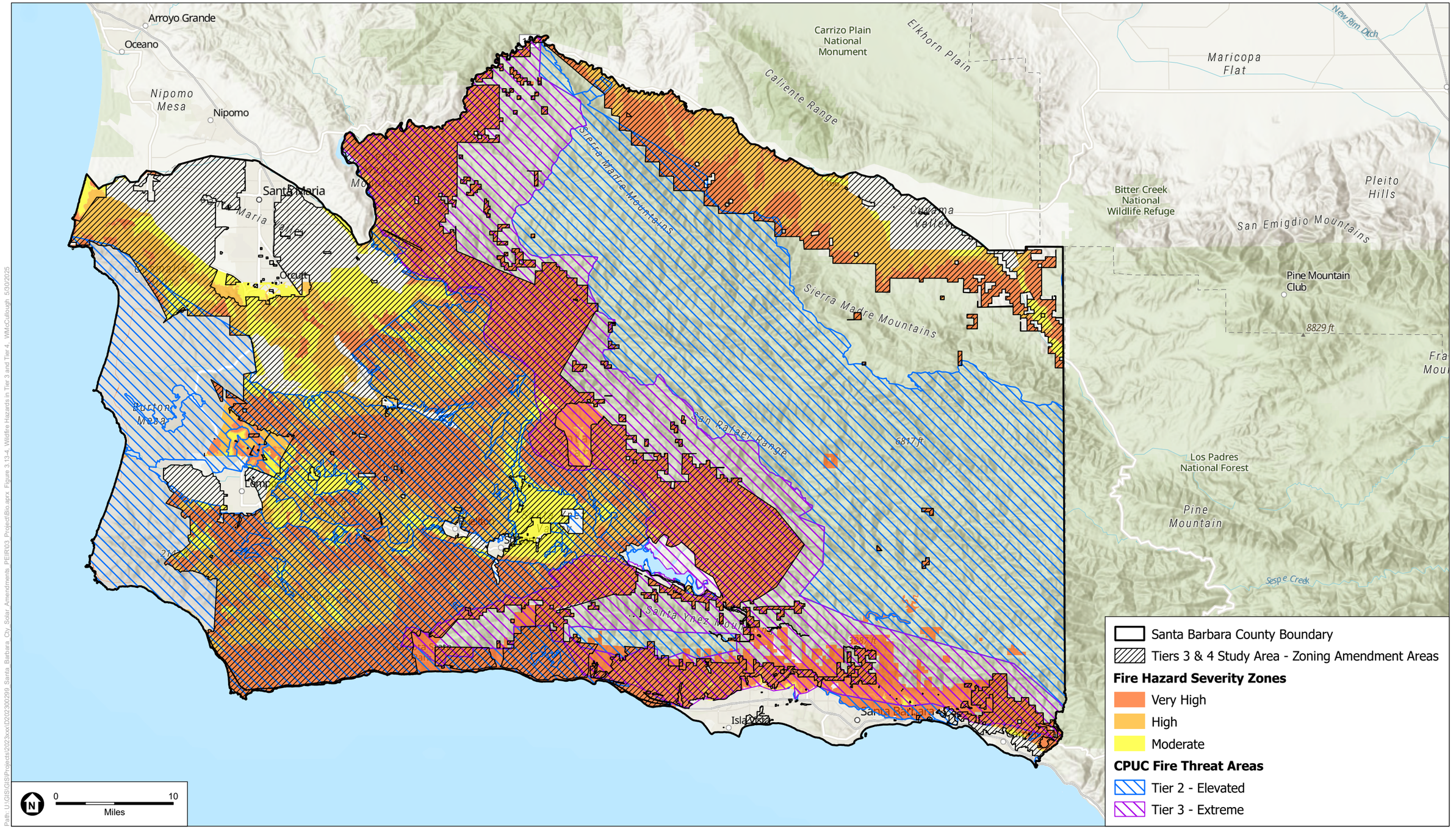
Path: U:\GIS\GIS\Projects\2023xxx\D2023002\99_Santa_Barbara_Cty_Solar_Amendments_PEIR\03_ProjectBio.aprx Figure 3.13-4_Wildfire Hazards in Tier 3 and Tier 4_WMcCullough_5/30/2025

SOURCE: ESA, 2025; CalFire, 2024

Santa Barbara County Utility-Scale Solar Amendments

Figure 3.13-3
Wildfire Hazards in the Project Area

ESA



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SOURCE: ESA, 2025; CalFire, 2024

Santa Barbara County Utility-Scale Solar Amendments

Figure 3.13-4
Wildfire Hazards in Tier 3 and Tier 4 Areas

ESA

Wildland Urban Interface

Wildland areas have a history of serious wildfires in Santa Barbara County. Homes and neighborhoods that reside in or alongside these wildland areas are vulnerable to such wildfires given their proximity to vegetative fuels. This transitional area, where structures and other human development meet or intermingle with undeveloped wildland, is defined as the wildland-urban interface (WUI).

Figure 3.13-5, *Wildland Urban Interface in the Project Area*, and **3.13-6**, *Wildland Urban Interface in Tier 3 and Tier 4 Areas*, show the WUI in relation to the tiers of solar energy systems and facilities that would be allowed under the Project. These WUI zones as detailed in the figures indicate where urban development and potential vegetative fuel sources meet.

Fire Protection Services

The Project area exists in both the LRA and SRA designations (Board of Forestry and Fire Protection 2025). The Project area is mostly located within the service area of the Santa Barbara County Fire Protection District (SBCFPD); primary fire protection services to the Project area are provided by Santa Barbara County Fire Department (SBCFD). SBCFD is a contractor to CalFIRE for lands within the SRA designations within the County, and CalFIRE does not have primary fire suppression responsibilities within the County. The remaining portions of the Project area are in the Montecito Fire Protection District (Montecito FPD) and the Carpinteria-Summerland Fire Protection District (Carpinteria-Summerland FPD). Should a fire occur in these areas, Montecito FPD and Carpinteria-Summerland FPD would have the primary responsibility to respond, although SBCFD often responds due to mutual aid agreements. These districts are discussed below in Section 3.13.3, *Regulatory Framework*. **Figure 3.13-7**, *Fire Stations in the Project Area*, and **Figure 3.13-8***, Fire Stations in Tier 3 and Tier 4 Areas*, show the locations of these stations.

3.13.3 Regulatory Framework

This section describes the regulatory setting for wildfire, including policies and programs that apply to wildfire management, emergency response, and access.

Federal

North American Electric Reliability Corporation Standards

The North American Electric Reliability Corporation (NERC) is a not-for-profit regulatory authority whose mission is to assure the effective and efficient reduction of risks to the reliability and security of the grid. NERC develops and enforces reliability standards; annually assesses seasonal and long-term reliability; monitors the bulk power system through system awareness; and educates, trains, and certifies industry personnel.

NERC developed a transmission vegetation management program to improve the reliability of the electric transmission system by preventing outages from vegetation located on transmission rights-of-way and minimizing outages from vegetation located adjacent to rights-of-way; maintaining clearances between transmission lines and vegetation on and along transmission rights-of-way; and reporting vegetation-related outages of the transmission systems. This transmission vegetation management program applies to Pacific Gas and Electric Company's (PG&E's) and Southern California Edison's (SCE's) transmission line–related vegetation management activities in the Project area. These requirements include identifying and documenting clearances between vegetation and any overhead, ungrounded supply conductors, while

considering transmission line voltage, the effects of ambient temperature on conductor sag under maximum design loading, fire risk, line terrain and elevation, and the effects of wind velocities on conductor sway. These guidelines are set forth and are consistent in both PG&E's Transmission Vegetation Management Standard and SCE's Transmission Vegetation Management Plan (TVMP), which is designed to meet or exceed federal laws and regulations, including NERC (PG&E 2016, SCE 2021).

State

California Senate Bill 38

Approved by the Governor in October 2024, Senate Bill 38 (SB 38) amended §761.3 of the California Public Utilities Code to address battery energy storage facilities. Section 761.3(g) requires that each battery energy storage facility in the state have an emergency response and evacuation plan that covers the premises of the battery energy storage facility. It requires the owner or operator of the facility, in developing the plan, to coordinate with local emergency management agencies, unified program agencies, and local first response agencies. Through this state-mandated local program, SB 38 requires the owner or operator to submit the plan to the County.

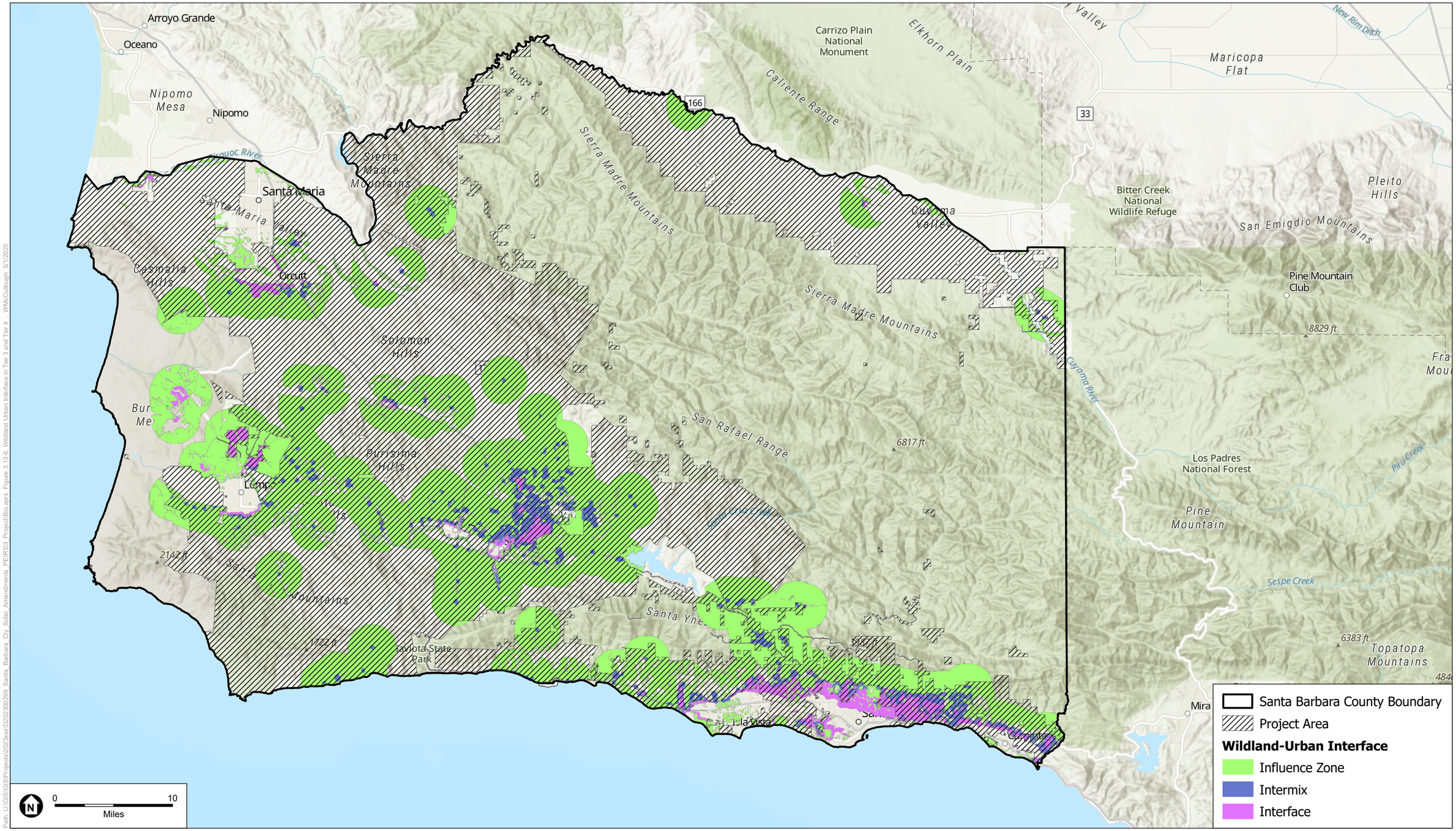
Strategic Fire Plan for California

The CAL FIRE Strategic Plan 2024: Transforming Tomorrow is CAL FIRE's most current 5-year strategic plan. Developed by the State Board of Forestry and Fire Protection, the Strategic Fire Plan outlines goals and objectives to implement CAL FIRE's overall policy direction and vision. The 2024 plan demonstrates CAL FIRE's goals to, in part, strengthen the Department's physical and digital infrastructure and streamline equitable access to information across core services, and identify core capabilities and strengthen operational capacity (CAL FIRE 2024a).

CAL FIRE's jurisdiction, which encompasses over 31 million acres, extends the length and breadth of the state with an emergency response and resource protection capability of 6,100 full-time fire professionals, foresters, and administrative employees; 2,600 seasonal firefighters; 105 California Conservation Corps firefighters; 600 Volunteers in Prevention; and 3,500 inmates and wards (CAL FIRE 2019). CAL FIRE provides direction for fire prevention and enforcement within SRAs using fire resource assessments, a variety of available data, mapping, and other tools. Pre-fire management activities, including prescribed burning, fuel breaks, forest health treatments, and removal of hazardous vegetation, are conducted at the unit level under the guidance of CAL FIRE program managers. Through the updated 2024 Strategic Plan, CAL FIRE also delivers land use planning and defensible space inspection programs to the local level across the state (CAL FIRE 2019).

California State Emergency Plan

Pursuant to the Emergency Services Act (Government Code §8550 et seq.), California has developed an emergency plan to coordinate emergency services provided by federal, state, and local government agencies and private persons. Rapid response to incidents involving wildfire and other natural and/or human-caused incidents is an important part of the plan, which is administered by the Governor's Office of Emergency Services. The Governor's Office of Emergency Services coordinates the responses of other agencies, including the U.S. Environmental Protection Agency, California Environmental Protection Agency, California Highway Patrol, California Department of Fish and Wildlife, regional water quality control boards, local air districts, and local agencies (Cal OES 2023).



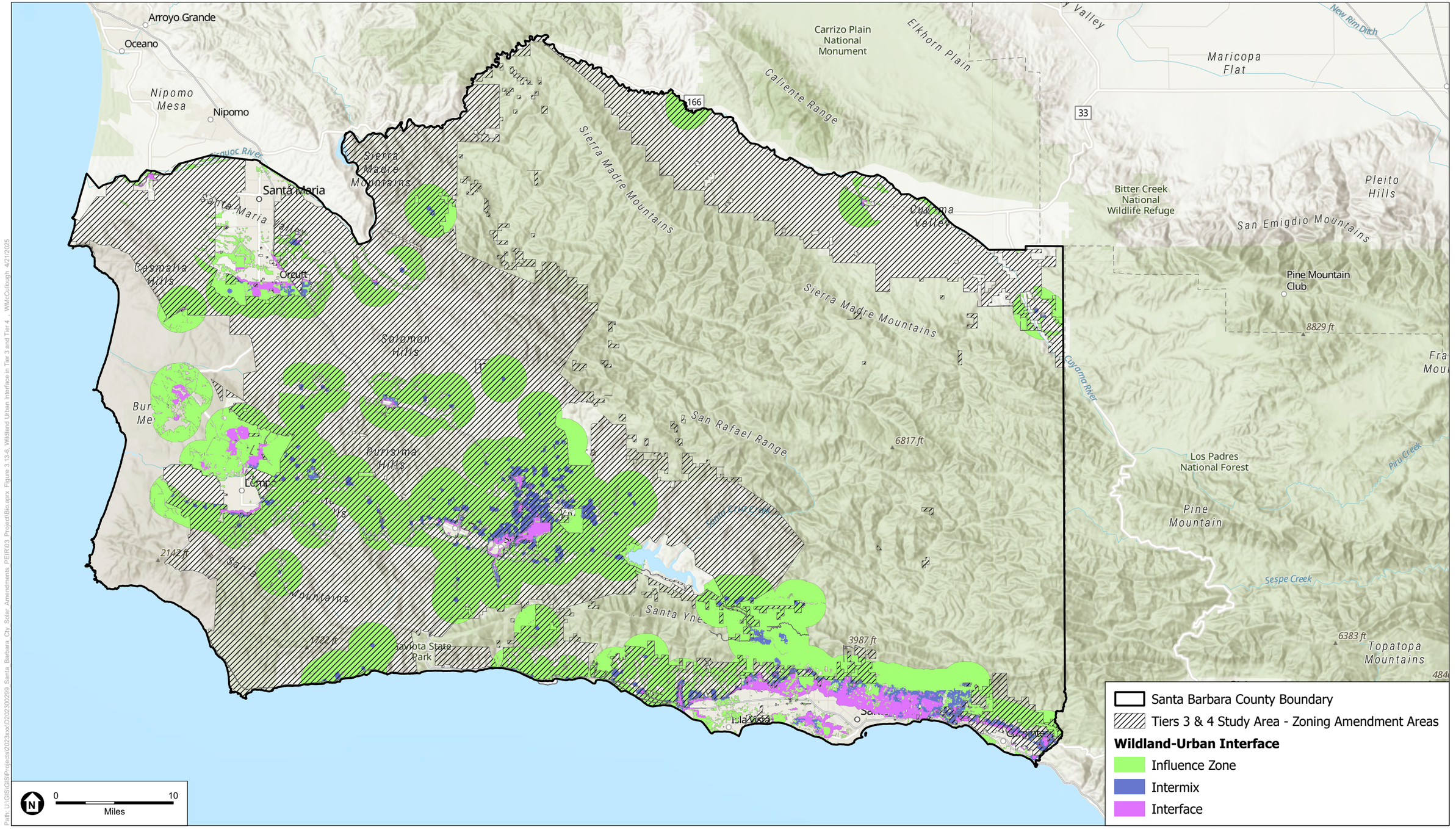
SOURCE: ESA, 2025; CalFire, 2024

Santa Barbara County Utility-Scale Solar Amendments

Figure 3.13-5
Wildland Urban Interface in the Project Area

ESA

Path: U:\GIS\GIS\Projects\2023\xxx\D2023002990 Santa Barbara City Solar Amendments PEIR\R3 ProjectBio.aprx Figure 3.13-6 Wildland Urban Interface in Tier 3 and Tier 4 - WMcCullough 5/1/2025



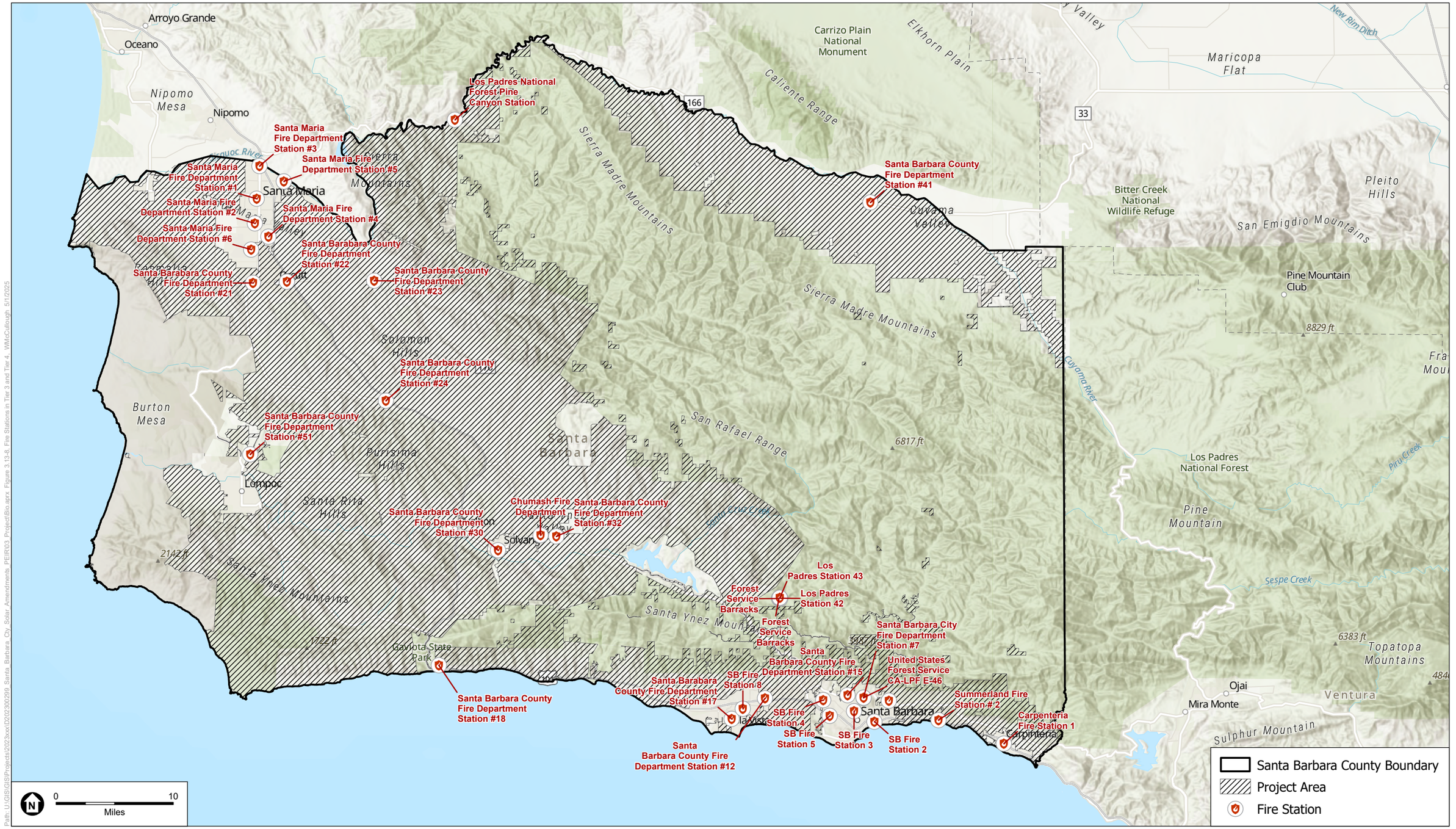
Path: U:\GIS\GIS\Projects\2023xxx\D202300299_Santa_Barbara_Cty_Solar_Amendments_PEIR\03_Project\Bio.aprx Figure 3.13-6_Wildland Urban Interface in Tier 3 and Tier 4 - WMcCullough 4/21/2025

SOURCE: ESA, 2025; CalFire, 2024

Santa Barbara County Utility-Scale Solar Amendments

Figure 3.13-6
Wildland Urban Interface in Tier 3 and Tier 4 Areas

ESA



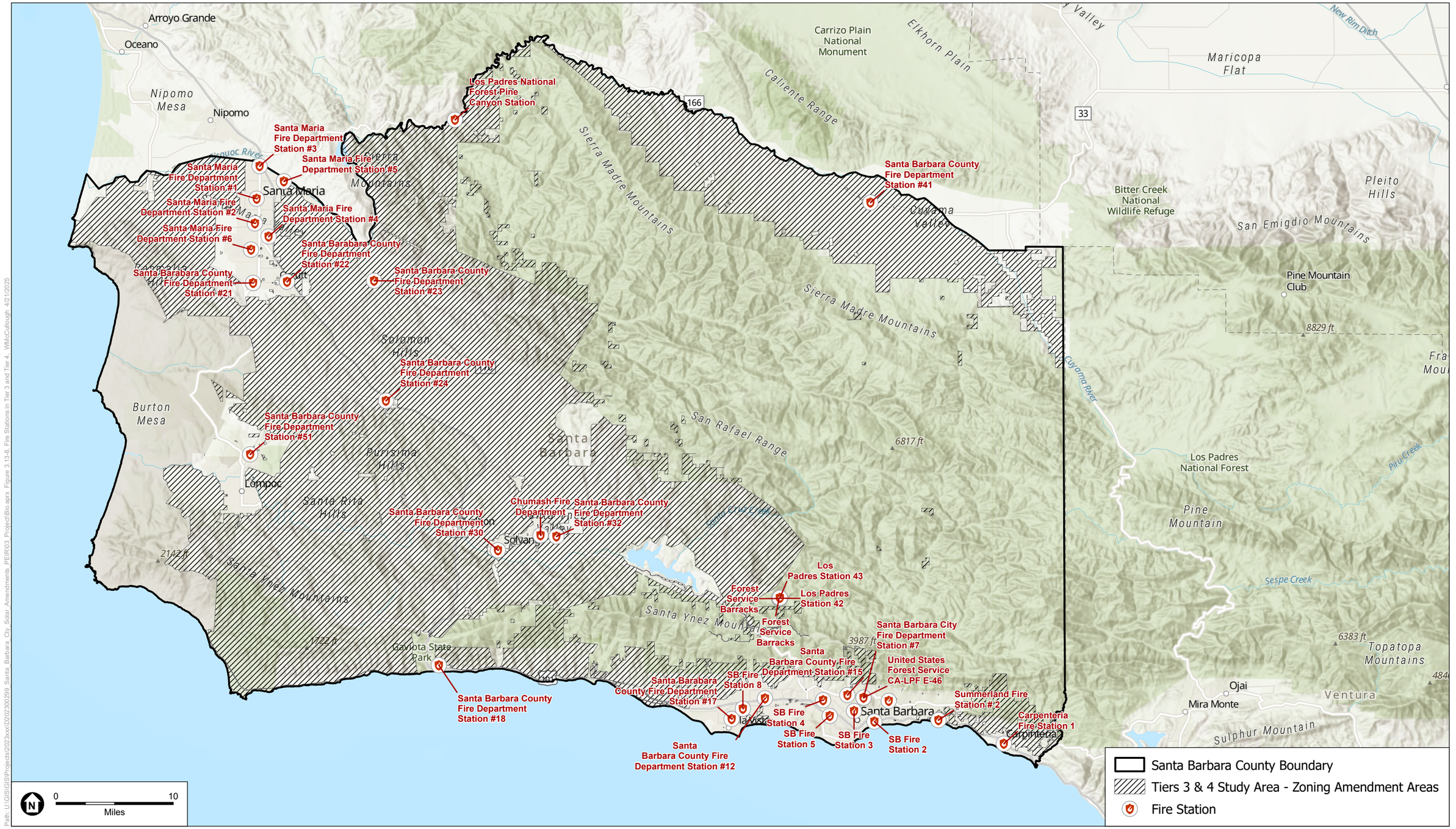
Path: U:\GIS\GIS\Projects\2023xxx\D202300299_Santa_Barbara_Cty_Solar_Amendments_PEIR\03_Project\Bio.aprx Figure 3.13-8, Fire Stations in Tier 3 and Tier 4, WMcCullough 5/1/2025

SOURCE: ESA, 2025; CalFire, 2024

Santa Barbara County Utility-Scale Solar Amendments

Figure 3.13-7
Fire Stations in the Project Area

ESA



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SOURCE: ESA, 2025; CalFire, 2024

Santa Barbara County Utility-Scale Solar Amendments

Figure 3.13-8
Fire Stations in Tier 3 and Tier 4 Areas

ESA

The California State Emergency Plan plays a key role in guiding state agencies, local jurisdictions, and the public on emergency management. It describes the methods for emergency operations, provision of mutual aid, emergency response capabilities of state agencies, resource mobilization, public information, and continuity of government during an emergency or disaster. Currently, the emergency plan is undergoing a comprehensive update. The update includes an updated hazards discussion with new information on wildfires, earthquakes, pandemics, severe weather, Public Safety Power Shutoffs (PSPS), and cyberattacks, as well as an additional section on science and technology in emergency management.

Public Resources Code Section 4291 and 4119

Public Resources Code §4291 identifies fire safety provisions that are deemed necessary by the director or agency with primary responsibility for fire protection in the area. During the fire hazard season, these regulations include maintaining defensible space[4]; restricting the use of equipment that may produce a spark, flame, or fire; requiring the use of spark arrestors on equipment that has an internal combustion engine; specifying requirements for the safe use of gasoline-powered tools in fire hazard areas; and specifying fire-suppression equipment that must be provided on-site for various types of work in fire-prone areas.

In addition, Public Resources Code Section 4119 authorizes the United States Forest Service (USFS), the United States Department of the Interior (US DOI), Bureau of Land Management, and CalFIRE to inspect properties to determine whether they comply with state forest and fire laws, regulations, and/or use permits. This can be used to request a PRC 4291 compliance inspection.

California Public Utilities Commission General Orders

General Order 95

Revised January 2020, this General Order outlines rules for construction of overhead electric lines. CPUC General Order 95 applies to work conducted by PG&E and the other investor-owned utilities, including the construction and reconstruction of overhead electric lines. The replacement of poles, towers, or other structures is considered reconstruction and requires adherence to all strength and clearance requirements of this order. CPUC has promulgated various rules to implement the fire safety requirements of General Order 95, including the following (CPUC 2020):

- **Rule 18A:** Requires utility companies to take appropriate corrective action to remedy safety hazards and General Order 95 nonconformances. Additionally, this rule requires that each utility company establish an auditable maintenance program.
- **Rule 31.2:** Requires that lines be inspected frequently and thoroughly. It also requires that lines temporarily out of service be inspected and maintained.
- **Rule 35:** Requires that vegetation management activities be performed to establish necessary and reasonable clearances. These requirements apply to all overhead electrical supply and communication facilities that are covered by this General Order. Specifically, this applies to communication and

[4] In Santa Barbara County, defensible space is defined as clearance from all structures shall not be less than 100 feet or to your property line, whichever is closer. Within the 100-foot perimeter, all brush, flammable vegetation, or combustible growth shall be modified so that a wildfire burning under average weather conditions would be unlikely to ignite the structure (SBCFD 2023).

electric supply circuits, energized at 750 volts or less, which must be kept clear of vegetation in new construction and when circuits are reconstructed or repaired.

- **Rule 38:** Establishes minimum vertical, horizontal, and radial clearances of wires from other wires.

General Order 165

General Order 165 establishes requirements for the inspection of electric distribution and transmission facilities that are not contained within a substation. Utilities must perform "patrol" inspections, which are defined as a simple visual inspection of utility equipment and structures (designed to identify obvious structural problems and hazards) at least once per year for each piece of equipment and structure. Detailed inspections, where individual pieces of equipment and structures are carefully examined, are required every 5 years for all overhead conductor and cables, transformers, switching/protective devices, and regulators/capacitors. By July 1 of each year, each utility subject to General Order 165 must submit an annual report of its inspections for the previous year under penalty of perjury (CPUC 2017a).

General Order 166

General Order 166 Standard 1.E requires each investor-owned utility, such as PG&E and SCE, to develop a fire prevention plan describing measures that the utility will implement to mitigate the threat of power line fires generally. Additionally, this standard requires that investor-owned utilities outline a plan to mitigate power line fires when wind conditions exceed the structural design standards of the line during a Red Flag Warning event in a high-fire-threat area. Fire prevention plans formulated by investor-owned utilities are required to identify specific parts of the utility's service territory where the conditions described above (i.e., Red Flag Warnings and high-wind events) may occur simultaneously. Standard 11 requires that utilities report annually to the CPUC regarding compliance with General Order 166 (CPUC 2017b).

PG&E Company Emergency Response Plan

Updated in 2019, the PG&E Company Emergency Response Plan assists PG&E personnel with safe, efficient, and coordinated response to emergency incidents involving gas or electric generation, distribution, storage, and/or transmission systems. The Company Emergency Response Plan applies to PG&E service territory and the people who work in those systems. This all-hazards approach applies to any natural disaster or human-caused situation (e.g., fires, floods, storms, earthquakes, terrorist attack, or cyberattack) that threatens life and property or requires immediate action to protect or restore service or critical business functions to the public. The Company Emergency Response Plan also outlines the operational structure, which includes a Wildfire Safety Operations Center that operates 24 hours a day during wildfire season (PG&E 2019).

PG&E Wildfire Mitigation Plan

Updated in April 2024, this plan outlines PG&E's Community Wildfire Safety Program, with the overarching goals to reduce ignition risk, improve operational mitigations such as PSPS, and improve system resilience. In this updated plan, PG&E employs strategies to aggressively reduce wildfire risk in the High Fire Threat Districts and High Fire Risk Areas through undergrounding, updating management and mitigation planning, and addressing vegetation risk more efficiently through new risk-informed mitigation initiatives (PG&E 2024).

SCE Wildfire Mitigation Plan

SCE's 2023-2025 Wildfire Mitigation Plan builds on the 2020-2022 Plan to maintain the wildfire risk reduction the company has achieved to date. The plan intends to further reduce the significant wildfire risk and PSPS impacts that remain in high fire risk areas. The main goals of the plan include installing covered conductors, undergrounding overhead power lines in severe risk areas, and implementing cutting-edge technologies to help predict the wildfire threat.

Key areas of action include (SCE 2024):

- Grid hardening, including transmission lines
- Target undergrounding work in severe risk areas
- Reduce PSPS impacts, particularly with Access & Functional Needs customers
- Expand aerial fire suppression funding to year-round
- Further technological advancements

2022 California Fire Code

The most recent fire code, the 2022 California Fire Code, is contained within Title 24, Part 9 of the California Code of Regulations. Based on the International Fire Code, the California Fire Code was created by the California Building Standards Commission and regulates use, handling, and storage requirements for hazardous materials at fixed facilities. Similar to the International Fire Code, the California Fire Code and the California Building Code use a hazards classification system to determine the appropriate measures to incorporate to protect life and property. The 2022 California Fire Code is an enforceable set of regulations consistent with nationally recognized and accepted practices for safeguarding life and property from the hazards of fire and explosion; dangerous conditions arising from the storage, handling, and use of hazardous materials and devices; and hazardous conditions in the use or occupancy of buildings or premises. It also contains provisions to assist emergency response personnel.

Section 1207 of the 2022 California Fire Code addresses design, construction, operation and maintenance (O&M), decommissioning, and hazard response (including for both fire and spill hazards) for electrical energy storage systems (ESSs). Santa Barbara County has adopted the 2022 version of the California Fire Code. Therefore, the County has enforcement authority for the California Fire Code for projects under its jurisdiction.

Chapter 12 of the California Fire Code addresses the installation, maintenance, repair, retrofitting, testing, commissioning, and decommissioning of energy systems, including photovoltaic systems, fuel cell energy systems, energy storage systems, standby and emergency power, and portable generators. Section 1207 of the 2022 California Fire Code specifically addresses the design, operation and maintenance (O&M), decommissioning, and hazard response for electrical energy storage systems (ESSs). Section 1207 requires ESSs to meet Underwriters Laboratories (i.e., UL) standard UL 9540, which is a safety standard specific to ESSs. For ESSs connected to a utility grid, like those enabled under this Project, the UL 9540 standard also extends to the equipment used to make that connection. This standard pertains to fire and explosion safety concerns associated with ESSs, including the safety of the storage (battery) component during operation, fire detection, and fire mitigation effectiveness in enclosed areas. For ESSs connected to a utility grid, the UL 9540 standard would also extend to the equipment used to make the connection. Santa

Barbara County would require full compliance with the California Fire Code and all applicable standards for final design and implementation of any solar and/or battery energy storage facility.

Local

Santa Barbara County Code of Ordinances

Chapter 10, County Building Code

Chapter 10 of the County Code is the Santa Barbara County Building Code (Ord. No. 5092, 11-19- 2019). In certain areas of the county there are conditions and situations that require modification of California codes for buildings and related construction, such as the Santa Barbara County High Fire Hazard Area,[5] and these conditions and situations require specific legislative action to provide for the safety and health of the populace of the county. The code addresses geological, topographical, and climatic conditions in the county, including extreme weather conditions, firefighting resources, flammable vegetation, High Hazard Areas, extreme wind conditions, and seismic shaking. The code provides the minimum standards to safeguard and protect life, buildings, and structures within the county.

Chapter 15, County Fire Prevention / Fire Code

Chapter 15 of the County Code (Ord. No. 5170, 12-6-2022) is titled Fire Prevention, and serves as the County's Fire Code (Section 3.14.3.1, State Regulations). This ordinance incorporates the County Fire Code by reference and, as a result, implements the minimum requirements consistent with nationally recognized good practices to safeguard public health, safety and general welfare from fire and other hazards in new and existing buildings, structures and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations.

Santa Barbara County Comprehensive Plan

The County's Comprehensive Plan (inclusive of mandatory and optional elements) addresses the conservation, development, and use of natural resources. Refer to Section 3.9, *Land Use and Planning* for analysis on consistency with these policies. Related to wildfire, the Seismic and Safety Element of the Comprehensive Plan is described below.

Seismic Safety and Safety Element

The Seismic Safety and Safety Element (Safety Element) is intended to guide land use planning by providing pertinent data regarding geologic, soil, seismic, fire, and flood hazards. The Safety Element was amended in 2023 and includes revised wildfire policies and incorporates the 2022 Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) by reference. This update also includes draft potential evacuation routes, however these have not been formally adopted by the County. The following Safety Element goals and policies relate to fire protection and prevention and are applicable to the Project:

Fire Protection and Prevention Goal 1: Protect the community from unreasonable risks associated with the effects of wildland and urban fires pursuant to Government Code 65302 (g)(1).

[5] As set forth in Title 14 Chapter 7A, this provision of the code outlines the areas of the County that are subject to higher building standards due to their proximity to known wildfire hazards.

***Policy FIRE-1.0*:** Continue to pursue and promote County fire prevention programs and control measures.

***Policy FIRE-1.2*:** The County will consider risks from hazards when reviewing plans for development and occupancies in High or Very High Fire Hazard Severity Zones and take action to minimize risks to occupants to the greatest extent feasible.

***Policy FIRE-1.3*:** The County shall manage County-owned urban open space facilities to reduce wildfire hazards and associated risks consistent with State and County wildfire regulations and standards.

***Policy FIRE-1.4*:** The County should work with property owners of existing developments that do not conform to contemporary fire safe standards to improve or mitigate access, water supply and fire flow, signing, and vegetation clearance to meet current State and/or locally adopted fire safety standards.

***Policy FIRE-2.0*:** The County shall use California Department of Forestry and Fire Protection-Fire Hazard Severity Zones to determine areas that will require appropriate construction materials for new buildings in State Responsibility Areas and Local Responsibility Areas, local agency Very High Fire Hazard Severity Zones, and designated Wildland-Urban Interface areas pursuant to the California Code of Regulations Title 24, Part 2, California Building Code.

***Policy FIRE-2.1*:** The County should continue to collaborate with the California Department of Forestry and Fire Protection in the revision of Fire Hazard Severity Zone Maps and shall adopt the official areas of Very High Fire Hazard Severity Zones in the Local and State Responsibility Areas.

***Policy FIRE-3.0*:** The County shall continue to require consistency with County Fire Department Development Standards that ensure adequate defensible space clearance around all structures in compliance with the California Fire Code, Public Resource Code §4291, and Government Code §51175-51188.

***Policy FIRE-3.1*:** New development shall meet or exceed the State Fire Safe Regulations through application of the Fire Code and wildfire development standards pertaining to fuel modification and defensible space.

***Policy FIRE-3.2*:** A Wildfire Protection Plan is required for all new large developments in the Very High Fire Hazard Severity Zone (VHFHSZ), including: subdivisions, mixed-use development, commercial cannabis activities, multi-family housing, businesses open to the public, and large assembly uses and/or events. Such uses may require a Wildfire Protection Plan in the High FHSZ, at the discretion of the Fire Marshal.

***Policy FIRE-3.3*:** When a Wildfire Protection Plan is required, it shall include measures for modifying fuel loading, a maintenance plan to ensure measures are maintained, and a site plan with locations of any roads or existing structures that may act as a fuel barrier in a configuration that will maximize their benefit as a fuel barrier/fire break to the proposed development.

***Policy FIRE-3.4*:** Santa Barbara County Fire Department shall continue to implement the Vegetation Management Program through implementation of its Unit Strategic Fire Plan and maintained in CalMapper, providing long-term maintenance of fire hazard reduction projects to mitigate risks to existing development and communities.

***Policy FIRE-3.5*:** Communities within Santa Barbara County are encouraged to prepare Community Wildfire Protection Plans to identify and prioritize areas for hazardous fuel reduction

treatments, describe methods to reduce structure ignitability, and methods of fuel treatment that protect essential infrastructure.

***Policy FIRE-3.6*:** To reduce the potential for fire damage, the County shall continue to require consistency with County Fire Department Development Standards pursuant to the California Fire Code, Public Resource Code §4291, and Government Code §51175-51188, as may be amended.

***Policy FIRE-5.0*:** New development in the State Responsibility Areas and Very High Fire Hazard Severity Zone shall meet or exceed State Fire Safe Regulations, as may be amended, relating to roads, water, signing and fuel modification; and Fire Hazard Reduction Around Buildings and Structures Regulations relating to fuel modification (Title 14, California Code of Regulations 1299.01-1299.05), as may be amended.

***Policy FIRE-5.1*:** New development within the State Responsibility Area, Very High Fire Hazard Severity Zones, and County High Fire Hazard Area will meet or exceed State standards set forth in the County Fire Code and County Building Code, Chapter 7A Materials and Construction Methods for Exterior Wildfire Exposure, as may be amended.

***Policy FIRE-5.2*:** The County will continue to evaluate non-conforming development and apply contemporary road standards consistent with the State Fire Safe Regulations through the development review process.

***Policy FIRE-5.3*:** All new development shall meet requirements identified in the State Fire Safe Regulations, National Fire Protection Association Standard 1142 on water supplies for suburban and rural firefighting, State Fire Code, and local Fire District Development Standards for hydrant spacing, water flow rates for fire suppression, and stored water for water and fire protection systems.

***Policy FIRE-5.4*:** New development in the State Responsibility Area and Very High Fire Hazard Severity Zone will meet or exceed the requirements in the State Fire Code and Fire Safe Regulations, which include visible home and street addressing and signage, evacuation and emergency vehicle access, and vegetation clearance maintenance on public and private roads that ensure adequate evacuation and emergency vehicle access.

***Policy FIRE-6.1*:** The County's fire districts shall continue to review and update Standard of Coverage studies provided for existing and planned new development to ensure there are adequate fire protection services, such as fire stations, equipment, and coverage during emergencies.

***Policy FIRE-6.3*:** The County's fire districts will continue to train and certify their staff using the California Incident Command Certification System or by the requirements and guidelines set by the State Fire Marshal for training emergency service staff.

***Policy FIRE-7.0*:** The County shall ensure completeness and availability of identified emergency supplies and resources to all segments of the population, focusing especially on vulnerable and disadvantaged communities, including but not limited to temporary shelter or housing, and items such as medical supplies and services, water main repair parts, generators, pumps, sandbags, road clearing, and communication facilities.

***Policy FIRE-7.1*:** The County shall maintain and improve disaster response and recovery capabilities and shall meet the emergency needs of all members of the community, especially the most vulnerable and disadvantaged.

***Policy FIRE-7.2*:** Post-wildfire reconstruction shall conform to the latest applicable Fire and Building Code standards.

***Policy FIRE-8.1*:** All new development in the Very High Fire Hazard Severity Zone VHFHSZ will comply with ingress/egress requirements found in applicable wildfire Development Standards, Fire Code, and the State Fire Safe Regulations.

***Policy FIRE-9.0*:** All new development shall maintain adequate water infrastructure that ensures water supply and flow rates are adequate for fire suppression.

***Policy FIRE-9.1*:** New development, including that which is not supplied by a water purveyor, shall have adequate infrastructure flow rate, and storage onsite that supports long-term water supply.

***Policy FIRE-9.2*:** The County will coordinate with water purveyors to encourage water supply infrastructure upgrades to maintain an adequate, long-term water supply for fire suppression needs for the community.

Community Plans

As discussed in Chapter 2, *Project Description*, several of the unincorporated communities have specific community plans with their own goals, policies, and development standards. A list of the community plan goals, policies, development standards, and design guidelines (as applicable) related to wildfire are listed below by community plan. The Goleta Community Plan contains no goals or strategies related to wildfire.

Eastern Goleta Valley

The following objectives, policies, and development standards are outlined in the Eastern Goleta Valley Community Plan and are applicable to the Project (County of Santa Barbara, 2025c).

Objective FIRE-EGV-1: Minimize the potential hazard to human and animal life, property, and the ecosystem of Eastern Goleta Valley due to fire.

***Policy FIRE-EGV-1.1*:** The County shall support and pursue collaborative fuel management and wildfire protection programs for the City of Santa Barbara, the City of Goleta, and Eastern Goleta Valley to encourage fire hazard reduction and protection of natural resources.

***Policy FIRE-EGV-1.2*:** Fire hazards shall be minimized in order to reduce the cost of and need for increased fire protection services, while protecting environmental resources.

DevStd FIRE-EGV-1A: In high-fire hazard areas, compliance with State and local defensible space and vegetation management requirements for structures and properties shall be demonstrated prior to development.

DevStd FIRE-EGV-1B: In high-fire hazard areas, the use of native, drought-tolerant, and fire-resistant plants shall be strongly encouraged in landscaping and restoration projects.

DevStd FIRE-EGV-1C: (INLAND) Within high fire hazard areas, vegetation management practices within Environmentally Sensitive Habitat (ESH)/Riparian Corridor (RC) overlay and setback areas should be limited to the following activities to balance environmental resources preservation against wildfire protection:

- Removal of non-native trees or immature native trees
- Removal of surface debris
- Removal of invasive non-native plants as defined and listed in the California Invasive Plant Council's "California Invasive Plant Inventory"

- Removal of vegetation in non-riparian oak woodland or forest within the minimum defensible space area from structures as required by the County Fire Department
- Selective limb removal of mature trees away from structures within minimum defensible space area as required by the County Fire Department
- Thinning, pruning or mowing of vegetation (except trees) to no less than that required to meet fuel modification criteria (in no case less than 4 inch stubble) and leaving the roots intact

***Policy FIRE-EGV-2.6*:** All non-agricultural development in the foothills area shall include provisions for water storage tanks, or connection to the Goleta Water District or other public water purveyor if development is located within the extent of a water district.

***Policy FIRE-EGV-2.7*:** Where feasible, water storage facilities shall be part of a large system or public supply which is reliably maintained, rather than individual ad hoc systems.

***Policy FIRE-EGV-2.8*:** When located within the boundaries of a water district, fire hydrants shall connect to the water district system.

Objective ES-EGV-1: Ensure effective emergency response services and minimize the adverse community-wide impacts of emergencies.

***Policy ES-EGV-1.1*:** The County shall continue to facilitate effective emergency response systems in the event of a community-wide emergency in Eastern Goleta Valley.

Gaviota Coast Plan

The following development standard is outlined in the Gaviota Coast Plan and is applicable to the Project (Santa Barbara County 2018).

Dev Std LU-3: Fire Protection. Development shall be sited to minimize exposure to fire hazards and reduce the need for grading, fuel modification (including thinning of vegetation and limbing of trees), and clearance of native vegetation to the maximum extent feasible. Building sites should be located in areas of a parcel's lowest fire hazard, and should minimize the need for long and/or steep access roads and/or driveways.

Santa Barbara County Comprehensive Plan Lompoc Area

The following goals are outlined in the Santa Barbara County Comprehensive Plan Lompoc Area Interpretive Guidelines and are applicable to the Project (County of Santa Barbara 1999).

Goal: Growth and employment must be consistent with the preservation and enhancement of resources and environmental quality.

Goal: Unique ecological areas should be identified and preserved.

A-1. Development adjacent to the Burton Mesa Preserve and other chaparral areas adjacent to the Preserve should include prevention measures such as Class A roofs, interior sprinklers, adequate access to the urban/rural interface, and structural setbacks (minimum 100 feet) from these high fire hazard areas. Setbacks for fire protection shall occur on private property. It is preferred to locate the setback on a common open space lot in order to avoid conflicts with owners of future individual lots. Access for Fire Department equipment may be provided within this setback and landscaping within this area should not impede the use of such equipment. Paved roads and trails

may be allowed within the setback. Fencing within the structural setback should be comprised of fire resistant material to minimize fire hazards.

A-2. Fuel Modification Zones that call for selective thinning and removal of down and dead materials should not be located through riparian or wetland areas or result in the removal of healthy specimen oaks. Within the Fuel Modification Zones, treatment of oak trees should be limited to limbing the branches up to a height of 6 feet, removing deadwood, and mowing the understory. Where specimen oaks have multiple trunks, all trunks should remain.

Specimen trees are defined in the Board of Supervisors adopted Environmental Threshold and Guidelines Manual as: "mature trees that are healthy and structurally sound and have grown into the natural stature particular to that species". For oaks on the Burton Mesa this should be considered as trees having one or more 4- inch diameter trunk(s) at a height four feet above the ground.

Los Alamos

The following goal and associated development standard and policies are outlined in the Los Alamos Community Plan and are applicable to the Project (Santa Barbara County 2011a).

Goal FIRE-LA-1: Reduce Fire Hazards Community-Wide While Preserving and Enhancing the Hillside Views.

***Policy FIRE-LA-1.1*:** Ensure that adequate fire staffing and facilities are available to meet the needs of both existing and new development in the Los Alamos Township, as well as service demands from outside the township area.

Dev Std FIRE-LA-1.1.3: Developments within High Fire Hazard Severity Zones shall comply with County Fire Department defensible space requirements.

***Policy FIRE-LA-1.2*:** Water system and storage facilities shall be engineered to provide adequate fire flows, capacities and pressures necessary to meet the needs of the planning area. Fire hydrants shall be located along streets, and, where necessary, within developments as required by the County Fire Department.

Mission Canyon Community Plan

The following policies and development standards are outlined in the Mission Canyon Community Plan and are applicable to the Project (Santa Barbara County 2014).

***Policy FIRE-MC-3*:** Fire hazards in the Mission Canyon Plan Area shall be minimized to reduce the cost and need for increased fire protection services and to protect natural resources.

DevStd FIRE-MC-3.1: Along access roads and driveways, limbing of native tree branches shall be allowed in order to meet the minimum vertical clearance requirements of the California Fire Code and County Fire Department development standards. To the maximum extent feasible, fuel modification practices shall not result in the removal, or substantial risk of loss, of mature, healthy, native trees (see DevStd BIO-MC-4.2 and Action BIO-MC-4.3).

DevStd FIRE-MC-3.2: Development proposals shall include an evaluation of the need and location for a fire hydrant, subject to review and approval by the County Fire Department. Fire hydrants may be required on either side of a roadway depending on such factors as: (1) the roadway represents a main route out of the Mission Canyon area; or (2) the Fire Chief, or designated representative, determines the use of fire hydrants on the opposite side of the roadway may prove operationally difficult, or may create unsafe working conditions.

DevStd FIRE-MC-3.3: Development shall comply with the County Fire Department's development standards for fire hydrant spacing and flow rates.

DevStd FIRE-MC-3.4: Development on private roads that does not currently comply with the minimum County Fire Department's development standards for private roads and driveways shall construct reasonable road frontage improvements or other applicable measures to expand the road and driveway space available for emergency turnout zones, pedestrian access, and appropriate landscaping and hardscaping, to the extent allowable by publicly or privately owned easements.

DevStd FIRE-MC-3.5: Development shall comply with current state and County Fire Department's development standards for defensible space (i.e., presently a minimum of 100 feet of fuel modification from buildings and structures)

Policy FIRE-MC-5: Conditional uses, including new construction and increases in intensity of use, shall not significantly contribute, individually or cumulatively, to the existing deficiency in roadway evacuation capacity from the Mission Canyon Plan Area…

DevStd FIRE-MC-5.1: Development shall comply with the County Fire Department's development standard for two separate access roads unless the County Fire Department waives/modifies the requirement and documents finding(s) for the waiver/modification based upon substantial evidence that public safety will not be compromised.

Montecito Community Plan

The following goals and policies are outlined in the Montecito Community Plan and are applicable to the Project (Santa Barbara County 1992).

Goal F-M-l: In High Fire Hazard Areas, 1 Strive to Ensure that Adequate Fire Protection Services and Facilities are Available Prior to Permitting New Development.

***Policy F-M-l.l*:** Because of the lack of a lateral water main above Mountain Drive, development should be minimized in the foothills by appropriate lowering of density and with appropriate development standards.

***Policy F-M-l.2*:** The County shall cooperate with the Montecito Fire Protection District in their efforts to implement regulatory provisions and to minimize the imposition of conflicting regulation on private development.

Orcutt Community Plan

The following development standards and policies are outlined in the Orcutt Community Plan and are applicable to the Project (Santa Barbara County 2024).

Policy FIRE-O-2: Fire hazards in Orcutt shall be minimized in order to reduce the cost of/need for increased fire protection services and to protect the natural resources in undeveloped open space areas.

DevStd FIRE-2.1: Development within or adjacent to high fire hazard areas should include the use of fire prevention measures such as perimeter roads, trails, Class A or B roofs, adequate access to the urban/rural interface and inclusion of structural setbacks per DevStd BIO 1.7. Fencing within the structural setback shall be comprised of fire-resistant material to minimize fire hazards.

DevStd FIRE-2.2: The County shall require two routes of ingress and egress for development unless waived by the Fire Department.

DevStd FIRE-2.3: Orcutt foothill development shall be protected by water storage tanks connected to an existing water purveyor or private water supplies.

Santa Ynez Valley Community Plan

The following goal and development standards are outlined in the Santa Ynez Valley Community Plan and are applicable to the Project (Santa Barbara County 2025b).

Goal FIRE-SYV: Maximize effective and appropriate fire prevention and protection measures to minimize exposure of people and property to wildfire hazards; minimize the adverse impacts of fire protection and suppression efforts.

DevStd FIRE-SYV-2.2: Development shall be sited to minimize exposure to fire hazards and reduce the need for grading and clearance of native vegetation to the maximum extent feasible. Building sites should be located in areas of a parcel's lowest fire hazard, and should minimize the need for long and/or steep access roads and/or driveways.

DevStd FIRE-SYV-2.3: Applications for parcel and tract maps in high fire hazard areas shall include fuel management plans for review during the permit review process. Such plans shall be subject to final review and approval by Planning & Development and the County Fire Department.

All proposed residential units and/or development that requires a building permit in fire hazard areas shall comply with the requirements of the California Building Code, California Fire Code, and Santa Barbara County Fire Department Development Standards.

- Decks, gazebos, patio covers, etc. must not overhang slopes and must conform to the latest building codes related to fire safety as updated from time to time. Front doors shall be solid core, minimally 1¾ inch thick. Garage doors shall be noncombustible. Wooden or plastic fences or vegetation growing on fences for lots along the project site perimeter shall not be used.
- All new power lines shall be installed underground in order to prevent fires caused by arcing wires.

Toro Canyon Plan

The following policies and development standards are outlined in the Toro Canyon Plan and are applicable to the Project (Santa Barbara County 2004).

***Policy FIRE-TC-2*:** Fire hazards in the Toro Canyon Planning Area shall be minimized in order to reduce the cost of/need for increased fire protection services while protecting the natural resources in undeveloped areas.

DevStd FIRE-TC-2.2: (INLAND) Development shall be sited to minimize exposure to fire hazards and reduce the need for grading and clearance of native vegetation to the maximum extent feasible. Building sites should be located in areas of a parcel's lowest fire hazard, and should minimize the need for long and/or steep access roads and/or driveways. Properties subject to high fire hazards requiring fuel breaks to protect the proposed structures shall use the Fuel Management Guidelines to establish fuel management zone(s) on the property.

DevStd FIRE-TC-2.2: (COASTAL) Development shall be sited to minimize exposure to fire hazards and reduce the need for grading, fuel modification (including thinning of vegetation and limbing of trees), and clearance of native vegetation to the maximum extent feasible. Building sites should be located in areas of a parcel's lowest fire hazard, and should minimize the need for long and/or steep access roads and/or driveways. Properties subject to high fire hazards requiring fuel breaks to protect the proposed structures shall use the Fuel Management Guidelines to establish fuel management zone(s) on the property.

DevStd FIRE-TC-2.5: All private roads and driveways serving development, including but not limited to subdivision or additional residential units on one lot, shall be constructed to the minimum roadway width requirement of the CSFPD or MFPD unless the applicable fire district waives/modifies the requirement and documents finding(s) for the waiver/modification with the County.

DevStd FIRE-TC-2.6: Development requiring fire hydrants in the Plan area shall maintain the required residual water pressure and hydrant spacing standards of the CSFPD or MFPD unless the applicable fire district waives/modifies the requirement and documents finding(s) for the waiver/modification with the County.

DevStd FIRE-TC-2.7: Development within or adjacent to high fire hazard areas shall include the use of fire prevention measures such as fire-retardant roof materials, sprinklers, and water storage consistent with county and state regulations for fire resistant construction, and the respective fire district standards of the CSFPD and MFPD.

Santa Barbara County Fire Protection District

The Santa Barbara County Fire Protection District encompasses approximately 2,480 square miles, providing services to an estimated population of 172,000. This includes the unincorporated areas of the County as well as the cities of Buellton, Solvang, and Goleta. The unincorporated areas include the communities of Casmalia, Cuyama, Gaviota, Garey, Hope Ranch, Los Alamos, Los Olivos, Mission Canyon, Mission Hills, New Cuyama, Orcutt, Santa Ynez, Sisquoc Vandenberg Village, and Ventucopa as well as private lands in the forest. Emergency Operations consists of 3 battalions (Battalion 1-South, Battalion 2-North and Battalion 3-Central) with a total of 16 fire stations that respond to all types of emergencies, including: fire, medical, rescue, and hazardous materials incidents (Santa Barbara County Fire Department, 2022).

Montecito Fire Protection District

The Montecito Fire Protection District (Montecito FPD) is a firefighting district composed of two firehouses and responds to structure fires, vehicle fires, and wildfires within their service area. The lands designated as LRA are under direct protection by the Montecito FPD. The District provides fire suppression, advanced life support, emergency medical services, technical rescue, and hazardous material response services with thirty-three emergency response personnel operating from two fire stations, as well as a fire prevention bureau along with thirteen administrative support staff (Montecito Fire Department 2019).

District firefighters provide many other valuable services to the community in addition to fire suppression, including emergency medical treatment and transport, technical rescue services, and response to hazardous material releases. Recently, Montecito FPD prepared a Comprehensive Wildfire Mitigation Strategy, which is a guiding document of the District. The purpose of the Comprehensive Wildfire Mitigation Strategy is to consolidate the information and recommendations provided within

various studies within the community on wildfire prevention. This strategy identifies the wildfire mitigation projects undertaken by the Department and provides guidance on project prioritization (Montecito Fire Department 2025). The District also conducted an evacuation study in 2020.

Carpinteria-Summerland Fire Protection District

The Carpinteria-Summerland Fire Protection District is responsible for emergency response under the lands designated as LRA. The District covers 40 square miles from the Pacific Ocean to extreme elevations in the Los Padres National Forest, and from Rincon Creek at the Santa Barbara County/Ventura County line to Ortega Hill. The District provides fire suppression, advanced life support, emergency medical services, arson investigations, homeland security, wildland abatement, technical rescue, and hazardous material response services with 28 emergency response personnel operating from two fire stations, as well as a fire prevention bureau along with administrative support staff (Carpinteria Summerland Fire Protection District 2021).

Santa Barbara County Multi-Jurisdictional Hazard Mitigation Plan

The Santa Barbara County *Multi-Jurisdictional Hazard Mitigation Plan* (MJHMP) was prepared and formulated with input and coordination from each incorporated city, the County of Santa Barbara, citizen participation, responsible officials, and support from the State of California Governor's Office of Emergency Services (CalOES) and the Federal Emergency Management Agency (FEMA). The MJHMP was developed to promote compliance with state and federal program requirements, to enhance local policies for hazard mitigation capability, and to achieve regulatory compliance, among other goals (Santa Barbara County 2023).

Santa Barbara Operational Area "All Risk" Mutual Aid Plan

The Santa Barbara Operational Area "All Risk" Mutual Aid Plan outlines procedures, policies, resource, and personnel information to assist local, state, and federal fire agencies in preparing for a major emergency. The objective of the Plan is to provide fire, rescue, paramedical, hazardous materials or other expertise in the form of resources and personnel as would be necessary to manage a major incident or disaster that would have had exceeded the capabilities of a single agency (SBCFD 2005).

Regional Wildfire Mitigation Program

The Regional Wildfire Mitigation Program (RWMP) is a multi-year initiative designed to assess hazard, exposure and vulnerability and equitably reduce wildfire hazard across the Santa Barbara front country. The program goals are to decrease the risk of wildfire impacts to structures and infrastructure, promote wildfire resilient green space, working lands, and habitats, and develop community capacity to adapt and recover from the shocks of natural disasters (Regional Wildfire Mitigation Program 2025).

2023 Santa Barbara County Unit Strategic Fire Plan

The Santa Barbara County Unit Strategic Fire Plan is a collaborative local planning document developed by the SBCFD. It identifies and evaluates wildland fire hazards and recognizes life, property, and natural resource assets at risk in the region. Key objectives identified by SBCFD include (SBCFD 2023):

- Maintain an up-to-date GIS database used for operations, planning, and analysis
- Develop tools to facilitate collection, analysis and presentation of various data sets

- Collaborate with local governmental agencies in the creation and adoption of land use plans, building codes, fire codes, and development standards in High Fire Hazard Areas
- Provide communities with technical support and guidance in the preparation of CWPPs using the Santa Barbara County approved Community Wildfire Protection Plan (CWPP) template
- Provide ongoing public education and outreach
- Enforce defensible space laws and ordinances, and provide defensible space education
- Conduct collaborative vegetation management projects
- Maintain suppression forces: engine companies, hand crew, construction section, air operations unit (helicopter program)
- Engage and participate with local stakeholder groups (e.g., fire safe councils and others) to validate and prioritize the assets at risk

Santa Barbara County Fire Department

The Santa Barbara County Fire Department (SBCFD) serves a population of approximately 184,000 residents encompassing 3,568 square miles. The fire department consists of sixteen fire stations, a crew program, a construction section, an air support unit, a Fire Prevention Division and support and administrative staff. Santa Barbara County Fire Department provides fire protection services to the Santa Barbara County Fire Protection District, which encompasses 1,757,092 acres and includes unincorporated portions of the County as well as the Cities of Buellton, Solvang, and Goleta. The Fire District includes 797,382 acres of SRA, 820,154 acres of Federal Responsibility Area (FRA), and 139,556 acres of LRA. The Department is a true "all-risk" organization providing services that include structure and wildland firefighting, emergency medical care and transportation, rescue, fire prevention and inspection, hazardous material and oil spill response and containment. The Santa Barbara County Fire Department Chief also serves as the County Fire Warden, responsible for enforcing all laws, ordinances and any rules or regulations adopted by the State Board of Forestry and Fire Protection and State Fire Marshal relating to fires or to fire prevention and protection (County of Santa Barbara 2023).

Santa Barbara County Fire Department Development Standards

The SBCFD has established multiple development standards regarding construction and development within the County. SBCFD provides review for various development projects within Santa Barbara County, including for commercial solar arrays, in accordance with local, state, and federal law. These development standards include a review of fire access plans, road access, naming conventions, easements, stored water plans, fire hydrant plans, and defensible space program requirements (Santa Barbabra County Fire Department 2025).

Community Wildfire Protection Plans

As described in Section 3.8 *Hazards and Hazardous Materials*, the Healthy Forests Restoration Act directs federal agencies to collaborate with communities in developing a Community Wildfire Protection Plan (CWPP), which includes the identification and prioritization of areas needing hazardous fuels treatment. With a CWPP in place, community groups receive priority for federal and state grants to treat hazardous fuels and address special concerns to reduce the risk of catastrophic loss as a result of wildland fire. CWPPs address the challenges of the Wildland/Urban Interface in a way that brings comprehensive

and locally supported solutions. Santa Barbara County has had numerous communities go through the process of developing CWPPs. There are eight certified CWPPs in Santa Barbara County. The City of Goleta CWPP and the City of Santa Barbara CWPP are not applicable to the Project because the Project would not be within city limits. There are six adopted CWPP's applicable to the Project.

Santa Barbara Foothills Community Wildfire Protection Plan

Adopted on June 3, 2025, this is the most recent CWPP in the County. Specifically, the Santa Barbara Foothills CWPP serves as a mechanism for gathering community input and identifying areas with high wildfire risk, and for identifying potential projects intended to mitigate wildfire risk. The CWPP identifies values at risk from wildfire, including people, property, natural resources, agricultural lands, cultural resources, economic interests, and infrastructure. A Wildfire Hazard and Risk Assessment was conducted for the CWPP and modeled extreme weather conditions to resemble a Sundowner wind event. These conditions represent extremely low fuel moisture and very high wind speeds. Peak weather conditions are intended to represent the predicted worst case wildfire behavior in the Plan Area, which serves to better equip the region for a wildfire event (County of Santa Barbara 2025d).

Mission Canyon Community Wildfire Protection Plan

In 2011, the Board of Supervisors adopted Mission Canyon CWPP. This CWPP identifies and prioritizes areas for hazardous fuel reduction treatments and recommends the types and methods of treatments to protect at-risk communities and essential infrastructure as well as measures to reduce structural ignitability. The topography, native and ornamental vegetative fuel loading, and residential development make the community of Mission Canyon a prime example of a wildland urban interface. The purpose of the Mission Canyon CWPP is to:

- Identify potential areas for hazardous fuel reduction treatments, increase the community's understanding of living in a fire-adapted ecosystem, and improve its ability to prepare for, respond to and recover from wildland fires
- Recommend best practices fuel reduction treatments to protect lives and reduce structural ignitability of property, and recommend best practices to improve the fire resilience of the landscape while protecting other ecological, social, and economic values

In addition to recommending priorities and strategies in the wildland urban interface and vicinity, this CWPP assists the Santa Barbara County Fire Department and Mission Canyon area residents in the identification of surrounding lands, including federal and state lands, at risk from catastrophic wildland fire (Santa Barbara County Fire Safe Council 2011).

Carpinteria-Summerland Community Wildfire Protection Plan

Adopted in 2021, this Plan covers the Carpinteria-Summerland Fire Protection District. The District provides fire services to approximately 17,747 residents and 4,500 structures. Both Carpinteria and Summerland are identified as Communities at Risk by CAL FIRE, with approximately 84% of the total land area in the District designated as having a moderate to very high fire hazard severity rating (Carpinteria Summerland Fire Protection District 2021). The primary strategies in this Plan include:

- Pre-fire planning.
- Public education and outreach to promote and implement fire adapted community practices.

- Vegetation management and fuel reduction at the community level, including the enforcement of defensible space standards on private lands.
- Reducing structure ignitability by promoting and enforcing building codes, ordinances, and statutes.

Gaviota Coast Community Wildfire Protection Plan

Adopted in 2023, this CWPP evaluates the Gaviota Coast's fire environment and the risk posed by wildland fire, identifies actions to reduce the threat to the community from wildland fire, and identifies and prioritizes vegetation management projects to reduce wildfire threat. The community covered by this CWPP encompasses 106,002 acres along the Gaviota Coast (Plan Area), and includes a broad range of land uses, including agriculture, ranching, recreation, residential, conservation, and industrial. The Plan Area exhibits a complex wildfire environment that presents a significant wildfire risk due to steep and varied terrain, a mosaic of different vegetation types, and a wildland-urban intermix development pattern that can exacerbate wildfire risk. The Plan Area, situated along the southern flank of the Santa Ynez Mountains, has a significant history of large and damaging wildland fires (Santa Barbara County Fire Safe Council 2023).

This CWPP includes an Action Plan that presents a series of recommendations intended to guide implementation of the CWPP. The recommendations focus on vegetation management, structural ignitability, community outreach and education, access and evacuation, funding, infrastructure and communications, and post-fire recovery. Vegetation management recommendations include identification of management types, standards, and techniques, and include best management practices to avoid or minimize resource impacts. The recommendations included in this CWPP are intended to achieve the stated goals of protecting lives, property, natural resources, and other values threatened by wildland fire while considering the unique nature of the Gaviota Coast community (Santa Barbara County Fire Safe Council 2023).

San Marcos Pass- Eastern Goleta Valley Mountainous Communities Community Wildfire Protection Plan

The San Marcos Pass and Eastern Goleta Valley (SMP/EGV) Mountainous Communities CWPP was developed in response to local stakeholders' desire to protect communities within the San Marcos Pass and Eastern Goleta Valley area. Adopted in October 2016, the purpose of this CWPP is to identify wildfire hazard reduction strategies for communities in the San Marcos Preserve and Eastern Goleta Valley mountainous areas that are in balance with sustainable ecological management and fiscal resources. Additionally, the CWPP provides educational resources for residents to enhance wildfire preparedness (Santa Barbara Fire Safe Council 2019). Goals of the plan include:

- Reduce the wildfire threats within the wildland urban interface/intermix to promote life safety
- Enhance protection of values at risk from wildfire (e.g., homes, businesses, critical infrastructure, natural resources, cultural resources, agricultural resources, and watershed resources)
- Balance wildfire protection strategies with natural and cultural resource sustainability
- Identify funding opportunities and grants for wildland fire protection

Montecito Community Wildfire Protection Plan

The primary purpose of this CWPP is to enhance protection of human life and reduce the wildfire threat to community values such as structures, critical infrastructure, businesses, and natural and historic

resources within Montecito. This CWPP serves to guide future actions of the Montecito Fire Protection District, property owners, business owners, homeowner associations, and other interested parties in their efforts to reduce the wildfire threat to the community of Montecito. This is in response to Montecito and its surrounding area has an extensive history of catastrophic wildfires that have been costly in terms of fatalities and injuries, damage and loss of multiple structures, and extremely high fire suppression and fire rehabilitation costs (Montecito Fire Department 2016). As such, goals of the plan include:

- Reduce the wildfire threat to life safety within and adjacent to the District
- Enhance protection of values (such as homes, businesses, critical infrastructure, natural resources, and historic resources) at risk from wildfire
- Balance wildfire protection strategies with natural and historic resources sustainability
- Develop a plan that will enhance the Fire District's opportunities to compete for grant funding related to the wildfire threat
- Engage the community, government partners, fire agency cooperators, and interested parties in development of the CWPP, and in future pre-fire mitigation activities and strategy development

Following the Thomas Fire in December of 2017, the Montecito CWPP was amended to more appropriately reflect the existing environment, giving specific attention to post-fire drainages changes. The loss of vegetation changed the physical properties and erodibility of the soil and altered the stability of the hillsides above the community. This Amendment does not replace the existing CWPP, but updates only those sections that require change as a result of the Thomas Fire and new information (Montecito Fire Department 2019).

3.13.4 Project Impact Analysis

Thresholds of Significance

CEQA Appendix G Significance Thresholds

Pursuant to Appendix G of the CEQA Guidelines, a project would result in significant wildfire effects on the environment if it would:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

County of Santa Barbara Environmental Thresholds

Santa Barbara County's Environmental Thresholds and Guidelines Manual provides information to address the criteria provided in the CEQA Guidelines. However, the County's Environmental Thresholds and Guidelines Manual does not contain information regarding wildfires.

Methodology

As described in Chapter 2, *Project Description*, the County proposes to amend necessary land use plans and ordinances to allow the development of utility-scale solar energy facilities (and smaller scales of solar energy facilities and systems) on land in unincorporated Santa Barbara County. However, future project-level siting and design details as well as the timing of potential future solar development are unknown. The impact analysis, therefore, does not evaluate potential impacts on wildfire resources on a project- or site-specific level. The analysis provided in this Program EIR describes the potential for the Project to directly or indirectly affect wildfire spread or emergency response capabilities, and the risk of exposure to wildfire or post-fire hazards, including the increased potential for ignition, if any.[6]

The assessment of impacts is qualitative, and considers the potential for an impediment of emergency evacuation and response efforts, increased wildfire risk and associated hazard conditions, and increased physical safety risks resulting in a high likelihood of harm to facility workers or the public as a result of wildfire. The analysis relied upon state and local policies and regulations, specifically CalFIRE and CPUC wildfire hazard mapping, County regulations to reduce wildfire risk and improve emergency response, utility company (PG&E and SCE) regulations and guidelines, and the local fire department capacity.

Broadly, the wildfire risk associated with photovoltaic solar energy systems stems from construction and decommissioning activities that could generate ignition risks from equipment or materials. The likelihood of a solar energy facility or related gen-tie lines igniting wildfire is low. These risks are similar to the risks of other industrial facilities and require careful management, especially in areas of high fire risk. Fires from properly installed PV solar panels are rare (US Department of Energy 2025). Facilities could alter the behavior of fire due to structures, mowing, and land use changes. For the purposes of this analysis, it is assumed all equipment would meet state and local building and fire code standards.

As for the battery ESS components analysis, it is assumed that all safety regulations pertaining to battery ESS would be applied to any battery ESS facility developed as a result of the Project.

Project Impacts

This section identifies and discusses potential wildfire impacts associated with the Project. **Table 3.13-1**, *Summary of Wildfire Impacts*, provides a summary of the Project's potential impacts related to wildfires. A detailed discussion of each impact follows.

The construction, operation and maintenance (O&M), and decommissioning phases of solar energy projects pose risk to wildland fire activity. These impacts could be direct (affecting the land, equipment, and personnel at the solar energy facility site) and indirect (potentially affecting nearby lands and communities through spread of wildland fires). Specific impacts through each phase of solar energy facility development and operation are discussed below.

[6] This analysis will adhere to the CEQA appendix G criteria related to post slope stability, which does not include mudflow or debris flow impacts.

TABLE 3.13-1
SUMMARY OF WILDFIRE IMPACTS

Wildfire Impacts	Impact Classification	Mitigation Measures	Residual Impact
Impact WF-1: The Project could substantially impair an adopted emergency response plan or emergency evacuation plan.	Potentially significant	MM T-1: Construction Traffic Control Plan	Insignificant with mitigation
Impact WF-2: The Project could exacerbate wildfire risk or uncontrolled spread of a wildfire.	Potentially significant	MM WF-1: Operational Site Safety Management Plan MM WF-2: Construction Ignition Risk Reduction	Insignificant with mitigation
Impact WF-3: The Project would require infrastructure that could exacerbate fire risk.	Potentially significant	MM WF-2: Construction Ignition Risk Reduction	Insignificant with mitigation
Impact WF-4: The Project could expose people or structures to significant risks as a result of post-fire stability.	Potentially significant	MM WF-3: Erosion and Sediment Control Plan	Insignificant with mitigation
Cumulative Impacts	Potentially significant	MM T-1: Construction Traffic Control Plan MM WF-1: Operational Site Safety Management Plan MM WF-2: Construction Ignition Risk Reduction MM WF-3: Erosion and Sediment Control Plan	Insignificant with mitigation

Threshold a) The Project would result in a significant impact if the Project would substantially impair an adopted emergency response plan or emergency evacuation plan.

Impact WF-1: The Project could substantially impair an adopted emergency response plan or emergency evacuation plan.

The County currently sets parameters for emergency evacuation and response in the Seismic Safety and Safety Element of the Comprehensive Plan, the Multi-Jurisdictional Hazard Mitigation Plan, and Operational Area "All Risk" Mutual Aid Plan. The Safety Element provides draft potential evacuation routes that are used for planning purposes only; however, none of these plans outline specific routes for the Project area in case of an emergency, they each provide general guidance, including protocols for collaboration and coordination, should an emergency occur in the vicinity. These plans are described in detail in Section 3.13.3, *Regulatory Framework,* and are considered at large under the analysis provided below for Impact WF-1. Because each incident is unique, emergency response authorities do not pre-designate evacuation routes and instead direct the community to the website, ReadySBC.org, for up-to-date information on an emergency, such as areas under an evacuation order or warning.

Construction and Decommissioning

Tier 1 solar energy systems are already allowed in the unincorporated County and thus would have no new or negligible new ground impacts. Rooftop solar would be installed on existing buildings in already developed areas. Small ground-mounted solar (under Tier 1) would be an accessory use to the primary use on-site, so would be located adjacent or next to existing structures on-site, likely in previously disturbed areas. Thus, it is not likely that construction and decommissioning activities associated with future Tier 1 solar energy systems would result in impacts related to emergency response and evacuation, as these developments are currently allowed. Similarly, the future Tier 2 solar energy systems would only be permitted on existing developed land, and it is not likely that construction and decommissioning activities associated with future Tier 2 solar energy systems would result in impacts related to emergency response and evacuation, as these smaller scale facilities would not likely interfere with traffic patterns near the site because of construction equipment activities or deliveries or necessitate a large number of personnel that need to evacuate. Therefore, impacts to emergency response and evacuation from construction and decommissioning of future Tier 1 and Tier 2 solar energy systems would be insignificant and no mitigation is required.

However, for future Tier 3 and Tier 4 solar energy facilities, it is anticipated that excavation and grading would occur during construction and decommissioning. This would require medium- and heavy-duty vehicles, which could interfere with emergency response or emergency evacuation procedures as traffic flow could be impeded by these construction vehicles. Tier 3 or 4 facilities could also require the delivery of large pieces of equipment, structures, or materials (e.g., utility poles, substation components, etc.) that could temporarily slow traffic flow. Vehicle trips and temporary lane closures during construction could contribute to emergency-related congestion on surrounding roads. Given the potential rural nature of the future locations of Tiers 3 and 4 solar energy facilities, and the locations relative to existing emergency response stations, impacts on emergency response and evacuation during construction and decommissioning would not likely occur. However, as required under the Project, any Tier 3 or Tier 4 solar energy facility would be required to complete a site specific emergency response and action plan. Therefore, compliance with the development standards would minimize impacts to emergency response personnel should a fire ignite as a result of construction or decommissioning.

The potential for battery ESS igniting a wildfire would be rare, as the enclosure units house the heating, ventilation, and air conditioning and fire protection systems. It is common practice for these enclosures to also house bi-directional inverters, of which the controllers would be located outside the structures, along with the transformers. These controllers would ensure that the energy storage system effectively responds to grid emergency conditions such as fire and would provide a secondary safety system designed to safely shut down the facility (US DOE 2025). It is assumed that any battery ESS facility developed as a result of the Project would undergo maintenance in accordance with manufacturers' guidelines and would comply with the provisions of the California Fire Code, as well as vegetation clearance requirements set forth in CPUC General Order 95. In addition, battery ESS are typically constructed on large concrete pads surrounded by gravel, which eliminate the occurrence of fuel loading in the immediate vicinity. It is anticipated that most, if not all, future battery ESS would have this design feature. Thus, while unlikely, should a fire occur as a result of a battery ESS failure, impacts would be significant, however, they would be reduced to an insignificant level with mitigation incorporated, as described below.

Depending on the location and size of a future solar energy facility, ingress, egress, and access points would vary and could interfere with major roadway thoroughfares. This could limit emergency response and evacuation times, leading to the inability of construction workers at the solar energy facility or people in the area to evacuate in an effective manner. However, the implementation of an emergency response and evacuation plan as proposed by the zoning ordinance development standards as part of the Project would reduce such impacts. Specifically, the site-specific plan for Tier 3 and Tier 4 solar energy facilities would be reviewed by SBCFPD, Montecito FPD, or Carpinteria-Summerland FPD, depending on the siting of the future facility. Permit conditions may be applied to individual projects as a result of that site-specific plan analysis, to prevent or limit location-specific safety impacts.

While the number of future solar energy facilities that would be developed as a result of the Project is unknown, the facilities would increase demand for SBCFPD. In particular, if multiple solar energy facilities begin construction around the same time, the response capability of SBCFPD could be hindered given the large Project area, particularly for the remote nature of Tier 3 and Tier 4 facilities. As described in the *Regulatory Framework* section, the SBCFD consists of sixteen fire stations and would be one of the three designated primary responders should an emergency occur within the Project area. Depending on the siting of the future Tier 3 or Tier 4 facility, the Montecito FPD or the Carpinteria-Summerland FPD could also be tasked with emergency response. Because it is unknown how many future Tier 3 and Tier 4 facilities would be developed as a result of the Project, there is a potential to burden the levels of service provided by SBCFPD, Montecito FPD, and/or the Carpinteria-Summerland FPD. In addition, traffic as a result of construction and decommissioning equipment could interfere with emergency response capabilities. Thus, as a result of the Project, an increase in demand for emergency service which could burden the level of service available, as well as impede emergency response due to solar energy facility traffic congestion could occur.

The Safety Element outlines emergency response protocols, as does the Operational Area "All Risk" Mutual Aid Plan that outlines interagency communication protocols in the event of an emergency. These three plans would apply to any and all future Tier 3 or Tier 4 solar energy facilities, and would lay out a structure for appropriate emergency response.

In addition, there are six approved CWPPs in Santa Barbara County[7]: Carpinteria-Summerland CWPP, Gaviota Coast CWPP, San Marcos Pass- Eastern Goleta Valley Mountainous CWPP, Santa Barbara Foothills CWPP, Montecito CWPP, and Mission Canyon CWPP. As described in detail in Section 3.13.1, *Regulatory Framework,* above, these plans include pre-fire planning, vegetation management and fuel reduction, and inter-agency coordination to minimize public hazards in the event of a wildfire. Through County Fire's periodic Operational Enhancement update to fire services deployment and departmental performance audit, emergency response in the service area is assessed with the goal of maintaining adequate service response to the population, as well as to existing and proposed development (County of Santa Barbara 2025e). This would help to reduce impacts on emergency response efforts through planning, ultimately leading to an anticipated and calculated service response capacity.

[7] As discussed in Regulatory Framework, there are eight certified CWPP's within the County. However, the City of Santa Barbara CWPP and the City of Goleta are outside the scope of analysis for the Project because they do not contain land in the Project Area.

For the reasons described above, as a result of the Project, there could be impacts on emergency response capacity. However, the proposed ordinance amendments would require the implementation of an emergency action plan. Specifically, it would require the applicant/owner of a Tier 3 or Tier 4 solar energy facility to design, construct, and operate the facility in accordance with all applicable statutes, regulations, and other requirements. This includes developing an emergency action plan in advance of construction to train local emergency response personnel during development and operation of the facility. The plan would be completed in accordance with existing state regulations (Health and Safety Code Section 25504(b); 19 Cal. Code Regs. 2731; 22 Cal. Code Regs. 66262.34[a][4]). The contents of the emergency action plan would comply with existing state regulations, would be developed in consultation with the County fire department and energy storage system supplier, and would include defined roles and responsibilities and training for local first responders. Given the inclusion of the emergency action plan, any potential impact on emergency response would be reduced and impacts on emergency response capacity would be insignificant.

Operation and Maintenance

Once constructed, operational activities for any future Tier 1 and Tier 2 solar energy systems would consist of routine maintenance and cleaning. The future Tier 1 and Tier 2 solar energy systems would generally operate passively, with the exception being incidental repairs or parts replacement due to damage. These maintenance activities would occur within previously developed areas and thus are not expected to have any impact on emergency response or evacuation efforts. Therefore, impacts from operation of future Tier 1 and Tier 2 solar systems would be insignificant and no mitigation is required.

Operation and maintenance (O&M) of Tier 3 and 4 solar energy facilities would typically require intermittent monitoring and washing of panels and equipment, using light-duty vehicles. These actions would not pose an increased risk to any emergency evacuation or response efforts, as this work would be minimal. However, the O&M of battery ESS could cause a potential impact on emergency response personnel, as battery ESS fires are difficult to extinguish. Battery ESSs generally come equipped with remote alarms for operations personnel and emergency response teams, including voltage, current, or temperature alarms from the battery management system (US DOE 2025). Other protective measures include ventilation, overcurrent protection, controls to operate the batteries within designated parameters, temperature and humidity controls, and smoke detection.

While rare, battery ESS facilities can create hazards for firefighters and emergency responders, with the possibility of explosions, flammable gases, toxic fumes, water-reactive materials, electrical shock, corrosives, or chemical burns. Firefighting battery ESS does not typically use water because it can increase exposure to toxic chemicals through smoke and vapor. Thus, firefighting response would necessitate site entry only by trained firefighters wearing full protective gear and trained on proper protocols for battery ESS. SBCFD contains a hazardous materials response team, consisting of firefighters from Station No.38 and No. 31 on duty at all times. This team is a group of firefighters and staff who have specialized training in the prevention and mitigation of incidents involving hazardous materials (SBCFD 2022). Should a battery ESS fire occur within the Project area, personnel from stations identified in the site-specific emergency action plan, as coordinated with local emergency response, would be tasked with the response. Refer to Figure 3.13-7 for a map of these stations. Given that stations 31 and 38 are currently the only two stations within the district that handle hazardous materials response, these stations could be impacted by the implementation of the Project through a reduction in capacity to

respond to other hazards-related emergencies within the service territory if battery ESS firefighting is needed. However, the implementation of the emergency action plan as required under the Project would equip other local stations with the ability to adequately and appropriately respond to a battery ESS fire.

As part of the proposed development standards, an emergency action plan would be developed for each Tier 3 and 4 solar energy facility in advance of construction to train local emergency response personnel during development and operation of the facility. The plan would be completed in accordance with existing state regulations (Health and Safety Code Section 25504[b]; 19 Cal. Code Regs. Section 2731; 22 Cal. Code Regs. Section 66262.34[a][4]). The contents of the emergency action plan would comply with existing state regulations, would be developed in consultation with the SBCFD and solar facility developer/energy storage system supplier, and would include defined roles and responsibilities and training for local first responders. If a battery ESS facility was developed, the emergency action plan would outline exact response protocols necessary to extinguish a fire should one occur. With successful implementation of the emergency action plan, impacts on emergency response would be reduced. In addition to the implementation of the emergency action plan as required by the Project, MM T-1, as described below, would reduce impacts of traffic congestion that could lead to potential delays in emergency response should a fire occur. Given the implementation of the mitigation measures, impacts to emergency response would be insignificant.

In addition, the County will update its Safety Element with final potential evacuation routes for planning purposes only along with analysis to evaluate their capacity, viability, and safety. This mapping and analysis will be helpful in evaluating emergency response capacities, and when considered with future projects as a result of the Project, could be used to adequately and accurately assess emergency needs. In turn, the study could reduce the potential burden on emergency service response given the planning foresight now available.

In conclusion, even with compliance with the development standard requiring implementation of an emergency action plan, impacts could be potentially significant due to increased traffic congestion during the construction phase. Thus, MM T-1 would be required. As discussed in Section 3.11, *Transportation*, additional traffic during construction or operation of the solar facilities could have a significant impact on potential evacuation routes in an emergency if the additional traffic would affect the ability of emergency vehicles to circulate to and from the sites, particularly in rural areas where there may be limited road connectivity and capacity. The proposed amendments would require a Traffic Control Plan for Tier 3 and Tier 4 solar energy facilities. However, Tier 2 facilities could be up to 5 acres in size and as such could result in potentially significant impacts during construction if road detours or closures were to occur. Therefore, a Traffic Control Plan, as described under Mitigation Measure T-1 for Tier 2 solar systems could be warranted to ensure construction impacts would be insignificant. The Traffic Control Plan, which would apply to Tiers 2, 3, and 4, would be submitted to the County and approved by the County Traffic Engineer. The Traffic Control Plan would address emergency access to ensure that emergency vehicles and evacuees would be able to adequately bypass traffic associated with construction of the solar facilities during all phases. Furthermore, all future solar energy facilities would be required to comply with the Santa Barbara County Fire Department (SBCFD) development standards, as well as the California Fire Code, which provide access standards and require a review of access plans prior to project implementation. Given adherence to applicable regulations and with the implementation of mitigation

measures, emergency access would be maintained through all Project phases, and the impact would be insignificant.

Mitigation Measures

MM T-1: Construction Traffic Control Plan. (See Section 3.11, *Transportation*, of this Draft Program EIR).

Residual Impacts

With the implementation of MM T-1 potential impacts to emergency response would be insignificant.

Threshold b) The Project would result in a significant impact if the Project would, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

Impact WF-2: The Project could exacerbate wildfire risk or uncontrolled spread of a wildfire.

Construction and Decommissioning

As mentioned above under Impact WF-1, future Tier 1 solar energy systems are already allowed throughout the unincorporated County areas and would have no or negligible ground impacts, and Tier 2 solar energy systems would only be permitted on existing developed land. Therefore, impacts to the uncontrolled spread of a wildfire during construction and decommissioning of future Tier 1 and Tier 2 solar facilities would be insignificant and no mitigation is required.

For future Tier 3 and Tier 4 solar energy facilities, the Project area contains areas of moderate, high, and very high Fire Hazard Severity Zones as designated by Cal FIRE. It also contains CPUC Fire Threat Districts of both "Elevated" and "Extreme." Refer to Figure 3.13-4 for a mapping of these areas. In addition, as shown on Figure 3.13-6, there are portions of the Project area that exist in the Wildland-Urban Interface. Given this, the nature of the Project area is inherently a high fire hazard region. In addition, as described under Section 3.13.2 Environmental Setting, the high velocity "sundowner" and Santa Ana winds can be present in the region and may exacerbate wildfire spread. The region has also experienced several major and catastrophic wildfires in recent years, indicating an inherently elevated baseline risk with respect to topography, vegetation/fuels, and weather/climate.

Future Tier 3 and 4 solar energy facility and battery ESS development that could occur as a result of the Project would involve construction equipment typical of heavy-duty earthmoving equipment, which could result in sparks that could ignite dry grass or vegetation. This is where the primary risk of fire would occur. Construction activities that could result in sparks, such as welding or grading, have greater potential to result in an ignition. Decommissioning could involve the use of scrapers, graders, dozers, compaction equipment, and other vehicles and equipment that have the potential to ignite fires, substantially similar to those used in construction. The change in the landscape due to the presence of the newly developed facility also poses an inherent risk of wildfire spread, as these facilities could alter the behavior of fire due to new structures, mowing, and land use changes. However, proactive planning with federal, state, and local wildfire and emergency response agencies compliance with state and local Fire Codes as well as OSHA requirements would reduce construction-related ignition risks. It is assumed that

any solar energy facility battery ESS would comply with all state and local regulations regarding fire risk, including Chapter 10 and Chapter 15 of the County Code of Ordinances.

However, solar energy facility construction and decommissioning activities would result in a reduction of flammable vegetation sources within the development perimeter to facilitate the site preparation and facility installation (or removal). For solar energy facility construction, the vegetation removal would occur first, before any other site preparation, grading, or construction activities. Similarly, prior to decommissioning, any vegetation within the Project area that would impede facility decommissioning and removal would be reduced or removed, before any other activities would occur.

In addition, during construction and decommissioning, construction workers would be expected to evacuate in the event of a wildfire given implementation of the emergency action plan. OSHA protections, including masking, would also be in effect, further reducing the risk of exposure to harmful pollutants as a result of a wildfire in the region. With the required emergency response plan and adherence to OSHA protocols, impacts would be insignificant.

Lastly, the implementation of Mitigation Measure WF-2, as described below, requiring oversight and requirements for heavy equipment, welding, and vehicles with catalytic converters, would mitigate the potential for brush or grass fires from construction equipment. Most notably, this standard also requires an on-site water tender and minimum vegetation clearances to prevent the spread of a fire should an ignition occur. This, combined with the incorporation of mitigation as described below, would bring impacts during construction to an insignificant level.

Operation and Maintenance

As mentioned above under Impact WF-1, once constructed, operational activities for future Tier 1 and Tier 2 solar energy systems would consist of routine maintenance and cleaning. These maintenance activities would occur within previously disturbed areas and thus are not expected to have any impact on the exacerbation or spread of a wildfire. Therefore, impacts from operation of future Tier 1 and Tier 2 solar systems would be insignificant and no mitigation is required.

The potential for future Tier 3 and Tier 4 solar energy facilities to contribute to wildfire risk considers ignition risk associated with operational and maintenance activities. Most wildfires started by electrical power are caused by the contact of trees and surface fuels with power lines (US DOE 2025). While the presence and use of electrical equipment at the facilities would have risks of ignition, fires from PV solar panels are rare (US DOE 2025). In addition, these types of facilities, by design, reduce flammable vegetation sources within the development perimeter, thus posing little threat to increased fire risk during their operation. The proposed zoning ordinance development standards would require the installation of ground vegetation within Tier 3 and 4 facilities, to be maintained for the duration of operation. Additionally, “agrivoltaic” projects which have the potential to be developed, would allow for crops or rangeland grasses to be grown under or around solar arrays. In both cases, the vegetation would be actively managed to reduce overgrowth and potential impacts to solar facility components. The proposed development standards would require a site-specific Ground Cover Vegetation Establishment and Management Plan that would, in part, require that the vegetation be actively managed on-site.

It is reasonable to assume all solar and electrical equipment would be required to conform to state and international building and fire code standards and these facilities would be regularly maintained and monitored to reduce ignition risks. However, accidents and fires could still occur. It is anticipated that regular operations and maintenance activities would also include mowing and trimming of trees to control vegetation on the facility sites and associated electrical corridors, in accordance with defensible space requirements established by the respective fire district. For a further analysis of potential impacts from gen-tie lines, refer to *Impact WF-3* below. While these activities reduce fuel sources, they also involve ignition risks that could generate sparks and cause wildfires, which could spread into the surrounding landscape. The proposed ordinance development standards would require preparation of a fire prevention plan to identify sources of fire hazards and methods to mitigate fire hazards during construction and throughout operation. The fire prevention plan would be approved by the appropriate fire district. The proposed development standards do not specify what should be included in the fire prevention plan generally, other than specific requirements for battery ESS components. Therefore, additional measures are proposed to reduce risks through implementation of an Operational Site Safety Management Plan, as described below under Mitigation Measures.

In addition, O&M activities would require few personnel, thus, it is not anticipated that there would be many project occupants on site. In any case, these workers would immediately evacuate in the event of a wildfire. Thus, it is unlikely that project occupants would be exposed to pollutant concentrations as a result of a wildfire, and impacts would be insignificant.

For the potential battery ESS component of the Project, depending on the type of battery employed, ignition could pose a risk to wildfire spread. Unless properly installed, maintained, and operated, accidental hazards for battery ESS include a potential for overheating, swelling, electrolyte leakage venting, fires, smoke, and explosions in worst-case scenarios involving thermal runaway (ACS 2022).[8] Failures associated with these batteries are described to be deflagration in nature.[9] The gases (e.g., hydrogen, carbon monoxide, methane, ethylene, and propylene) produced as a result of a fire, smoke, and/or thermal runaway can accumulate to a combustible level in the installation location and cause an explosion. Although explosion derived from battery ESS is unlikely (DOE 2025), it is important to note the potential of this occurrence. In addition, further discussion on thermal runaway can be found in Section 3.8, Hazards and Hazardous Materials, of this Draft PEIR.

Lithium-ion battery cells can be subject to thermal runway, which causes them to release very hot flammable, toxic gases. This is a stacked effect, where failure of one cell can lead to cascade effects, resulting in an explosion or a very difficult to extinguish fire (ACS 2022).

Sodium-sulfur batteries pose a similar safety concern as lithium-ion batteries, as molten sodium combined directly with molten sulfur can lead to a highly exothermic, toxic fire. However, most manufacturers' specifications for these types of batteries include preventative measures such as sand filling to extinguish fire and absorb leaked active materials, thermal fuses to prevent short-circuits, hermetical cell seals, and a

[8] *Thermal runaway* describes a process that is accelerated by increased temperature, in turn releasing energy that further increases temperature. Thermal runaway occurs in situations where an increase in temperature changes the conditions in a way that causes a further increase in temperature, often leading to a destructive result. It is a kind of uncontrolled positive feedback (ACS 2022).

[9] *Deflagration* is combustion that propagates through a gas or across the surface of an explosive at subsonic speeds, driven by the transfer of heat (ACS 2022).

mechanically isolating thermal enclosure to protect against external shock or internal leakage. It is anticipated that any sodium-sulfur battery ESS developed as a result of this Project will abide by these typical manufacturers specifications which will minimize the risk of fire spread (ACS 2022).

The last category of battery, flow batteries, are generally considered the safer option. However, flow battery electrolytes are often strong acids and bases carrying high concentrations of metal ions. Thus, the risks of these liquids are related to their toxicity, corrosiveness, environmental impact, and flammability. There could be risk of hazardous materials leaks from batteries during operations due to the potential for batteries to leak or ignite when overheating from energy storage (ACS 2022).

The proposed zoning ordinance development standards would require preparation of an emergency response and emergency action for battery ESS components of Tier 3 or 4 facilities, to be approved by the appropriate fire district. The plan would include establishing response procedures for an equipment malfunction or failure and including procedures that provide for the safety of emergency responders, nearby residents, and properties. Additional safety provisions as required by MM WF-1 would provide for regular safety inspections and trainings to ensure safety during project O&M. With the incorporation of mitigation, impacts during O&M would be reduced to an insignificant level.

Mitigation Measures

MM WF-1: Operational Site Safety Management Plan. Prior to issuance of a building permit for the construction of a Tier 3 or 4 solar energy facility, an Operation Site Safety Management Plan shall be developed for review and approval by the appropriate fire district. This Plan shall include at minimum:

- A program for regular inspections, proper storage practices, and maintaining fire suppression systems to ensure equipment is running properly.
- Site specific vegetation clearance requirements.
- Battery ESS fire-suppression techniques and trainings for first responders.
- Fire Code review requiring a Fire Hazards Analysis for battery ESS over 70kW systems.

MM WF-2: Construction Ignition Risk Reduction. During construction of Tier 3 or 4 solar energy facilities, measures shall be taken to mitigate the potential for brush or grass fires from use of heavy equipment, welding, vehicles with catalytic converters, etc. These requirements shall include, but are not limited to, the following:

- All equipment with the potential to work off-road shall be equipped with appropriate mufflers and have extinguishers mounted on each vehicle;
- Personnel shall be briefed on the dangers of wildfire and be able to respond accordingly should the need arise;
- On-site supervisor(s) shall have a cell phone or other means of initiating a 911 response time in a timely manner in the event of a medical emergency and/or fire;
- All dead and decadent vegetation immediately surrounding the facility should be removed and soil disturbance should be kept at a minimum;
- Smoking shall be in a designated area and/or in enclosed cab only;
- Hot work permit is required as needed;

- A source of on-site water for emergency use shall be available on each construction site during construction.

Residual Impacts

With the implementation of MM WF-1 and MM WF-2, the residual impact would be insignificant.

Threshold c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.

Impact WF-3: The Project would require infrastructure that could exacerbate fire risk.

Construction and Decommissioning

As mentioned above, future Tier 1 solar energy systems are already allowed throughout the unincorporated County areas and would have no or negligible ground impacts and Tier 2 solar facilities would only be permitted on existing developed land. Therefore, impacts on fire risk due to infrastructure requirements during construction and decommissioning of future Tier 1 and Tier 2 solar facilities would be insignificant and no mitigation is required.

For purposes of this impact criteria assessment, infrastructure associated with Tier 3 and 4 solar energy systems could include roads, fuel breaks, emergency water sources, power lines providing electricity on-site, other utilities delivering services on-site, and gen-tie lines. For future Tier 3 and Tier 4 solar energy systems, given the inherent potential for ignition risk associated with overhead power lines, which could be included as any gen-tie line, it is reasonable to assume all solar energy facilities would comply with CPUC GO 165 and 166. For facilities in SCE territory, SCE's Wildfire Mitigation Plan would apply. For PG&E's service territory, PG&E's Fire Prevention Plan and Wildfire Safety Plan would apply. Relevant programs include enhanced weather monitoring, the Wood Pole Test and Treat Program, Proactive Responses to Fire Incidents, enhancements to PG&E's Storm Outage Prediction Model, the Wildfire Reclosing Disable Program, and the implementation of the PSPS program (PG&E 2019). Additionally, vegetation along substation lines would be managed in compliance with NERC Standard FAC-003, Transmission Vegetation Management. The Project also would abide by the CPUC vegetation management and clearance requirements, GO 95 and GO 165, which would effectively manage the risk of exposing surrounding communities to exacerbated risk of the uncontrolled spread of a wildfire during construction and decommissioning. At the end of the facility lifespan, the site would be decommissioned and the land reclaimed, and substantially similar activities to construction would occur.

In addition to the regulations discussed above, Tier 3 and 4 facilities would be required to comply with a County Fire Department-approved fire prevention plan, per the proposed ordinance amendments. Thus, while construction and decommissioning activities do inherently pose a risk for ignition, considering the regulatory and environmental setting in which the Project exists and would comply, construction and decommissioning would have an insignificant impact on wildfire risk due to the relatively short duration of construction, anticipated flat site topography, minimal vegetation, and the Project's implementation of required fuel breaks, vegetation clearances, and compliance with CPUC applicable General Orders.

In addition, vegetation clearance requirements would be included as part of the Project, per proposed development standards requiring a fire prevention plan and a ground cover vegetation establishment and management plan. Since the proposed development standards do not specify the vegetation removal requirements to be included within these two plans, MM WF-2, which requires all dead and decadent vegetation immediately surrounding the facility to be removed during project construction, would minimize the risk of wildfire spread by eliminating the fuel sources of vegetation during construction and decommissioning. Thus, with implementation of required regulations, the proposed development standards, and mitigation, impacts during construction and decommissioning would be insignificant.

Operation and Maintenance

As mentioned above, once constructed, operational activities for any future Tier 1 and Tier 2 solar energy facilities would consist of routine maintenance and cleaning. These maintenance activities would occur within previously disturbed areas and thus are not expected to have any impact on the exacerbation or spread of a wildfire through the installation or maintenance of associated infrastructure. Therefore, impacts from operation of future Tier 1 and Tier 2 solar facilities would be insignificant and no mitigation is required.

It is reasonable to assume that any Tier 3 or 4 solar energy facility components developed as a result of the Project would include the maintenance of fuel breaks, power lines, and other electrical utilities. However, this implementation of fuel breaks and vegetation clearances would assist with fire prevention and suppression and therefore would not exacerbate fire risk. It is assumed any facility would comply with CPUC vegetation clearance and other regulatory requirements, as described under construction and decommissioning above, and that any vegetation clearance work within fire breaks would be performed in accordance with SBCFC standards and best practices.

Some of the infrastructure associated with Tier 3 and 4 solar energy facilities could require fuel management and/or defensible space programs and activities. This would occur during the O&M phase, and projects would be subject to procuring and following a Vegetation Management Plan as required under the County's proposed development standards. While these fuel management activities would reduce the potential for wildfire ignition or risk of property damage/loss during a wildfire, these activities could also contribute to potential impacts to other resources as clearing practices could result in ignition. However, overall, the risk of wildfire would be reduced due to fuel loading reduction.

The infrastructure associated with future Tier 3 and Tier 4 solar energy facilities could increase the potential for ignition and spread of a wildfire due to grading or operation of machinery during construction. However, as previously stated under Impact WF-2, all new construction would need to comply with existing regulations developed by the State (e.g., CFC), the County (e.g., County Fire Code and)SBCFD fire prevention programs. Thus, the associated infrastructure would not pose an increased risk to people or structures as a result of a fire, and impacts would be insignificant.

Mitigation Measures

MM WF-2: Construction Ignition Risk Reduction.

Residual Impacts

With implementation of the mitigation measure, residual impacts would be insignificant.

Threshold d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Impact WF-4: The Project could expose people or structures to significant risks as a result of post-fire stability.

Construction and Decommissioning

As mentioned above, future Tier 1 solar energy systems are already allowed throughout the unincorporated County areas and would have no or negligible ground impacts and Tier 2 solar systems would only be permitted on existing developed land. Therefore, impacts on people or structures resulting from post-fire slope stability during construction and decommissioning of future Tier 1 and Tier 2 solar systems would be insignificant and no mitigation is required.

The Project area most likely to yield future Tier 3 and Tier 4 solar energy facility development, as well as the surrounding vicinity, is widely used for agricultural purposes. Given the land use types where Tier 3 and 4 solar energy facilities would be allowed, little housing development exists (i.e., it is consistent with lands zoned for agriculture, public utilities, light or general industry, and professional or institutional uses), outside of Existing Developed Rural Neighborhoods (EDRN; see Section 3.9, *Land Use and Planning*) within agricultural zones. Future projects enabled under the Project would not include a housing component, nor would there be permanent occupants on site.

The construction of solar energy facilities would most likely involve grading, as well as additions of impervious areas that could change the drainage patterns of the site (i.e., concrete slabs that house the battery ESS enclosures). This could lead to erosion, siltation, issues with flooding, or pollutant runoff. Similarly, during decommissioning, the removal of aboveground and belowground structures could result in changed drainage patterns. It is expected that any solar facility developed as a result of the Project would comply with County development standards, which generally prevent development of this caliber on slopes greater than 20 percent. However, because the land is relatively flat as indicated in Figure 3.13-2, *Topography in Tier 3 and Tier 4,* the risk of landslides is negligible due to lack of slope. In addition, the future development of Tier 3 and 4 facilities would be constructed in accordance with the County's Grading Code, zoning ordinance standards, and other requirements that would manage erosion during construction or decommissioning, which would reduce potential runoff or drainage impacts. Therefore, the impacts of construction and decommissioning activities related to runoff or post-fire slope stability would be insignificant.

Operation and Maintenance

As mentioned above, once constructed, operational activities for any future Tier 1 and Tier 2 solar energy systems would consist of routine maintenance and cleaning. These maintenance activities would occur within previously disturbed areas and thus would not expose people or structures to significant risks. Therefore, impacts from operation of future Tier 1 and Tier 2 solar systems would be insignificant and no mitigation is required.

Additionally, the future development of Tier 3 and Tier 4 solar facilities, including potential components such as substations and battery ESS, would be located in areas that are generally rural or industrial in nature. While the facilities themselves would not include any housing, some designated agriculture lands

could include a dwelling. In this case, this would be a considerably small amount of housing on likely a large property. Therefore, no people or structures would be exposed to significant risks associated with landslides, flooding, or post-fire slope instability.

However, during O&M, should a fire occur, people and/or structures nearby could be affected by post-slope stability induced by drainage changes. However, the implementation of MM WF-3 as described below would reduce drainage-related direct and indirect impacts. Considering the oversight that the required Erosion and Sediment Control Plan would provide for each Tier 3 or 4 facility, impacts to post-slope stability and runoff, as well as any related drainage changes, would be insignificant. This is because the soil conditions would be evaluated to ensure adequate draining, including impacts relating to fire, and would prevent potential stability issues that could damage nearby populations or structures. Associated infrastructure as a result of the Project would follow wildfire management practices, including those pertaining to erosion control, and impacts would be insignificant.

Mitigation Measures

> **MM WF-3: Erosion and Sediment Control Plan.** Where required by the latest edition of the California Green Code and/or Chapter 14 of the Santa Barbara County Code, a Storm Water Pollution Prevention Plan (SWPPP), Storm Water Management Plan (SWMP) and/or an Erosion and Sediment Control Plan (ESCP) shall be implemented as part of the development of Tier 3 or Tier 4 solar energy facilities. Grading and erosion and sediment control plans shall be designed to minimize erosion during construction and shall be implemented for the duration of the grading period and until re-graded areas have been stabilized by structures, long-term erosion control measures or permanent landscaping. The Owner/Applicant shall submit the SWPPP, SWMP or ESCP using Best Management Practices (BMP) designed to stabilize the site, protect natural watercourses/creeks, prevent erosion, convey storm water runoff to existing drainage systems keeping contaminants and sediments on-site. The SWPPP or ESCP shall be a part of the Grading Plan submittal and must be approved prior to issuance of grading permits.

Residual Impacts

With the implementation of MM WF-3, impacts would be reduced to an insignificant level and no residual impacts would occur.

3.13.5 Cumulative Impacts Analysis

For Project impacts to combine with the impacts of other projects, the collective incremental impacts must overlap both geographically and temporally. The geographic scope for potential cumulative impacts to wildfire includes the areas surrounding potential siting of future solar energy facilities of all tiers. This includes the site and the surrounding conditions that could contribute to the fire environment and nearby evacuation routes.

All future solar energy projects developed as a result of the Project would be required to adhere to the most current local, state, and federal regulations, implement the applicable mitigation measures discussed throughout this Programmatic EIR, and complete further site-specific environmental review if necessary. Cumulative projects that could contribute to wildfire risk consist primarily of four solar energy projects that are in the planning stages prior to the implementation of this Project. It is also assumed that these solar energy projects would also adhere to all local, state, and federal regulations as stated above. As

such, these solar energy projects would implement similar mitigation measures and would not be expected to cause a substantial cumulative impact in conjunction with the Project.

With respect to Impact WF-1, compliance with applicable County emergency response and emergency evacuation plans and the adherence with MM T-1, impacts to emergency response and evacuation would be insignificant. It is reasonable to assume that the designation of emergency routes during emergencies would not change based on more or less projects in the region. Thus, the agencies would not be overburdened by the addition of future solar energy facilities that would be enabled under the Project. The cumulative impacts of this Project, when considered with others in the region, would not obstruct any emergency response or evacuation plan. The Project's contribution to cumulative conditions would not cause or contribute to a significant cumulative impact due to impairment of an emergency response plan and the cumulative impact would be insignificant.

The Project could increase the potential for ignition sources in the area, in combination with the cumulative projects. Future solar energy facilities would be required to establish response procedures for an equipment malfunction or failure, including procedures that provide for the safety of emergency responders, nearby residents, and properties. Additional safety provisions as required by MM WF-1 would provide for regular safety inspections and training to ensure safety during O&M, which is the phase that poses the highest risk. With the incorporation of mitigation, impacts would be reduced to an insignificant level. Therefore, the Project would not cause or contribute to a significant cumulative impact relating to the exacerbation of wildfire risks due to slope, prevailing winds, or other factors and thereby expose people to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Cumulative impacts would be insignificant.

The infrastructure associated with future Tier 3 and Tier 4 solar energy facilities could increase the potential for ignition and spread of a wildfire due to grading or operation of machinery during construction. When cumulatively considered with other projects in the area, this could pose a potential impact towards exposing people or structures to risk. However, compliance with existing regulations developed by the State (e.g., CFC) and the County (e.g., County Fire Code and SBCFD fire prevention programs) would reduce these impacts to an insignificant level, as all future projects would need to comply. Thus, when cumulatively considered, impacts would be insignificant.

Finally, the Project would not cause or contribute to a significant cumulative impact relating to the exposure of people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes with the incorporation of MM WF-3. Future solar energy facilities would implement wildfire management practices, including those pertaining to erosion control, as would other projects in the region. Therefore, cumulative impacts would be insignificant.

CHAPTER 4
Alternatives

4.1 Introduction

This section of the Program EIR evaluates alternatives to the Project, and analyzes the comparative environmental impacts associated with each alternative. Under CEQA, and as indicated in California Public Resources Code Section 21002.1(a), the identification and analysis of alternatives to a project is a fundamental aspect of the environmental review process intended to consider ways to mitigate or avoid the significant environmental effects of a project.

Guidance regarding the definition of project alternatives is provided in State *CEQA Guidelines* Section 15126.6(a) as follows:

> *An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.*

The CEQA Guidelines emphasize that the selection of project alternatives be based primarily on the ability to reduce significant impacts relative to the proposed project, "even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." (Section 15126.6(b)) The State *CEQA Guidelines* further direct that the range of alternatives be guided by a "rule of reason," such that only those alternatives necessary to permit a reasoned choice are analyzed (Section 15126.6(f)).

In selecting project alternatives for analysis, potential alternatives should be feasible. The State *CEQA Guidelines* Section 15126.6(f)(1) explains that:

> *Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.*

The CEQA Guidelines require the analysis of a "no project" alternative and, depending on the circumstances, evaluation of alternative location(s) for the project, if feasible. Based on the alternatives analysis, an environmentally superior alternative is to be designated. In general, the environmentally superior alternative is the alternative with the least adverse impacts on the environment. If the environmentally superior alternative is the "no project" alternative, an EIR shall also identify another environmentally superior alternative among the other alternatives (Section 15126.6(e)(2)).

Section 15126.6(d) of the State *CEQA Guidelines* states that alternatives analysis need not be presented in the same level of detail as the assessment of the proposed project. Rather, an EIR is required to provide sufficient information to allow meaningful evaluation, analysis, and comparison with the proposed project. If an alternative would cause one or more significant impacts in addition to those of the proposed project, analysis of those impacts is to be discussed, but in less detail than for the proposed project.

4.1.1 Project Objectives

The Project objectives are presented in Chapter 2, Project Description, and reiterated here for reference. The underlying purpose of the Project is to allow utility-scale solar and smaller scales of solar energy generation facilities to be developed on land previously not available for such use in order for the County to come closer to meeting its renewable energy goals. The Project seeks to achieve the following primary objectives:

1. Encourage the development of solar energy within the County in order to meet ambitious state and local emission reduction goals.
2. Allow utility-scale solar in areas that can accommodate the use while maintaining valued resources.
3. Provide opportunities for the development of solar energy within the County through the removal of some County regulatory barriers identified in the Strategic Energy Plan (e.g., allowing utility-scale solar outside of the existing 600-acre overlay area, and allowing utility-scale solar within Williamson Act-contracted land).
4. Develop a regulatory program that minimizes potential adverse effects on people and the environment.
5. Provide efficiency and clarity in the permitting process.
6. Increase renewable energy generation through utility-scale and community-scale solar.
7. Facilitate permitting of on-site and "distributed" renewable energy projects to support regional resiliency and provide electricity availability during Public Safety Power Shutoffs and local severe weather or disaster events.

4.1.2 Summary of Potentially Significant Impacts of the Proposed Project

Sections 3.1 through 3.13 of this Draft Program EIR address the environmental impacts of implementation of the Project. Potentially feasible alternatives were developed with consideration of avoiding or lessening the significant, and potentially significant, adverse impacts of the Project, as identified in Chapter 3 of this Draft Program EIR and summarized in Table ES-1 in the "Executive Summary" chapter. As described in Table ES-1 and Sections 3.1 through 3.13, for the following resource areas the Project could result in significant or potentially significant impacts that would be reduced to less-than-significant levels with the incorporation of mitigation: aesthetics, biological resources, cultural resources (historic, human remains, paleontological resources), greenhouse gas emissions, hazards and hazardous materials, noise, transportation, utilities and service systems, and wildfires. Additionally, significant and unavoidable environmental impacts were identified as resulting from the Project for the following resource areas: aesthetics, agricultural resources, and cultural resources (archaeological resources and tribal cultural resources).

4.2 Alternatives Considered but Rejected from Further Evaluation

CEQA Guidelines Section 15126.6(c) requires that an EIR disclose alternatives that were considered for analysis but rejected as infeasible and briefly explain the reasons for their rejection. According to the State CEQA Guidelines, the following factors may be used to eliminate alternatives from detailed consideration: the alternative's failure to meet most of the basic Project Objectives, the alternative's infeasibility, or the alternative's inability to avoid significant environmental impacts. The County considered alternatives identified during the process of developing the proposed amendments and from suggestions received in the comments submitted during the scoping process. Alternatives that have been considered and rejected are discussed below.

4.2.1 Encourage Small-Scale Solar Systems/Limit Larger Scale to Disturbed Areas Alternative

This alternative would encourage and prioritize the development of small-scale solar projects in urbanized areas. In addition, this alternative would reduce the future development of community-scale and utility-scale solar energy facilities on agricultural land and undeveloped lands. Essentially, this alternative would combine components of the Project and Alternative 2 (see Section 4.3.2).

More specifically, community-scale and utility-scale solar facilities would be limited to disturbed or marginal lands. In particular, these facilities would not be allowed on prime agricultural lands, even if those lands would otherwise be considered "disturbed" or "marginal." The Project prioritizes small-scale solar energy systems on rooftops and promotes integration into urbanized areas through permit streamlining that would result from the creation of Tier 1 and Tier 2 approval processes. In addition, the removal of prime agricultural lands from the areas available for Tier 3 and Tier 4 solar energy facilities is proposed under Alternative 2. Thus, this alternative would reduce the overall area in which solar facilities could be located. Since a portion of this suggested alternative would be implemented as part of the Project and the other portion is evaluated as part of Alternative 2, this was not determined to warrant further analysis as a separate alternative.

4.2.2 Locate Utility-Scale Solar Only Near Existing Transmission Lines Alternative

Given the need for utility-scale solar projects to tie into the grid, the County considered limiting utility-scale solar energy facilities to within one mile of existing transmission lines. This alternative would significantly reduce the opportunity for utility-scale solar projects within the County. The alternative would still help the County meet the state and local greenhouse gas emission reduction goals and reduce the reliance on fossil fuels, but would not have nearly the same level of effectiveness toward meeting those goals. In addition, energy generation, storage, and transmission technologies may change over time. Transmission infrastructure may also be expanded due to factors outside the County's control, such as the State's commitment to upgrading transmission lines to meet greenhouse gas emission and electrification goals. Therefore, since this alternative could result in barriers to achieving the County's goals in the future, this alternative is not evaluated further in this Program EIR.

4.3 Alternatives Selected for Analysis

As described above, according to CEQA Guidelines Section 15126.6 (a), the purpose of analyzing project alternatives is to identify alternatives that "…*would avoid or substantially lessen any of the significant effects of the project."* According to Section 15126.6(e) an EIR alternatives analysis should include the analysis of a "no project" alternative to allow decision makers to compare the impacts of approving a proposed project with the impacts and foreseeable future of not approving that project.

A reasonable range of alternatives with the potential to attain the basic Project objectives but avoid or substantially reduce significant impacts is analyzed below. Each alternative is discussed in relation to the objectives of the Project. Alternatives selected for this analysis include:

- Alternative 1: No Project Alternative
- Alternative 2: Reduction of Solar on Agricultural Lands
- Alternative 3: Removal of Utility-Scale Solar in Coastal Areas Alternative

4.3.1 Alternative 1 – No Project Alternative

As required by CEQA, the No Project Alternative is evaluated in this Draft Program EIR. Under the No Project Alternative, the proposed amendments to the plans and ordinances discussed in Chapter 2 would not be approved. The proposed amendments to the County's Comprehensive Plan Land Use Element, Coastal Land Use Plan (CLUP), County Land Use and Development Code (LUDC), Montecito LUDC (MLUDC), Article II Coastal Zoning Ordinance (CZO), and Uniform Rules for Agricultural Preserves and Farmland Security Zones (Uniform Rules)would not be incorporated into the County's plans and codes.

Table 2.1, *Solar Photovoltaic Systems Currently Allowed within Santa Barbara County*, within Chapter 2, *Project Description*, details the types of solar projects allowed within the Inland and Coastal portions of the unincorporated county. As currently is the case, under the No Project Alternative, utility-scale solar facilities would only be allowed within the 600-acre Utility-Scale Solar Photovoltaic Overlay, in accordance with the LUDC. Utility-scale facilities could only be developed outside of the overlay area if they are accessory to a primary use, or are not subject to County permitting regulations (e.g., are on State, Federal, or Tribal lands or are initiated by the County on County lands). Rooftop solar energy systems would be allowed throughout the unincorporated County without a planning permit. Freestanding or ground-mounted solar energy systems that are accessory to a principal use would be allowed in the Inland areas without a planning permit, but would require a Coastal Development Permit (CDP) in the Coastal Zone. Battery ESS would continue to be allowed as part of a utility-scale solar energy facility within the Utility-Scale Solar Photovoltaic Overlay, and also to be allowed as stand-alone facilities in other zones.

Aesthetics

Under the No Project Alternative, there would be no change to the County's land use plans, zoning codes, and Uniform Rules. Utility-scale solar energy facilities could generally only be developed within the existing 600-acre overlay area. However, as there would be no Project-related visual change relative to baseline conditions, the No Project Alternative would, therefore, result in insignificant aesthetic impacts and impacts would be less than under the Project.

Agricultural Resources

Under the No Project Alternative, there would be no streamlined approach to permit utility-scale solar development within the County outside of the 600-acre overlay area. Agricultural lands, which encompass most of the study area in the County, would continue to be used for agricultural uses and other allowed purposes consistent with existing compatibility requirements. As there would be no Project-related change relative to baseline conditions, the No Project Alternative would result in insignificant impacts on agricultural resources or agricultural lands, and impacts would be less than under the Project.

Air Quality

Under the No Project Alternative, the proposed amendments would not be adopted, and solar energy systems and facilities would be developed under existing policies and regulations. As such, pollutant emissions would continue to be emitted during construction, operation, and decommissioning of future solar projects, although development would occur in fewer areas of the County, at a smaller scale, with a more limited pace than under the Project.

With respect to conflicts with applicable air quality plans (Impact AQ-1), since the construction, operation, and decommissioning of solar energy systems and facilities would not occur to the same degree under the No Project Alternative, the air quality benefits of such facilities would not be realized. As a result, there would be less renewable energy infrastructure compared to the Project, which would support to a lesser degree the state's goal to transition to renewable energy resources pursuant to Senate Bill 100 (SB 100) and California's Renewables Portfolio Standard (RPS). As a result, the decrease in pollutant emissions associated with the replacement of nonrenewable energy resources would continue to a lesser extent than that of the Project. Therefore, although impacts to air quality plans would be greater than those of the Project, impacts would still be insignificant.

Similar to the Project, future solar energy systems and facilities under the No Project Alternative would not result in a cumulatively considerable net increase in construction, decommissioning, operation-related emissions for which the County is in nonattainment for an applicable federal or state ambient air quality standard (Impact AQ-2) or generate other emissions, such as odors, adversely affecting a substantial number of people (Impact AQ-4). Emissions may be reduced under the No Project Alternative as there would be no land use amendments which would allow for the development of utility-scale solar facilities. Because new freestanding or ground-mounted solar energy systems, utility-scale solar energy facilities (within the 600-acre overlay area), and standalone battery ESS projects would still be permissible under the No Project Alternative and would involve varying degrees of ground-disturbance during their construction and decommissioning, exposure of sensitive receptors to excessive dust generation and potential Valley Fever impacts would be potentially significant (Impact AQ-3), although to a lesser degree than the Project. Mandatory compliance with Santa Barbara County Air Pollution Control District rules and regulations, including fugitive dust controls, would ensure that potential impacts on air quality would be insignificant. Overall, the No Project Alternative would have similar or fewer impacts compared with the Project.

Biological Resources

Under the No Project Alternative, the proposed amendments would not be adopted, and solar energy systems and facilities would be developed under existing policies and regulations. Future solar energy systems and facilities would still be constructed and would be subject to project-level environmental

review and permitting, as required under existing conditions. However, as with the Project, potentially significant impacts to biological resources could occur. With compliance with existing policies and regulations, along with implementation of mitigation measures identified through the approval process, as applicable, impacts would be insignificant and less than under the Project.

Cultural Resources

The No Project Alternative would be subject to the current objectives and policies in the Comprehensive Plan and zoning codes that require avoidance of impacts to historic resources. The No Project Alternative could result in similar impacts as the Project regarding identified and potentially eligible historic resources in Santa Barbara County (Project Impact CR-1), given that the No Project Alternative would involve construction, decommissioning, operations and maintenance activities related to new rooftop solar energy systems, and freestanding or ground-mounted solar energy systems which would have the potential to result in adverse changes in the significance of historical or archeological resources. The County permitting process would remain the same for County-recognized and listed historical resources under the No Project Alternative, which currently does not involve a formal review process for National Register of Historic Places, California Register of Historical Resources, or potentially eligible resources for the installation and construction of rooftop solar energy systems, and freestanding or ground-mounted solar energy systems. Thus, the No Project Alternative could result in potentially significant impacts to historic resources if not identified during building permit review, without mitigation as proposed under the Project.

Under the No Project Alternative the proposed amendments would not occur and the Utility-Scale Solar Photovoltaic Overlay would remain. Thus, under the No Project Alternative, Tier 3 or 4 types of solar energy facilities would not be allowed on other zoned lands outside of the overlay. Under the No Project Alternative solar energy systems and facilities would still be developed involving varying degrees of ground-disturbance during their construction, decommissioning, operations and maintenance phases, resulting in potential adverse changes in the significance of known and unknown archeological or unique archaeological resources and paleontological resources, as well as disturbance of human remains, including those outside of cemeteries. Further, lands where solar energy projects could be sited under the No Project Alternative have been demonstrated to possess elevated levels of sensitivity for buried cultural resources, tribal cultural resources, paleontological resources, and human remains. However, the potential area of impact associated with utility-scale solar projects under the No Project Alternative would be limited to the 600 acres of land zoned as AG-II within the Utility-Scale Solar Photovoltaic Overlay. Nevertheless, the No Project Alternative could have the potential to significantly impact archaeological or unique archaeological resources, human remains, tribal cultural resources, and paleontological resources, although to a lesser degree than described in Section 3.5, *Cultural Resources*. Existing resource protection policies and development standards, and mitigation measures identified through previous environmental documentation, would reduce impacts to these resources to an insignificant level. Compliance with state law (i.e., PRC Section 5097.98, as amended by Assembly Bill 2641) would also ensure that potential impacts on human remains, including those outside of cemeteries, would be insignificant.

Energy

Under the No Project Alternative, the proposed amendments to the County's land use plans, ordinances, and zoning regulations would not be adopted. Energy facilities, including utility-scale solar and battery ESS, would continue to be developed under existing regulations. As such, energy would continue to be

consumed during construction, operation, and decommissioning of future solar energy projects, although development would likely occur in fewer areas of the County, at a smaller scale, or at a more limited pace than under the Project.

As described in Section 3.12, *Energy*, the Project would result in insignificant energy impacts, including with respect to construction- and operation-related energy consumption (Impact ENG-1) and conflicts with state or local plans for renewable energy or energy efficiency (Impact ENG-2). Since under the No Project Alternative, energy use associated with construction, operation, and decommissioning of future solar systems and facilities would occur in fewer areas of the County, at a smaller scale, or at a more limited pace than under the Project, energy would not be consumed in a wasteful, inefficient, or unnecessary manner, similar to the Project. However, because the scale and scope of renewable energy generation and storage within the County would be more limited, the No Project Alternative would not provide as much support for renewable energy generation compared to the Project. Therefore, while the No Project Alternative would not conflict with state or local renewable energy plans, it would have overall similar or greater impacts than the Project, but would still be insignificant. The No Project Alternative would not provide the beneficial impacts that would occur under the Project.

Greenhouse Gas Emissions

Under the No Project Alternative, the amendments would not be adopted, and solar energy systems and facilities would be developed under existing policies and regulations. As such, pollutant emissions would continue to be emitted during construction, operation, and decommissioning of future solar projects, although development would occur in fewer areas of the County, at a smaller scale, or at a more limited pace than under the Project.

As described in Section 3.7, *Greenhouse Gas Emissions*, the Project would result in a potentially significant GHG impact related to construction and decommissioning emissions for Tier 3 and Tier 4 projects (Impact GHG-1), due to the potential to exceed the County's 2024 bright-line threshold of 1,000 $MTCO_2e$ per year. For future solar energy systems and facilities developed under the Project, MM GHG-1 would be required to reduce impacts to insignificant. Under the No Project Alternative, similar potential to surpass thresholds would be applicable to future solar energy facilities that may be similar to Tier 3 and Tier 4 projects, such as utility-scale solar facilities currently allowed on lands zoned AG-II within the 600-acre Utility-Scale Solar Photovoltaic Overlay. Similar to the Project, these projects would be required to undergo GHG emissions evaluation and implement mitigation if emissions exceed the applicable threshold. Therefore, impacts would be potentially significant but mitigable to insignificant under the No Project Alternative with implementation of similar measures as identified for the Project.

With respect to conflicts with GHG reduction plans, policies, and regulations (Impact GHG-2), the No Project Alternative would not conflict with applicable GHG reduction plans or policies and would continue to support renewable energy development, albeit at a potentially slower or more limited scale when compared to the Project. However, because the scale and scope of renewable energy generation and storage within the County would be more limited, the No Project Alternative would not provide as much support for renewable energy generation compared to the Project. Therefore, while the No Project Alternative would not conflict with GHG reduction plans, policies, and regulations, it would have an overall similar or greater impact than the Project, but would still be insignificant.

Hazards and Hazardous Materials

The No Project Alternative could result in exposure of the environment and sensitive receptors to hazards, hazardous materials, or hazardous conditions, and some of the impacts could occur within 0.25 mile of a school or within 2 miles of an airport (Impacts HAZ-1, HAZ-2, HAZ-3, HAZ-4, and HAZ-5). However, there are no such sensitive receptors near the 600-acre solar overlay area, so only rooftop and freestanding/ground-mounted solar energy systems (as currently defined within the zoning ordinances) would be of consideration. Under the No Project Alternative, solar energy facilities would undergo individual environmental review and permitting processes; however, there would be less development of solar energy facilities under the No Project Alternative. Environmental impacts related to hazards and hazardous materials would be less than the Project, given that solar energy systems and facilities, as well as battery ESS facilities, would still occur but at a reduced rate and greatly reduced location, would adhere to all applicable rules and regulations, and would likely implement similar mitigation measures, when required. Therefore, the No Project Alternative would have insignificant impacts with mitigation and overall would have less impacts compared to the Project.

Land Use and Planning

Under the No Project Alternative, future development of utility-scale solar facilities would only be allowed on lands zoned AG-II within the 600-acre Utility-Scale Solar Photovoltaic Overlay, and stand-alone battery ESS, rooftop systems, and freestanding/ground-mounted solar energy systems would continue to be permitted as historically done. As described in Section 3.9, *Land Use and Planning,* the Project's land use impacts would be insignificant. Compared with the Project, the No Project Alternative would not result in substantially different land use impacts. Land use designations, zoning, and development patterns would remain the same under this alternative. However, the No Project Alternative would not achieve the Project objectives such as reducing local emissions, increasing renewable energy generation, and allowing utility-scale solar development in areas that can accommodate the use. Additionally, the No Project Alternative would not remove regulatory barriers that limit the development of solar energy facilities identified in the County's Strategic Energy Plan. Thus, under the No Project Alternative the current regulatory framework would continue to pose barriers to solar energy development and limit the County's ability to align land use planning with state and local energy goals. While this Alternative would result in fewer changes to land use, it would result in greater adverse impacts to land use and planning when considering long-term sustainability goals. The impact would be insignificant but greater when compared to the Project.

Noise

As with the Project, the No Project Alternative could still result in a temporary increase in ambient noise or ground-borne vibration levels that exceed applicable standards, for example, if pile driving would be required to install a freestanding/ground-mounted solar energy system with noise-sensitive receptor locations nearby (Impacts NOI-1, NOI-2). However, potential impacts would be to a lesser degree as compared to the Project due to the greatly reduced potential for utility-scale solar development. Similar to the Project, the No Project Alternative would result in insignificant impacts related to the exposure of workers to airport or airstrip noise (Impact NOI-3).

Under the No Project Alternative, solar energy facilities would still be constructed in accordance with existing plans and zoning regulations and would be subject to individual environmental review and

permitting, as necessary. These facilities would still be required to comply with all applicable rules and regulations and implement similar mitigation measures when necessary. Therefore, the No Project Alternative would result in lessened impacts than under the Project, and the frequency and extent of construction-related impacts (such as off-site construction traffic noise) would be substantially less than under the Project due to the limited locations where utility-scale solar projects could occur under the No Project Alternative.

Transportation

Under the No Project Alternative, utility-scale solar energy facilities would be limited to the 600-acre Utility-Scale Solar Photovoltaic Overlay area. Rooftop and freestanding or ground-mounted solar energy systems would occur throughout the unincorporated County, as currently allowed. Construction and operational vehicle miles traveled under the No Project Alternative would be similar for Tier 1 and 2 systems but greatly reduced for Tiers 3 and 4, as compared to the Project. As with the Project, under the No Project Alternative it would be reasonable to assume that construction workers would be employed elsewhere on different project sites for which temporary construction VMT would be generated. Under the No Project Alternative, construction trips and VMT would still occur but to a lesser degree. The No Project Alternative would not increase roadway hazards or interfere with emergency access beyond levels identified under the Project. Impacts under the No Project Alternative would be insignificant and would be less compared with the Project.

Utilities and Service Systems

Under the No Project Alternative, there would be no streamlined approach to allowing solar energy facility development within the County other than within the existing 600-acre solar overlay zone. Utility-scale projects within the overlay would be assessed for conformance with State and County regulations and provisions. Potential impacts and mitigation measures (if needed) to water and wastewater supplies and solid waste collection resources would be addressed through project-specific CEQA documentation. Rooftop and freestanding/ground-mounted solar energy systems (as currently defined under the County's ordinances) would continue to be allowed. Under a No Project Alternative, impacts to water supply, solid waste, or other utilities and service systems would be insignificant and less than the Project given the reduced potential for the development of utility-scale solar energy to occur.

Wildfire

Under the No Project Alternative utility-scale solar would be allowed within the 600-acre Utility-Scale Solar Photovoltaic Overlay, and rooftop systems, freestanding/ground-mounted solar energy systems, and stand-alone battery ESS would be permitted as historically done. Thus, as with the Project, the No Project Alternative could still result in some impacts to emergency response and evacuation (Impact WF-1); exacerbate wildfire risk, including infrastructure (Impact WF-2 and WF-3); and expose people or structures to risk (Impact WF-4). However, under the No Project Alternative impacts related to emergency response and evacuation would be less than under the Project, and mitigation as identified through CEQA analysis would be implemented to reduce impacts for any project within the 600-acre Overlay area. Thus, impacts under the No Project alternative would be insignificant but less than the Project.

In addition, utility-scale solar facilities could be developed under the No Project Alternative in the 600-acre overlay, and standalone battery ESS and smaller solar energy systems could be located in areas

of moderate, high, and very high Fire Hazard Severity Zones as designated by Cal FIRE, or in CPUC Fire Threat Districts of "Elevated" and "Extreme." Thus, the No Project Alternative could have the potential to exacerbate wildfire spread, but impacts would be less compared to the Project. Similar to the Project, CEQA analysis would be required for future utility-scale solar development in the 600-acre overlay and mitigation could be required. Thus, impacts under the No Project Alternative would be insignificant but less than the Project.

The No Project Alternative could have the potential to require maintenance of fuel breaks and other electrical infrastructure that could exacerbate fire risk given the opportunity for utility-scale solar development in the 600-acre overlay. Thus, while impacts under No Project Alternative would be insignificant and less than under the Project, mitigation as necessary could be implemented to reduce impacts under project-specific CEQA analysis.

Lastly, it is possible that solar energy facilities developed under the No Project Alternative could impact people and/or structures by post-slope stability induced by drainage changes should a fire occur. However, these impacts would be less than those described under the Project because the potential location of facilities developed would be limited to the 600-acre overlay area. As such, mitigation would not be required as impacts under the No Project Alternative would be insignificant.

Relationship to Project Objectives

Under the No Project Alternative, the future development of solar energy facilities would not occur to the same extent as under the Project. Utility-scale solar energy facilities would be limited to lands zoned AG-II within the 600-acre Utility-Scale Solar Photovoltaic Overlay in accordance with existing regulations. Therefore, the No Project Alternative would not expand the areas within the unincorporated County where utility-scale solar energy facilities could be developed. Because the scale and scope of solar energy generation and associated battery ESS within the County would be more limited, the No Project Alternative would not provide as much support for renewable energy generation compared to the Project. The No Project Alternative would not remove any of the County regulatory barriers identified in the SEP. In addition, the No Project Alternative would not provide efficiency and clarity in the permitting and Williamson Act contracting processes for solar energy systems and facilities. The No Project Alternative would not support regional resiliency and provide electrical availability during Public Safety Power Shutoffs and local severe weather or disaster events. Overall, the No Project Alternative would not meet the underlying purpose and primary objectives of the Project. Furthermore, the No Project Alternative would not provide the beneficial effects of an increase in renewable energy and increased resiliency that would occur for the unincorporated County under the Project.

4.3.2 Alternative 2 – Reduction of Solar on Williamson Act-Contracted Lands

Under Alternative 2, the location and requirements for Tier 1 and Tier 2 would be the same as under the Project. However, under Alternative 2, *Reduction of Solar on Williamson –Act-Contracted Lands*, the locations within agriculturally zoned lands in which Tier 3 and Tier 4 solar energy facilities could be located would be reduced. **Table 4-1**, *Comparison of the Project and Alternative 2*, provides a comparison of locations where Tier 3 and Tier 4 solar energy facilities would be allowed under the two scenarios. In general, Alternative 2 would limit or prevent the development of Tier 3 or 4 facilities within

certain Williamson Act-contracted lands, thereby reducing the overall acreage that could be developed with Tier 3 and Tier 4 solar energy facilities.

TABLE 4-1
COMPARISON OF THE PROJECT AND ALTERNATIVE 2

	Project	Alternative 2
Tier 3 and Tier 4 Facilities allowed on:		
Agriculturally-zoned land (AG-1 and AG-2) not part of a Williamson Act contract	• Yes; no minimum parcel size • Tier 3 maximum footprint: 30 acres • Tier 4 maximum footprint: no maximum	Same as Project
Prime soils on land not part of a Williamson Act contract	• Yes, but must be permanently preserved offsite at a 1:1 ratio. • Tier 3 maximum footprint: 30 acres • Tier 4 maximum footprint: no maximum	Same as Project
Williamson Act, Superprime Contract land	No	No
Williamson Act, Prime Contract land	• Yes; minimum contract premises size of 40 acres • Tier 3 maximum footprint: 10 acres or 10% of the premises • Tier 4 maximum footprint: not allowed (premises too small)	No
Williamson Act, Nonprime Contract land	• Yes; minimum contract premises size of 100 acres • Tier 3 maximum footprint: 30 acres or 15% of the premises • Tier 4 maximum footprint: 100 acres or 15% of the premises	• Yes; minimum contract premises size of 500 acres • Tier 3 maximum footprint: 30 acres or 10% of the premises • Tier 4 maximum footprint: 100 acres or 10% of the premises
Williamson Act, Open Space Contracted Lands	No	No
Williamson Act, Recreation Contracted Lands	No	No

There are similarities between the Project and Alternative 2. More specifically, as with the Project, Alternative 2 would allow Tier 3 and Tier 4 facilities on agriculturally zoned lands (AG-I and AG-II) that are not a part of a Williamson Act contract. In addition, these facilities could be located on prime soil designated lands not subject to a Williamson Act contract. Alternative 2, like the Project, would not allow Tier 3 and Tier 4 facilities on contracted lands qualifying as Superprime. In addition, as with the Project, Alternative 2 would identify solar energy facilities to be an incompatible land use for open space and recreation contracts. Finally, similar to the Project, Alternative 2 would allow for Williamson Act contracts to be rescinded in order to simultaneously enroll into a Solar Use Easement. The Solar Use Easement would require that the land be used for solar photovoltaic facilities for a term of 20 years, or if the landowner requests, for a term of not less than 10 years. As with the Project, Alternative 2 would require a decommissioning plan that would guide site closure to meet requirements that are applicable at that time. If the site is within an agricultural zone, then the site would be restored to a condition suitable to resume agricultural usage.

However, Alternative 2 would not allow Tier 3 and Tier 4 facilities on lands that qualify as a "Prime" contract under the County's Williamson Act Uniform Rules. As shown in **Table 4-2**, *Alternative 2 Agricultural Preserve Contract Acreages*, currently, approximately 31,507 acres qualify as Prime contracts within the unincorporated County. Under the Project as proposed, Tier 3 solar energy facilities up to 10 acres in size (or up 10 percent of the contract premises, whichever is less) could be allowed on Prime contracted lands (see Table 4-1). Under the Project, Tier 4 facilities would not be allowed on Prime contracted land, as the size limit for a solar energy facility would be too small. Therefore, compared with the Project, Alternative 2 would result in a reduction of approximately 31,507 acres of Prime contracted lands (or a 100% percent reduction).

TABLE 4-2
ALTERNATIVE 2 AGRICULTURAL PRESERVE CONTRACT ACREAGES

Agricultural Preserve Contract Type	Total Acres (Project)	Tier 3 or 4 Solar Energy Facilities Allowed under Alternative 2?	Percent Decrease Between Project and Alternative 2
Prime	31,507	No	-
Prime Subtotal	*31,507*	-	*100%*
Nonprime (below 500 acres)	184,691	No	-
Nonprime (above 500 acres)	285,691	Yes	-
Nonprime Subtotal	*470,379*	-	*39%*
Total	**501,886**	-	43%

SOURCE: County of Santa Barbara, 2025

Alternative 2 would allow solar energy facilities on contracted lands designated as "Nonprime" but only where the contracted premises is greater than 500 acres in size. There are approximately 470,379 acres of Nonprime-contracted lands, of which approximately 285,691 acres are within contracts with premises greater than 500 acres (see Table 4-2). Therefore, compared with the Project, Alternative 2 would result in a reduction of approximately 184,691 acres of Nonprime contracted lands (a 39% reduction) available for solar energy facilities. In addition, Alternative 2 would have stipulations that would not apply under the Project. Under Alternative 2 the solar energy facility footprint could not exceed 100 acres in size, or up to 10 percent of the contract premises (versus 15 percent under the Project). The solar energy facility would be required to be located so as to avoid prime soils and not impair existing agricultural operations on the subject property or other agricultural lands in the vicinity.

In total, under Alternative 2, Tier 3 and Tier 4 facilities could be located on approximately 216,198 fewer acres than under the Project (an approximately 43 percent reduction), assuming that the agricultural preserve contracts are not canceled or placed in nonrenewal. Potential impacts within each resource area are discussed below.

Aesthetics

Alternative 2 would allow for Tier 3 and Tier 4 solar energy facilities on agriculturally-zoned lands that are not under a Williamson Act contract, similar to the Project. Compared to the Project, this alternative would result in reduced acreage available for solar facility development for lands under agricultural preserve contracts. Alternative 2 would have a 39 percent reduction in the acreage on nonprime

contracted lands that could be used for Tier 3 and Tier 4 facilities compared to the Project. With the reduced potential for future solar energy facilities under this alternative, there would be a corresponding reduction of visual effects. As with the Project, future solar energy facilities developed under Alternative 2 could result in significant and unavoidable adverse effects on a scenic vista, substantial damage to scenic resources, and conflicts with applicable zoning and other regulations governing scenic quality. The same mitigation measures identified for the Project would be required under Alternative 2 to reduce the aesthetic impacts. Compared to the Project, due to the reduced acreage available for solar development, Alternative 2 would have less aesthetics impacts compared to the Project as a result of the reduction in the locations in which the solar energy facilities could be located.

Agricultural Resources

Similar to the Project, Alternative 2 would allow for Tier 3 and Tier 4 solar energy facilities on agriculturally zoned lands (AG-I and AG-II) that are not under a Williamson Act contract. However, as noted in Table 4-1, under Alternative 2, solar development would not be permitted on prime Williamson Act contracted land but could occur on nonprime land (as defined in the Uniform Rules) if under a Williamson Act contract for premises of 500 acres or greater. Community-scale facilities could be developed with a maximum footprint of 30 acres for community-scale (Tier 3) facilities and a maximum footprint of 100 acres for utility-scale (Tier 4) solar energy facilities. Compared to the Project, this would result in an overall reduction of acreage available for solar facility development (an approximately 43 percent reduction in the total prime and nonprime contracted lands). Similar to the Project, this alternative would allow for some flexibility of land use, which could encourage agrivoltaic or shared agricultural and solar generation uses (e.g., livestock grazing or row crops under solar panels), while also retaining Williamson Act protections for nonprime lands. Compared to the Project's potentially significant and unavoidable impacts, Alternative 2 would result in reduced, but still significant impacts on important farmland and fewer, but still significant, conflicts with agricultural zoning and Williamson Act contracts. Alternative 2 would be more protective of prime lands under Williamson Act contracts but would not inhibit solar or battery ESS development. Alternative 2 would allow utility-scale solar in areas that can accommodate the use while maintaining valued agricultural resources. Compared to the Project, due to the reduced acreage available for solar energy development, Alternative 2 would have less impacts to agricultural resources compared to the Project as a result of the reduction in the locations in which the solar energy facilities could be located, but impacts would still be significant, even after implementation of mitigation measure MM AG-1.

Air Quality

Under Alternative 2, the locations and requirements for Tier 1 and Tier 2 systems would be the same as under the Project. However, the locations within agriculturally zoned lands in which Tier 3 and Tier 4 solar energy facilities could be located would be more restricted. Alternative 2 would limit or prevent the development of Tier 3 or 4 facilities within certain Williamson Act contracted lands and therefore reduce the overall acreage that could be developed with Tier 3 and Tier 4 solar energy facilities. As such, pollutant emissions would continue to be emitted during construction and operation of future solar projects, although development would likely occur in fewer areas of the County than under the Project.

Air quality-related impacts under Alternative 2 would be similar or less than those analyzed in the Project, as there would be less overall development of solar energy systems and facilities compared to the Project.

With respect to conflicts with applicable air quality plans (Impact AQ-1), since the construction, operation, and decommissioning of solar energy systems and facilities under Alternative 2 would occur in fewer areas of the County, at a smaller scale, or at a more limited pace than under the Project, the air quality benefits of such facilities would be realized but at a lesser extent of those under the Project. As a result of Alternative 2, there would be less renewable energy infrastructure compared to the Project, which would support to a lesser degree the state's goal to transition to renewable energy resources pursuant to SB 100 and California's RPS. As a result, the decrease of pollutant emissions associated with the replacement of nonrenewable energy resources would continue to a lesser extent than that of the Project. Therefore, although impacts to air quality plans would be greater than those of the Project, impacts would still be insignificant.

Similar to the Project, future solar energy systems and facilities under Alternative 2 would not result in a cumulatively considerable net increase in construction, decommissioning, operation-related emissions for which the County is in nonattainment for an applicable federal or state ambient air quality standard (Impact AQ-2) or generate other emissions, such as odors, adversely affecting a substantial number of people (Impact AQ-4). Emissions may be reduced under Alternative 2 as the overall acreage that could be developed with Tier 3 and Tier 4 solar energy facilities would be reduced. Because Alternative 2 would involve varying degrees of ground-disturbance during the construction and decommissioning of the future solar energy facilities, exposure of sensitive receptors to excessive dust generation and potential Valley Fever impacts would be potentially significant (Impact AQ-3), although to a lesser degree than the Project. Accordingly, projects that would result under Alternative 2 would be required to implement MM AQ-1 and MM AQ-2 to reduce the potential for excessive dust generation and potential Valley Fever such that air quality impacts would be reduced to an insignificant level. Overall, Alternative 2 would have similar or lesser impacts than the Project.

Biological Resources

Under Alternative 2, the locations and requirements for Tier 1 and Tier 2 systems would be the same as under the Project. However, the locations within agriculturally zoned lands in which Tier 3 and Tier 4 solar energy facilities could be located would be more restricted. Alternative 2 would limit or prevent the development of Tier 3 or 4 facilities within certain Williamson Act contracted lands and therefore reduce the overall acreage that could be developed with Tier 3 and Tier 4 solar energy facilities.

Alternative 2 could still result in similar impacts to biological resources (Impacts BIO-1 through BIO-5), but with reduced impacts to agriculturally zoned lands. If these lands have been historically or currently used for agriculture, these areas likely have somewhat limited potential for biological resources (e.g., special-status plant and wildlife species, sensitive natural communities, riparian habitat, wetlands, wildlife corridors, protected native trees) due to lack of native habitat and recurring disturbance to the land from agricultural practices. Reduction in potential development of these lands may result in fewer impacts to special-status species adapted to agricultural areas (e.g., burrowing owls) and raptor foraging habitat. For agriculturally zoned lands that have not been previously disturbed, these lands may include native habitat, non-native habitat, or a mix of both. Thus, there may be higher potential for these lands to support biological resources and the reduction in potential development of these lands may result in fewer impacts to biological resources (e.g., special-status plant and wildlife species, sensitive natural communities, riparian habitat, wetlands, wildlife corridors, protected native trees). In either scenario, under Alternative 2, implementation of Project MM BIO-1 through BIO-16 would reduce impacts to these resources to an

insignificant level. Compared with the Project, Alternative 2 would result in less impacts to biological resources.

Cultural Resources

Under Alternative 2, the location and requirements for Tier 1 and Tier 2 projects would be the same as under the Project. However, under Alternative 2, the allowable locations for Tier 3 and 4 solar facilities would be reduced compared to the Project. Alternative 2 could still result in similar impacts to identified and potentially eligible historic resources (Project Impact CR-1) given that Alternative 2 would involve construction, decommissioning, operations and maintenance activities related to new rooftop solar energy systems, and freestanding or ground-mounted solar energy systems which have the potential to result in adverse changes to the significance of historical or archeological resources. Potential impacts to historic resources would remain the same (Project Impact CR-1) and MM CR-1 would still apply under Alternative 2. The reduction in acreage for Tier 3 and 4 facilities under Alternative 2 would not preclude potential impacts to historic resources, as identified and potential Federal- and State-listed historic resources exist throughout the County and are not exclusive to Williamson Act-contracted lands. Therefore, Alternative 2 would have the same impacts to historic resources as indicated in Section 3.5, *Cultural Resources*.

Under Alternative 2, solar energy systems and facilities would still be developed, involving varying degrees of ground-disturbance during the construction, decommissioning, and operations and maintenance phases. This disturbance would result in potential adverse changes in the significance of known and unknown archeological or unique archaeological resources, tribal cultural resources, and paleontological resources, as well as disturb human remains, including those outside of cemeteries. Under Alternative 2 the areas in which Tier 3 and 4 solar energy facilities could be located would be reduced by approximately 216,198 acres. However, lands zoned as AG-II, as well as inland and coastal areas within the unincorporated County, possess elevated levels of sensitivity for buried cultural resources, human remains, tribal cultural resources, and paleontological resources. Thus, despite the reduced available acreage for Tier 3 and 4 solar energy facilities under Alternative 2, impacts to archaeological or unique archaeological resources, human remains, tribal cultural resources, and paleontological resources would be potentially significant (Impacts CR-2, CR-3, CR-4, and CR-5). Implementation of MM CR-6 for human remains, in addition to compliance with state law (i.e., PRC Section 5097.98, as amended by Assembly Bill 2641) would ensure that potential impacts on human remains, including those outside of cemeteries, would be insignificant. However, as with the Project, even with implementation of MM CR-2 through CR-5 for archaeological and unique archeological resources, MM PR-1 through PR-4 for paleontological resources, and MM TCR-1 through TCR-3, impacts to archaeological resources, tribal cultural resources, and paleontological resources would be significant and unavoidable. While overall impacts to cultural resources under Alternative 2 would be less than the Project given the reduction in the areas in which future solar energy facilities could be located, there would still be some significant and unavoidable impacts on the whole.

Energy

Under Alternative 2, solar energy facilities would still be permitted on agriculturally zoned lands but development of Tier 3 and Tier 4 facilities would be further restricted on certain Williamson Act-contracted lands. These restrictions would reduce the total available acreage for larger-scale solar energy development within the County compared to the Project.

As with the Project, Alternative 2 would result in the use of electricity and fuel during construction and operation. Under Alternative 2, energy use associated with construction, operation, and decommissioning of future solar systems and facilities would occur in fewer areas of the County, at a smaller scale, or at a more limited pace than under the Project, and such energy would not be consumed in a wasteful, inefficient, or unnecessary manner, similar to the Project (Impact ENG-1). In addition, Alternative 2 would continue to support solar energy generation and would not conflict with any state or local renewable energy or energy efficiency plans (Impact ENG-2). However, the overall contribution of renewable energy generation within the County under Alternative 2 would likely be somewhat lower than under the Project due to reduced buildout potential on agricultural lands. Alternative 2 would not provide as much support for renewable energy generation compared to the Project. Nonetheless, the energy impacts would be similar or slightly greater, yet still insignificant, compared to the Project.

Greenhouse Gas Emissions

Under Alternative 2, Tier 3 and Tier 4 solar energy facilities would be restricted on certain Williamson Act-contracted lands. These restrictions would reduce the total acreage available for community and utility-scale solar energy development compared to the Project.

As with the Project, construction and decommissioning of Tier 3 and Tier 4 projects under Alternative 2 could generate GHG emissions that exceed the County's 1,000 $MTCO_2e$/year threshold (Impact GHG-1). Accordingly, similar project-level evaluations and implementation of MM GHG-1 would be required to reduce potential GHG impacts. Because Alternative 2 would reduce the geographic scope of allowable Tier 3 and Tier 4 development, it could result in fewer large-scale projects and, thus, reduce overall GHG emissions from construction activities. Nonetheless, GHG impacts would be potentially significant but mitigable to insignificant with the same mitigation as the Project.

Similar to the Project, Alternative 2 would not conflict with any adopted state or local GHG reduction plans and would continue to support renewable energy infrastructure (Impact GHG-2), but on a lesser scale than the Project. However, the County would not have as much access to renewable, carbon-free energy sources as under the Project. Therefore, while Alternative 2 would not conflict with GHG reductions plans, policies, and regulations, it would have overall similar or greater impacts than the Project, but impacts would still be insignificant.

Hazards and Hazardous Materials

As with the Project, future solar energy facilities that would be developed under Alternative 2 could result in exposure of the environment and sensitive receptors to hazards, hazardous materials, or hazardous conditions, and some of the impacts could occur within 0.25 mile of a school or within 2 miles of an airport (Impacts HAZ-1, HAZ-2, HAZ-3, HAZ-4, and HAZ-5). However, under Alternative 2, future solar energy facilities would be located on fewer parcels of land under Williamson Act Contracts. Projects located on farmland may result in the exposure of contaminated soil or groundwater due to pesticide use. Therefore, Alternative 2 may result in less impacts related to the exposure of contaminated soil or groundwater as compared to the Project.

Environmental impacts under Alternative 2 that are related to hazards and hazardous materials would be similar to the Project given that future solar energy projects under Alternative 2 could be located in areas

with potential contamination. However, with adherence to applicable rules and regulations as well as implementation of MM HAZ-1, impacts would be reduced. In addition, as with the Project, future solar energy projects under Alternative 2 that are located within 2 miles of an airport would be required to implement MM HAZ-2 to reduce impacts. Therefore, Alternative 2 would have insignificant hazards and hazardous materials impacts similar to the Project, although impacts would be less than the Project, given the reduction in the areas where solar energy facilities could be located.

Land Use and Planning

Under Alternative 2, the locations and requirements for Tier 1 and Tier 2 systems would be the same as under the Project. However, the development sites for Tier 3 and Tier 4 solar energy facilities would be more limited, particularly for development on lands under Williamson Act contracts.

As with the Project, Alternative 2 would result in insignificant land use and planning impacts. However, compared to the Project, Alternative 2 would reduce the potential for land use compatibility concerns due to the reduced areas for location of Tier 3 and Tier 4 solar energy facility development. In addition to preventing Tiers 3 and Tier 4 solar energy facility development on Prime contracted lands under the Williamson Act, Alternative 2 would also restrict development on Nonprime contracted lands to premises 500 acres or larger, with facility footprints no larger than 100 acres. Such limitations would reduce the total acreage available for Tier 3 and Tier 4 development by approximately 216,198 acres. While this Alternative aims to achieve aggressive state and local renewable energy goals, it would achieve these goals to a reduced extent compared to the Project due to these limitations. Alternative 2 would not result in substantial land use and planning conflicts. Therefore, land use and planning impacts under Alternative 2 would remain insignificant.

Noise

Under Alternative 2, solar energy facilities would be allowed on agriculturally zoned lands (AG-I and AG-II); however, development of Tier 3 and Tier 4 solar energy facilities on certain Williamson Act-contracted lands would be restricted. As a result, the total area available for Tier 3 and Tier 4 solar energy facility development would be reduced. As described in Section 3.10, *Noise*, the Project would result in an insignificant with mitigation impact related to off-site construction traffic noise (Impact NOI-1). Other noise and vibration impacts, including on-site construction equipment noise and construction-related groundborne vibration, would be insignificant with mitigation (Impacts NOI-1 and NOI-2). Operational noise and vibration would also be insignificant.

Under Alternative 2, future solar energy facilities would still involve similar construction and operational activities and would generate comparable types of noise and vibration. Although the scale of some solar development would be reduced, similar conclusions and mitigation measures identified for the Project, would apply to Alternative 2 to address noise and vibration impacts. However, under Alternative 2 with implementation of mitigation measures the impacts would be the same as the Project but would be reduced due to the more limited development footprints for some designated lands.

Transportation

Under Alternative 2, Tier 3 and Tier 4 solar energy facilities would be restricted on certain Williamson Act-contracted lands thereby reducing the locations and total acreage available for large-scale solar energy

development compared to the Project. Similar construction and operational activities would occur under Alternative 2 as would occur under the Project. However, because this alternative reduces the geographic scope of allowable Tier 3 and Tier 4 development, it could result in fewer large-scale projects and reduce overall construction trips.

Impacts related to conflicts with applicable programs, plans, ordinances, or policies addressing the circulation system under Alternative 2 would be similar to those that would occur under the Project. Construction and operational vehicle trips under this alternative would be reduced, and there would be no conflict or inconsistency with CEQA Guidelines Section 15064.3(b). Under Alternative 2, there would be less potential for roadway hazards as part of construction of Tier 3 and Tier 4 solar energy facilities as compared to the Project. Periodic vehicle and truck maintenance activities would not introduce incompatible uses or interfere with existing site access. Further, implementation of MM T-1, which requires a construction traffic control plan, would reduce any potential impacts to emergency access which could result from implementation of Alternative 2. As with the Project, impacts would be insignificant and less compared with the Project given the reduction in the development of future solar energy facilities.

Utilities and Service Systems

Under Alternative 2, there would be a smaller overall acreage available for Tier 3 and Tier 4 solar energy facility development. Compared to the Project, the same conclusions and the same mitigation measures (as described in Section 3.12.4) would be required under Alternative 2 for reducing the identified utilities and service system impacts. Due to the reduced acreage available for solar development, Alternative 2 could have reduced overall effects on water and solid waste capacity demand compared to the Project. With implementation of mitigation measures, Alternative 2 would result in the same residual insignificant impacts as the Project. However, such effects would be less compared to the Project given the reduced solar energy facility development that would occur under Alternative 2.

Wildfire

As with the Project, Alternative 2 could result in impacts to emergency response and evacuation (Impact WF-1); exacerbate wildfire risk, including infrastructure (Impacts WF-2 and WF-3); and expose people or structures to risk (Impact WF-4). Alternative 2 would allow Tier 1 or 2 systems on all unincorporated County lands, the same as the Project. However, Tier 3 or 4 solar energy facilities would not be allowed on prime contracted lands, thereby reducing the geographic areas in which these facilities could be developed.

Under Alternative 2, although there would be a reduction in acreage of where potential solar facilities could be located, impacts on emergency response would be similar to that of the Project, although slightly lessened due to the lesser potential occurrence of solar energy facilities. This is primarily because, in rare circumstances, battery ESS can create hazards for firefighters and emergency responders, with the possibility of explosions, flammable gases, toxic fumes, water-reactive materials, electrical shock, corrosives, or chemical burns, as well as a difficult to extinguish fire. Similar to the Project, MM T-1 would be required to reduce residual impacts under Alternative 2 on emergency response and evacuation to a level of insignificance. As with the Project, impacts would be insignificant and less compared with the Project given the reduction in the development of future solar energy facilities.

As with the Project, under Alternative 2 utility-scale solar facilities and battery ESS could be developed in areas of moderate, high, and very high Fire Hazard Severity Zones as designated by Cal FIRE. These areas also contain CPUC Fire Threat Districts of both "Elevated" and "Extreme." Thus, solar energy facilities developed under Alternative 2 could have the potential to exacerbate wildfire spread. As with the Project, with the implementation of MM WF-1 and WF-2, residual impacts would be reduced to a level of insignificance. As with the Project, impacts would be insignificant and similar compared with the Project given elevated risk of wildfire spread due to location.

Alternative 2 would require infrastructure including roads, fuel breaks, emergency water sources, power lines providing electricity onsite, other utilities delivering services onsite, and gen-tie lines, and could include the maintenance of fuel breaks, power lines, and other electrical utilities. While slightly less in scale, Alternative 2 would result in an impact to wildfire risk as it would require infrastructure that could exacerbate wildfire spread. With implementation of MM WF-2, residual impacts would be reduced to a level of insignificance. As with the Project, impacts would be insignificant and less compared with the Project given the reduction in the development of future solar energy facilities.

Alternative 2 could impact people and/or structures by post-slope stability induced by drainage changes should a fire occur. Thus, impacts would be substantially similar but less than the Project because potential solar energy facilities developed under Alternative 2 would be less in scale. MM WF-2 would be required to reduce residual impacts to a level of insignificance. As with the Project, impacts would be insignificant and less compared with the Project given the reduction in the development of future solar energy facilities.

Relationship to Project Objectives

Under the Reduction of Solar on Williamson Act-Contracted Lands Alternative, the location and requirements for Tier 1 and Tier 2 would be the same as under the Project. However, under Alternative 2 the locations within agriculturally zoned lands in which Tier 3 and Tier 4 solar energy facilities could be located would be reduced, thereby reducing the opportunities for the community-scale and utility-scale solar energy facilities. In total, Alternative 2 would reduce the agricultural areas in which future Tier 3 and Tier 4 facilities could be located by approximately 216,198 acres compared to the Project. As a result of the reduction of the geographic area in which Tier 3 and Tier 4 facilities could locate, the overall contribution of renewable energy generation within the County under Alternative 2 would likely be lower than under the Project.

Alternative 2 would meet the Project objective to remove some of the County regulatory barriers identified in the SEP and would improve the efficiency and clarity in the permitting process to a similar degree as the Project. While Alternative 2 would meet the underlying purpose of the Project since it would allow utility-scale solar and smaller scales of solar energy generation facilities to be developed on land previously not available for such uses, it would not meet the underlying purpose to the same degree as the Project. Alternative 2 would increase renewable energy generation by providing opportunities for utility-scale and community-scale solar facilities, but not to the same degree as the Project. With the reduction in area in which Tier 3 and 4 solar energy facilities could be located, Alternative 2 would help the County achieve the aggressive state and local renewable energy goals, but to a lesser degree than the Project. In addition, the County would not have as much access to renewable, carbon-free energy sources as under the Project. The overall contribution of renewable energy generation within the unincorporated County under

Alternative 2 would be somewhat lower than under the Project due to reduced buildout potential on agricultural lands. Thus, Alternative 2 would not provide as much support for renewable energy generation compared to the Project. Overall, while Alternative 2 would allow for an increase in renewable energy and increased resiliency for the unincorporated County, Alternative 2 would not provide the beneficial effects to the same degree as the Project.

4.3.3 Alternative 3: Removal of Utility-Scale Solar in Coastal Areas Alternative

Alternative 3, Removal of Utility-Scale Solar in Coastal Areas Alternative, would reduce the areas in the County where utility-scale solar energy facilities (Tier 4) would be allowed. Under Alternative 3, solar energy systems (Tiers 1 and 2) and community-scale solar energy facilities (Tier 3) would be allowed in the Coastal Zone, to be permitted as described in Section 2.5.2, *Proposed Amendments*. The Coastal Zone includes properties along the Gaviota Coast and properties within the Carpinteria Agricultural Overlay District. However, under Alternative 3, utility-scale solar (Tier 4) would not be allowed in the Coastal Zone.

Under the Project, there are approximately 59,374 acres within the Coastal Zone (within the unincorporated county area) where zoning amendments would allow Tier 3 and 4 facilities (see **Table 4-3**, *Comparison of Project and Alternative 3 by Acreages and Zones for Tier 4 Development)*. There are 5,955 acres zoned for AG-I, 53,066 acres zoned for AG-II, and 322 acres zoned for PU in the Coastal Zone. There are no parcels zoned M-1, M-2, and M-CR in the Coastal Zone. There are parcels zoned M-RP and PI in the Coastal Zone, but none of them would be large enough to support Tier 4 facilities even under the proposed Project. Some parcels zoned AG-I, AG-II, and PU would be large enough for Tier 4 facilities under the Project, but these parcels could not have Tier 4 solar facility development under Alternative 3. Alternative 3 would prevent Tier 4 facilities from being developed within the Coastal Zone on the acres shown in Table 4-3, even if the zoning designation allowed for it and the parcel was at least 30 acres in size.

TABLE 4-3
COMPARISON OF PROJECT AND ALTERNATIVE 3 BY ACREAGES AND ZONES FOR TIER 4 DEVELOPMENT

Zoning Designation	Unincorporated County Total Acres (Project)[1]	Coastal Zone Total Acres[1]	Percent Difference
AG-I (Agricultural I)	41,741	5,955	86%
AG-II (Agricultural II)	718,784	53,066	93%
PI (Professional and Institutional)	263	1	100%
PU (Public Utility)	497	322	35%
M-1 (Light Industry)	101	0	100%
M-2 (General Industry)	1,732	0	100%
M-RP (Industrial Research Park)	92	30	67%
M-CR (Coastal-Related Industry)	294	0	100%
TOTAL	763,504	59,374	92%

NOTE:
1. Estimated Acreage as of February 2024
SOURCE: County of Santa Barbara, 2024

Compared to the Project, Alternative 3 would reduce the land available for Tier 4 solar energy facility development as shown by total acreage and parcels in Table 4-2 below. Alternative 3 would reduce the land available for Tier 4 solar energy facility development by approximately eight percent, as compared to the Project.

Aesthetics

Under Alternative 3, solar development in the Coastal Zone would be limited to Tier 1 and 2 solar energy systems and community-scale (Tier 3) solar energy facilities. Visual effects identified for Tiers 1, 2, and 3 solar development would occur in the Coastal Zone, but effects could be dispersed and less noticeable compared to the development and presence of utility-scale solar energy facilities. Because utility-scale solar facilities (Tier 4) would not be permitted in the Coastal Zone, visual effects associated with these facilities would be reduced within coastal areas, relative to the Project. Under Alternative 3, Tier 4 solar energy facilities could be permitted in other areas of the County, subject to development code standards and zoning requirements. The same or similar visual effects as identified for the Project would occur in those non-coastal areas under Alternative 3. By precluding utility-scale solar facilities on lands in the Coastal Zone, Alternative 3 would protect important coastal visual resources. From a visual perspective, given the importance of protecting visual resources in the Coastal Zone, Alternative 3 would result in decreased impacts compared to the Project. However, under this alternative, smaller (Tier 3 community-scale) solar energy facilities and (Tier 1 and 2) solar energy systems could still be permitted within the Coastal Zone, which would still have the potential to result in some visual impacts in this important viewshed. Tier 3 solar energy facilities would be subject to development standards including those related to appearance, height, setbacks and lighting, which would generally reduce impacts of such facilities. Additionally, in areas outside the Coastal Zone, the same or similar visual effects would occur as those identified for the Project and the same mitigation measures would be required. Overall, due to the reduced footprint available for solar development, there would be reduced visual impacts under Alternative 3 compared to the Project, but impacts would be significant even after mitigation for Impacts AV-1, AV-2, and AV-3. Impacts related to light and glare would be insignificant with mitigation, but less than the Project.

Agricultural Resources

Under Alternative 3, there would be a reduction in solar energy development in the Coastal Zone as only Tiers 1, 2, and 3 solar energy systems and facilities would be permitted in these areas including properties along the Gaviota Coast and within the Carpinteria Agricultural Overlay District. The majority of lands zoned for agricultural purposes and important farmlands in the County are not located in the Coastal Zone. There would be a reduction in agricultural impacts within the Coastal Zone compared to the Project; therefore, this alternative would be more protective of important farmland in the county overall. Overall, the agricultural impact conclusions under Alternative 3 would be similar to but less than the Project and would occur over a reduced footprint. The same mitigation measures would be necessary to reduce impacts to agricultural resources. However, Alternative 3 would still have significant impacts regarding the conversion of designated farmland (Impact AG-1) and potential conflicts with agricultural zoning and Williamson Act contracts (Impact AG--2), even after implementation of mitigation, but would be less than the Project. Impacts regarding other changes in the existing environment that could result in conversion of farmland (Impact AG-3) would be insignificant and less than the project.

Air Quality

Under Alternative 3, the allowable locations for solar energy systems and facilities would be marginally reduced due to a restriction of Tier 4 projects in coastal areas. With this exception, under Alternative 3, the location and requirements for Tiers 1 through 3 solar energy systems and facilities would otherwise be the same as under the Project. As such, air quality impacts would be similar to the Project during construction, operation, and decommissioning of future solar energy projects. However, development of Tier 4 solar energy facilities would occur in fewer areas of the County than under the Project.

Air quality-related impacts under Alternative 3 would be similar or less than those analyzed for the Project, as there would be marginally less overall development of solar energy facilities compared to the Project. With respect to conflicts with applicable air quality plans (Impact AQ-1), since the construction, operation, and decommissioning of solar energy systems and facilities under Alternative 3 would occur in fewer areas of the County than under the Project, the air quality benefits of such facilities would be realized but to a lesser extent of those under the Project. As a result of Alternative 3, there could be less renewable energy infrastructure compared to the Project, which would support to a lesser degree the state's goal to transition to renewable energy resources pursuant to SB 100 and California's RPS. As a result, the decrease of pollutant emissions associated with the replacement of nonrenewable energy resources would continue to a lesser extent than that of the Project. Therefore, although impacts to air quality plans would be greater than those of the Project, impacts would still be insignificant.

Similar to the Project, future solar energy systems and facilities under Alternative 3 would not result in a cumulatively considerable net increase in construction, decommissioning, operation-related emissions for which the County is in nonattainment for an applicable federal or state ambient air quality standard (Impact AQ-2) or generate other emissions, such as odors, adversely affecting a substantial number of people (Impact AQ-4). Emissions may be reduced under Alternative 3 as the overall acreage that could be developed with solar energy facilities would be reduced. Because Alternative 3 would involve varying degrees of ground disturbance during construction and decommissioning, exposure of sensitive receptors to excessive dust generation and potential Valley Fever impacts would be potentially significant (Impact AQ-3). Accordingly, for projects permissible under Alternative 3, projects would be required to implement MM AQ-1 and MM AQ-2 to reduce the potential for excessive dust generation and potential Valley Fever such that air quality impacts would be reduced to an insignificant level. Overall, Alternative 3 would have similar or lesser impacts than as described for the Project.

Biological Resources

Under Alternative 3, solar energy systems (Tiers 1 and 2) and community-scale solar energy facilities (Tier 3) would be allowed in the Coastal Zone. Utility-scale solar energy facilities (Tier 4) would not be allowed in the Coastal Zone but could be permitted in other areas of the County. The Coastal Zone is rich in biological resources, including special-status plant and wildlife species with ranges restricted to or overlapping with the coast, sensitive natural communities, riparian habitat, wetlands, wildlife corridors, and protected native trees. Thus, prohibiting Tier 4 solar energy facilities would reduce potential impacts to biological resources, particularly for those resources found primarily or solely along the coast. For all other future solar energy facilities under Alternative 3, implementation of proposed mitigation measures would reduce impacts to these resources to an insignificant level. Compared with the Project, Alternative 3 would result in less impacts to biological resources.

Cultural Resources

Under Alternative 3, Tier 4 solar energy facilities would not be allowed in coastal areas. As with the Project, Alternative 3 would result in impacts to identified and potentially eligible historic resources in Santa Barbara County (Project Impact CR-1), given that the Alternative 3 would involve construction, decommissioning, operations and maintenance activities related to new rooftop solar energy systems, and freestanding or ground-mounted solar energy systems which have the potential to result in adverse changes to the significance of historic resources. Even with implementation of MM CR-1, impacts to historic resources under Alternative 3 would significant.

Alternative 3 would preclude Tier 4 utility-scale solar energy facility projects within the acreage proposed to allow such development within the Coastal Zone but other components of the Project would remain the same. Since each project permissible under Alternative 3 would involve varying degrees of ground-disturbance during their construction, decommissioning, operations and maintenance phases, they would have the potential to result in adverse changes in the significance of known and unknown archeological or unique archaeological resources and paleontological resources, as well as disturb human remains, including those outside of cemeteries. Inland areas and coastal lands within the unincorporated County have been demonstrated to possess elevated levels of sensitivity for buried cultural resources, paleontological resources, and human remains. Development of future solar energy systems and facilities would occur throughout the unincorporated County. The potential to significantly impact archaeological or unique archaeological resources, human remains, tribal cultural resources, and paleontological resources would still occur to a degree similar to the Project (Impacts CR-2, CR-3, CR-4, and CR-5), as described in Section 3.5, *Cultural Resources*. Implementation of MM CR-6 for human remains, in addition to compliance with state law (i.e., PRC Section 5097.98, as amended by Assembly Bill 2641) would ensure that potential impacts on human remains, including those outside of cemeteries, would be insignificant. However, as with the Project, even with implementation of MM CR-2 through CR-5 for archaeological and unique archeological resources, MM PR-1 through PR-4 for paleontological resources, and MM TCR-1 through TCR-3, impacts to archaeological resources, tribal cultural resources, and paleontological resources would be significant and unavoidable. Alternative 3 would result in similar but lessened impacts as the Project. Therefore, even with implementation of mitigation, impacts to cultural resources under Alternative 3 would be significant and unavoidable.

Energy

Under Alternative 3, utility-scale solar energy facilities (Tier 4) would not be permitted within the Coastal Zone thereby reducing the total area available for utility-scale solar development compared to the total acreage available under the Project. Development of smaller-scale solar energy projects (Tiers 1 through 3) would still be allowed in these areas.

As with the Project, Alternative 3 would result in the use of electricity and fuel during construction and operation. Under Alternative 3, energy use associated with construction, operation, and decommissioning of future solar systems and facilities would occur in fewer areas of the County for Tier 4 projects. But similar to the Project, such energy would not be consumed in a wasteful, inefficient, or unnecessary manner (Impact ENG-1). Additionally, Alternative 3 would not conflict with state or local plans related to renewable energy or energy efficiency (Impact ENG-2). While the prohibition of Tier 4 facilities in the Coastal Zone may incrementally reduce the County's total renewable energy output, this alternative

would continue to support meaningful renewable energy development and storage. Nonetheless, the overall contribution of renewable energy generation within the County under Alternative 3 would likely be somewhat lower than under the Project due to reduced buildout potential in the Coastal Zone. Alternative 3 would not provide as much support for renewable energy generation compared to the Project. Therefore, energy-related impacts under Alternative 3 would be similar or slightly greater compared to the Project.

Greenhouse Gas Emissions

Under Alternative 3, Tier 4 utility-scale solar facilities would not be permitted within the Coastal Zone thus reducing the amount of land available for utility-scale solar development compared with the Project. As with the Project, construction and decommissioning of Tier 3 and Tier 4 facilities under Alternative 3 could result in GHG emissions that exceed County thresholds (Impact GHG-1). Mitigation Measure GHG-1 would be required to ensure that project-level emissions are quantified and mitigated if they exceed the applicable threshold. However, by removing the ability to construct Tier 4 solar energy facilities in the Coastal Zone, Alternative 3 could result in fewer utility-scale projects overall, which may reduce total GHG emissions associated with construction and decommissioning relative to the Project. Therefore, the impact would remain potentially significant but mitigable to insignificant with implementation of the same mitigation measures as would apply to the Project.

Alternative 3 would continue to support renewable energy development (including Tiers 1 through 3) and would not conflict with applicable GHG reduction policies or plans (Impact GHG-2). However, the limitation of utility-scale solar within the Coastal Zone would not provide the county with as much renewable, carbon free energy sources. Therefore, while Alternative 3 would not conflict with GHG reductions plans, policies, and regulations, it would have overall similar or greater impact than the Project, but would still be insignificant.

Hazards and Hazardous Materials

As with the Project, Alternative 3 could result in exposure of the environment and sensitive receptors to hazards, hazardous materials, or hazardous conditions, and some of the impacts could occur within 0.25 mile of a school or within 2 miles of an airport (Impacts HAZ-1, HAZ-2, HAZ-3, HAZ-4, and HAZ-5). Environmental impacts related to hazards and hazardous materials would be generally consistent with the Project, would adhere to all applicable rules and regulations, and would implement similar mitigation measures (MMs HAZ-1 and HAZ-2), when required. However, under Alternative 3, future Tier 4 solar energy facilities would be located on fewer parcels of land. Therefore, Alternative 3 may result in less impacts related to the exposure of contaminated soil or groundwater as compared to the Project. Adherence to applicable rules and regulations, as well as implementation of MM HAZ-1, would reduce potential impacts to an insignificant level. In addition, as with the Project, future solar energy projects under Alternative 3 that are located within 2 miles of an airport would be required to implement MM HAZ-2 to reduce impacts. Therefore, under Alternative 3, hazards and hazardous materials impacts would be insignificant. In comparison to the Project, Alternative 3 would have fewer impacts related to hazards and hazardous materials.

Land Use and Planning

Under Alternative 3, Tier 4 solar energy facilities would be prohibited in the Coastal Zone, thereby reducing the location where future utility-scale solar energy facilities could be developed. However, Tiers 1, 2, and 3 could still be located within the Coastal Zone. As with the Project, Alternative 3 would have an insignificant impact with respect to physically dividing a community, but would have a smaller impact than the Project since Tier 4 facilities would avoid communities within the Coastal Zone. In addition, impacts related to community compatibility would be similar to the Project but would be less in comparison because of the reduction that would occur in the development of Tier 4 solar energy facilities. Alternative 3 could reduce potential impacts within the Coastal Zone, which may further align with state and local policies related to the protection and preservation of coastal resources and landscapes. As with the Project, under Alternative 3 land use impacts would be insignificant. In comparison to the Project, Alternative 3 would have fewer impacts related to land use.

Noise

Under Alternative 3, the development of Tier 4 utility-scale solar facilities would be prohibited within the Coastal Zone, including areas along the Gaviota Coast and the Carpinteria Agricultural Overlay District. As a result, the total area available for Tier 4 development would be reduced compared to the total acreage available under the Project. As described in Section 3.10, *Noise*, with mitigation the Project would result in an insignificant impact related to off-site construction traffic noise (Impact NOI-1). Other noise and vibration impacts, including on-site construction equipment noise and construction-related groundborne vibration, would be insignificant with mitigation (Impacts NOI-1 and NOI-2). Operational noise and vibration would also be insignificant.

As with the Project, the development of future solar energy facilities under Alternative 3 would involve similar construction and operational activities and would generate comparable types of noise and vibration. Although the scale and geographic extent of some Tier 4 development would be reduced, similar conclusions and mitigation measures identified in Section 3.10, *Noise*, would apply to development under Alternative 3 in order to address noise and vibration impacts. However, in comparison to the Project, Alternative 3 would slightly reduce noise impacts within the Coastal Zone due to the exclusion of utility-scale solar development in that area.

Transportation

Under Alternative 3, only Tier 1-3 energy systems and facilities would be permitted in the Coastal Zone. By removing the ability to construct Tier 4 facilities in the Coastal Zone, Alternative 3 could result in fewer utility-scale projects overall, which could reduce vehicle trips associated with construction and operation of the Project.

There would therefore be reduced potential for conflict with applicable programs, plans, ordinances, and policies related to the transportation system (Impact T-1), conflict with CEQA Guidelines Section 15064.3(b) (Impact T-2), impacts resulting in increased hazards due to a geometric design feature or incompatible use (Impact T-3), and impacts resulting in inadequate emergency access (Impact T-4). Transportation impacts from Alternative 3 would remain insignificant.

Utilities and Service Systems

Under Alternative 3, no utility-scale solar facilities would be permitted in the Coastal Zone. Community-scale solar energy facilities and Tier 1 and Tier 2 solar energy systems could be permitted in the Coastal Zone under this alternative. As identified in Section 3.12.4, utility-scale solar facilities have the greatest impact on utilities and service systems, particularly in the areas of water supply and solid waste capacity. It is noteworthy that the main landfill likely to receive solid waste from the Project or alternatives is the Tajiguas Landfill, which is located in the Coastal Zone. The same or similar impacts (as identified for the Project) would occur under this alternative for all tiers of solar energy systems and facilities developed in inland locations. Because Tier 4 facilities would not be constructed in the Coastal Zone under Alternative 3, there would be a corresponding decrease in water demand impacts in the Coastal Zone. However, the same impact conclusions would apply and the same mitigation measures would be required under Alternative 3 as are required for the Project. Due to the reduced acreage available for solar development, Alternative 3 could have reduced overall effects on water and solid waste capacity demand compared to the Project. However, it is possible that under Alternative 3, water demand impacts would simply occur in different geographic areas (outside of the Coastal Zone) with no overall reduction in the identified level of demand. As for the Project, with mitigation measures implemented, impacts under Alternative 3 would be reduced to insignificant levels.

Wildfire

As with the Project, Alternative 3 could result in impacts to emergency response and evacuation (Impact WF-1), exacerbate wildfire risk (including infrastructure) (Impacts WF-2 and WF-3), and expose people or structures to risk (Impact WF-4). Alternative 3 would allow utility-scale solar development in much of unincorporated Santa Barbara County. Alternative 3 would vary from the Project in that Tier 4 (utility-scale) solar energy facilities would not be allowed in the Coastal Zone. Other components of the Project would remain the same. With regard to emergency response and evacuation (Impact WF-1), Alternative 3 would result in similar impacts to that of the Project, and mitigation would be required to reduce residual impacts to a level of insignificance.

In addition, utility-scale solar facilities that could be developed under Alternative 3 could be located in areas of moderate, high, and very high Fire Hazard Severity Zones as designated by Cal FIRE. These areas also contain CPUC Fire Threat Districts of both “Elevated” and “Extreme.” In addition, as with the Project, battery ESS could be developed in these areas. Thus, solar energy facilities developed under Alternative 3 could have the potential to exacerbate wildfire spread (Impact WF-2). As with the Project, with implementation of mitigation measures, residual impacts under Alternative 3 would be insignificant. In comparison to the Project, Alternative 3 would slightly reduce wildfire impacts within the Coastal Zone due to the exclusion of utility-scale solar development in that area.

Alternative 3 would allow the development of solar energy facilities in the same inland areas as the Project. This would require infrastructure which could include roads, fuel breaks, emergency water sources, power lines providing electricity onsite, other utilities delivering services onsite, and gen-tie lines, as well as could include the maintenance of fuel breaks, power lines, and other electrical utilities. Thus, Alternative 3 would be the same as Impact WF-3 of the Project, and mitigation would be required to reduce residual impacts to a level of insignificance.

Lastly, Alternative 3 could impact people and/or structures by post-slope stability induced by drainage changes should a fire occur. Thus, impacts would be the same as Impact WF-4 of the Project, and mitigation would be required to reduce residual impacts to a level of insignificance. Thus, impacts under Alternative 3 would be similar to the Project.

Relationship to Project Objectives

Under the Removal of Utility-Scale Solar in Coastal Areas Alternative, development of Tier 4 (utility-scale solar energy facilities) would be reduced in the Coastal Zone. However, Tiers 1, 2, and 3 would be allowed as under the Project in the Coastal Zone and Tier 4 facilities would be allowed in the inland areas.

Alternative 3 would generally meet the same goals and objectives as identified for the Project, but over a smaller geographic area. Alternative 3 would remove the option of developing utility-scale solar in the Coastal Zone, including the potential future redevelopment of the Mariposa Reina site with anything more than a Tier 2 or Tier 3 project, thereby limiting the geographic area for Tier 4 facilities. The areas within the unincorporated county in which solar energy systems and facilities could be developed would be expanded compared to existing conditions. Thus, Alternative 3 would meet the underlying purpose of the Project since it would allow utility-scale solar and smaller scales of solar energy generation facilities to be developed on land previously not available for such uses, although with the limitation on the location of Tier 4 it would not meet the underlying purpose to the same degree as the Project.

Alternative 3 would result in the removal of some of the identified regulatory barriers identified in the SEP. As with the Project, Alternative 3 would provide efficiency and clarity in the permitting process for solar energy systems and facilities and battery ESS. While Alternative 3 would support renewable energy development, the County would not have as much access to renewable, carbon-free energy sources as under the Project. With the reduction in area in which Tier 4 solar energy facilities could be located, Alternative 3 would help the County achieve the aggressive state and local renewable energy goals, but to a lesser degree than the Project.

Even with the reduction in areas in which Tier 4 solar energy facilities could be located, Alternative 3 would support regional resiliency and provide electrical availability during Public Safety Power Shutoffs and local severe weather or disaster events although not necessarily to the same extent as under the Project. Overall, Alternative 3 would meet the underlying purpose and primary objectives of the Project. Furthermore, Alternative 3 would provide the beneficial effects of an increase in renewable energy and increased resiliency that would occur for the unincorporated County but not to the full extent as under the Project.

4.4 Environmentally Superior Alternative

CEQA Guidelines Section 15126.6(e)(2) indicates that an analysis of alternatives to a proposed project shall identify an environmentally superior alternative among the alternatives evaluated in an EIR and that if the “no project” alternative is the environmentally superior alternative, the EIR shall identify another environmentally superior alternative among the remaining alternatives. Selection of an environmentally superior alternative is based on comparison of the alternatives to determine which would reduce or eliminate the impacts associated with the Project to the greatest degree. However, for implementation of a

planning and policy document, such as amendments to plans and ordinances, there may not be a clear environmentally superior alternative. An alternative may reduce environmental impacts to certain resource areas and increase impacts to other resource areas as compared to the proposed Project, while another alternative may reduce different environmental impacts. Although CEQA does not provide specific guidance in this matter, where an alternative is anticipated to result in reduced impacts for a majority of resource areas and/or substantially reduced impacts in especially critical resource areas, this can support a finding that the alternative is environmentally superior. In such instances, the EIR may disclose the differences between the alternatives and identify how each alternative may be superior. The Lead Agency retains the authority to identify the environmentally superior alternative based on the evidence in the EIR, agency and public input, Lead Agency standards and policies, and the Lead Agency's independent decision-making.

Table 4-4, *Comparison of the Impacts of the Project and Alternatives*, provides a comparative summary of the environmental impacts of each alternative with those of the Project. With the exception of the No Project Alternative, the alternatives have similar reductions to potential resource impacts given that the other alternatives would result in less development of future solar energy facilities in different geographic areas. In addition to resource areas assessed, it is important to consider how and to what extent each alternative accomplishes the underlying purpose and objectives of the Project.

Of the alternatives analyzed in this Program EIR, Alternative 1 is considered the environmentally superior alternative because it would reduce to the greatest extent the Project's significant environmental impacts. Alternative 1, the No Project Alternative, reflects the existing conditions with no amendments to the County's plans, ordinances, and Uniform Rules. Under Alternative 1, future utility-scale solar could be developed but would only be allowed on lands zoned AG-II within the 600-acre Utility-Scale Solar Photovoltaic Overlay in accordance with the LUDC. Battery ESS would continue to be allowed as part of a utility-scale solar energy facility within the overlay, and also as stand-alone facilities in other zones. In addition, rooftop solar energy systems would be allowed throughout the unincorporated County without a planning permit. Freestanding or ground-mounted solar energy systems would be allowed in the Inland areas without a planning permit but would require a Coastal Development Permit (CDP) in the Coastal Zone. Alternative 1 would, in comparison to the Project, result in reduced environmental impacts related to aesthetics, agricultural resources, air quality (criteria pollutant in nonattainment area, exposure of sensitive receptors to substantial pollutant concentrations, odors), biological resources, cultural resources (archaeological, human remains, tribal cultural, paleontological), energy (energy consumption), greenhouse gas emissions (emissions exceeding thresholds), hazards and hazardous materials, land use and planning (physically divide a community, quality of life), noise, transportation, utilities and service systems, and wildfire. However, the No Project Alternative would result in greater impacts with respect to air quality (conflict with air quality management plan), cultural resources (historic), energy (conflict with or obstruct a state or local plan for renewable energy or energy efficiency), greenhouse gas emissions (conflict with applicable plans), and land use and planning (consistency with applicable land use plans). The No Project Alternative would not expand the areas in which utility-scale solar and smaller scales of solar energy generation facilities could be developed, thereby assisting less in meeting the County's ambitious emission reduction goals. The No Project Alternative would also not support regional resiliency and provide electric availability during times of need. CEQA Guidelines Section 15126.6 also states that if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative from among the other alternatives.

TABLE 4-4
COMPARISON OF THE IMPACTS OF THE PROJECT AND ALTERNATIVES

Impact	Project	Alternative 1: No Project Alternative	Alternative 2: Reduction of Solar on Williamson Act-Contracted Lands	Alternative 3: Removal of Utility-Scale Solar in Coastal Areas
Aesthetics				
AV-1: Substantial adverse effect on a scenic vista	Significant and unavoidable	Insignificant; less than the Project	Significant and unavoidable; less than the Project	Significant and unavoidable; less than the Project
AV-2: Substantially damage scenic resources	Significant and unavoidable	Insignificant; less than the Project	Significant and unavoidable; less than the Project	Significant and unavoidable; less than the Project
AV-3: Conflict with applicable zoning and other regulations governing scenic quality	Significant and unavoidable	Insignificant; less than the Project	Significant and unavoidable; less than the Project	Significant and unavoidable; less than the Project
AV-4: Substantial light or glare	Insignificant with mitigation	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project
Agricultural Resources				
AG-1: Convert FMMP designated farmland to non-agricultural use	Significant and unavoidable	Insignificant; less than the Project	Significant and unavoidable; less than the Project	Significant and unavoidable; less than the Project
AG-2: Conflict with agricultural zoning or Williamson Act contract	Significant and unavoidable	Insignificant; less than the Project	Significant and unavoidable; less than the Project	Significant and unavoidable; less than the Project
AG-3: Other changes resulting in farmland conversion	Insignificant	Insignificant; less than the Project	Insignificant; less than the Project	Insignificant; less than the Project
Air Quality				
AQ-1: Conflict with air quality management plan	Insignificant	Insignificant; greater than the Project	Insignificant; greater than the Project	Insignificant; greater than the Project
AQ-2: Cumulatively considerable increase of criteria pollutant in nonattainment area	Insignificant	Insignificant; less than the Project	Insignificant; less than the Project	Insignificant; less than the Project
AQ-3: Exposure of sensitive receptors to substantial pollutant concentrations	Insignificant with mitigation	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project
AQ-4: Generate emissions such as odors that affect a substantial amount of people	Insignificant	Insignificant; less than the Project	Insignificant; less than the Project	Insignificant; less than the Project
Biological Resources				
BIO-1: Candidate, sensitive, or special status species	Insignificant with mitigation	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project
BIO-2: Riparian habitat or sensitive natural habitat	Insignificant with mitigation	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project

TABLE 4-4
COMPARISON OF THE IMPACTS OF THE PROJECT AND ALTERNATIVES

Impact	Project	Alternative 1: No Project Alternative	Alternative 2: Reduction of Solar on Williamson Act-Contracted Lands	Alternative 3: Removal of Utility-Scale Solar in Coastal Areas
BIO-3: State or federally protected wetlands	Insignificant with mitigation	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project
BIO-4: Wildlife corridors or wildlife nursery sites	Insignificant with mitigation	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project
BIO-5- Tree preservation policy or ordinance	Insignificant with mitigation	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project
BIO-6: Conflict with adopted habitat conservation plan	No Impact	No impact; same as the Project	No impact; same as the Project	No impact; same as the Project
Cultural, Paleontological, and Tribal Cultural Resources				
CR-1: Historical resources	Insignificant with mitigation	Significant and unavoidable; greater than the Project	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project
CR-2: Archaeological resources	Significant and unavoidable	Insignificant with mitigation; less than the Project	Significant and unavoidable; less than the Project	Significant and unavoidable; less than the Project
CR-3: Disturbance of human remains	Insignificant with mitigation	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project
CR-4: Tribal cultural resources	Significant and unavoidable	Insignificant with mitigation; less than the Project	Significant and unavoidable; less than the Project	Significant and unavoidable; less than the Project
CR-5: Paleontological resources	Significant and unavoidable	Insignificant with mitigation; less than the Project	Significant and unavoidable; less than the Project	Significant and unavoidable; less than the Project
Energy				
ENG-1: Cause wasteful, inefficient, or unnecessary consumption of energy	Insignificant	Insignificant; less than the Project	Insignificant; less than the Project	Insignificant; less than the Project
ENG-2: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency	Insignificant	Insignificant; greater than the Project	Insignificant; greater than the Project	Insignificant; greater than the Project
Greenhouse Gas Emissions				
GHG-1: Generate emissions exceeding screening threshold	Insignificant with mitigation	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project
GHG-2: Conflict with applicable plans	Insignificant	Insignificant; greater than the Project	Insignificant; greater than the Project	Insignificant; greater than the Project
Hazards and Hazardous Materials				
HAZ-1: Routine transport, use, or disposal of hazardous materials	Insignificant	Insignificant with mitigation; less than the Project	Insignificant; less than the Project	Insignificant; less than the Project

TABLE 4-4
COMPARISON OF THE IMPACTS OF THE PROJECT AND ALTERNATIVES

Impact	Project	Alternative 1: No Project Alternative	Alternative 2: Reduction of Solar on Williamson Act-Contracted Lands	Alternative 3: Removal of Utility-Scale Solar in Coastal Areas
HAZ-2: Accidental release of hazardous materials into the environment	Insignificant	Insignificant with mitigation; less than the Project	Insignificant; less than the Project	Insignificant; less than the Project
HAZ-3: Emit hazards within one-quarter miles of an existing or proposed sensitive receptor	Insignificant	Insignificant with mitigation; less than the Project	Insignificant; less than the Project	Insignificant; less than the Project
HAZ-4: Hazardous materials sites	Insignificant with mitigation	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project
HAZ-5: Noise hazards related to airports	Insignificant with mitigation	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project
Land Use and Planning				
LU-1: Physically divide a community	Insignificant	Insignificant; less than the Project	Insignificant; similar to the Project	Insignificant; less than the Project
LU-2: Consistency with applicable land use plans	Insignificant	Insignificant; greater than the Project	Insignificant; greater than the Project	Insignificant; greater than the Project
LU-3: Adverse quality of life on existing communities	Insignificant	Insignificant; less than the Project	Insignificant; less than the Project	Insignificant; less than the Project
Noise				
NOI-1: Temporary or permanent increase in ambient noise levels	Insignificant with Mitigation	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project
NOI-2: Excessive groundborne vibration or groundborne noise	Insignificant with mitigation	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project
NOI-3: Noise impacts related to airports	Insignificant	Insignificant; less than the Project	Insignificant; similar to the Project	Insignificant; similar to the Project
Transportation				
T-1: Conflict with plan, ordinance, or policy addressing circulation system, including transit, roadway, bicycle, and pedestrian facilities	Insignificant	Insignificant; less than the Project	Insignificant; less than the Project	Insignificant; less than the Project
T-2: Conflict or be inconsistent with CEQA Guidelines Section 15064.3	Insignificant	Insignificant; less than the Project	Insignificant; less than the Project	Insignificant; less than the Project
T-3: Increase hazards due to a geometric design feature or incompatible uses	Insignificant	Insignificant; less than the Project	Insignificant; less than the Project	Insignificant; less than the Project

TABLE 4-4
COMPARISON OF THE IMPACTS OF THE PROJECT AND ALTERNATIVES

Impact	Project	Alternative 1: No Project Alternative	Alternative 2: Reduction of Solar on Williamson Act-Contracted Lands	Alternative 3: Removal of Utility-Scale Solar in Coastal Areas
T-4: Inadequate emergency access	Insignificant with mitigation	Insignificant; less than the Project	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project
Utilities and Service Systems				
UT-1: New or expanded utility infrastructure	Insignificant	Insignificant; less than the Project	Insignificant; less than the Project	Insignificant; less than the Project
UT-2: Water demand	Insignificant with mitigation	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project
UT-3: Wastewater treatment	Insignificant	Insignificant; less than the Project	Insignificant; less than the Project	Insignificant; less than the Project
UT-4: Solid waste	Insignificant with mitigation	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project
Wildfire				
WF-1: Emergency response or evacuation plans	Insignificant with mitigation	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project
WF-2: Exacerbate wildfire risks	Insignificant with mitigation	Insignificant with mitigation; less than the Project	Insignificant with mitigation; similar to the Project	Insignificant with mitigation; less than the Project
WF-3: Infrastructure which could exacerbate fire risk	Insignificant with mitigation	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project
WF-4: Expose people or structures to significant risks	Insignificant with mitigation	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project	Insignificant with mitigation; less than the Project

SOURCE: ESA, 2025

According to CEQA Guidelines Section 15126.6(a), the purpose of an alternatives analyses is to identify alternative developments that would feasibly attain most of the basic objectives of the project but that would avoid or substantially reduce any of the significant effects of the proposed Project. Alternatives 2 and 3 would both reduce the scope of the Project by limiting the geographic areas in which larger-scale solar energy facilities could be located. Alternative 2 would reduce the future development of Tier 3 and Tier 4 facilities within Williamson Act-contracted lands, and Alternative 3 would preclude future Tier 4 facilities in coastal areas. Therefore, both would reduce the scope of the Project, and, while significant and unavoidable impacts would be less, neither alternative would completely avoid the significant and unavoidable aesthetics (scenic vistas, scenic resources, conflicts with regulations), agricultural (converting designated farmland, conflict with zoning and Williamson Act), and cultural resources impacts (archaeological, tribal, and paleontological) that would occur under the Project.

Both Alternative 2 and Alternative 3 would, in comparison to the Project, result in reduced or similar environmental impacts related to aesthetics (light and glare), agricultural resources (other changes

resulting in farmland conversion), air quality (criteria pollutant in nonattainment area, exposure of sensitive receptors to substantial pollutant concentrations, odors), biological resources, cultural resources (historic, human remains), energy (wasteful, inefficient, or unnecessary consumption), greenhouse gas emissions (emissions exceeding screening threshold), hazards and hazardous materials, land use and planning (physically divide a community; quality of life), noise, transportation, utilities and service systems, and wildfire. However, Alternatives 2 and 3 would result in greater impacts with respect to air quality (conflict with air quality management plan), energy (conflict with or obstruct a state or local plan for renewable energy or energy efficiency), greenhouse gas emissions (conflict with applicable plans), and land use and planning (consistency with applicable land use plans).

With the exception of the No Project Alternative, the two alternatives analyzed do not reduce significant impacts that would occur under the Project to an insignificant level. In most cases, the reduction in impacts would be largely due to the reduced areas in which the future development of Tier 3 and Tier 4 solar energy facilities could be developed, compared to the larger geographic area that would be allowed under the Project. Alternative 2 would potentially reduce the geographic area in which community-scale and utility-scale solar energy facilities could be located to a greater extent than would occur under Alternative 3, by not allowing Tier 3 and 4 facilities on 31,507 acres of Prime contracted lands nor on 184,691 acres of Nonprime-contracted lands with contract premises smaller than 500 acres in size. Compared to the Project, Alternative 2 could reduce the potential impacts to agricultural resources, biological resources, and cultural resources to a greater degree than would occur under Alternative 3 as a result of the larger reduction in geographic area in which the larger solar energy facilities could be located.

However, Williamson Act contracts preserve lands for agricultural use while the contracts are in effect, but are not a permanent protection method (e.g., conservation easements). If a landowner canceled or did not renew an existing agricultural preserve contract, then the land would become available for Tier 3 or 4 solar facility development without the Uniform Rules restrictions. Therefore, Alternative 2 would not ultimately prevent Tier 3 or 4 facility development on contracted lands.

Alternative 3 would prevent Tier 4 facilities from being developed on 59,374 acres within the Coastal Zone, the majority of which are zoned for agriculture. The Coastal Zone also contains sensitive biological, cultural, aesthetic, and other resources as discussed within this Program EIR. Alternative 3 would reduce potential impacts to these sensitive resources within the Coastal Zone, as compared to Alternative 2. When taken together and compared against Alternative 2, Alternative 3 ultimately prevents more land from being developed with utility-scale solar energy facilities and would therefore reduce the potential environmental impacts to a greater degree. As such, Alternative 3 would be the environmentally superior alternative to the proposed Project.

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CHAPTER 5
Other CEQA Considerations

This chapter addresses environmental topics required by the California Environmental Quality Act (CEQA) that are not covered within the other chapters of this Draft Program Environmental Impact Report (Draft PEIR), including: significant unavoidable impacts; irreversible environmental changes; growth inducing impacts; potential secondary effects related to Project mitigation measures; and environmental effects found not to be significant. In addition, reasons for implementation of the Project, notwithstanding potentially significant unavoidable impacts identified, are addressed in this chapter.

5.1 Significant and Unavoidable Impacts

CEQA Guidelines Section 15126.2(a) requires that an EIR describe significant environmental impacts that cannot be avoided, including those effects that can be mitigated but not reduced to less-than-significant levels. As indicated in Chapter 3, *Environmental Impact Analysis,* of this PEIR, the Project would result in the following significant unavoidable impacts.

5.1.1 Aesthetics

The Project would result in potentially significant impacts related to direct and indirect substantial adverse effects to public scenic vistas associated with the future development of Tier 3 and Tier 4 solar energy facilities (Impact AV-1). While mitigation would reduce some of the impacts, because the specific locations and designs for future projects are unknown at this time, potentially significant and unavoidable impacts could result even with implementation of MM AV-1 and MM AV-2.

The Project would result in potentially significant impacts related to local or state scenic corridors (Impact AV-2). Depending on the scale and location with respect to scenic resources in the state and local scenic corridors, significant and unavoidable impacts could result. Development standards and implementation of MM AV-1 and MM AV-2 would reduce potential conflicts with visual and aesthetic resources in identified scenic corridors. However, even with implementation of applicable standards and the mitigation impacts would be significant and unavoidable.

Future solar energy projects could degrade the existing visual character or quality of public views or conflict with applicable regulations governing scenic quality (Impact AV-3). While MM AV-1 and MM AV-2 would reduce some adverse visual impacts, future solar energy projects could degrade the existing visual character or quality of public views or conflict with applicable regulations governing scenic quality. Therefore, residual impacts would be significant and unavoidable.

With regard to cumulative impacts, the Project in combination with future growth and related projects, would result in significant and unavoidable aesthetic impacts, related to public scenic vistas, local or state scenic corridors, and visual character or quality of public views, or conflicts with applicable regulations governing scenic quality. The Project's contribution to this potentially significant cumulative impact would be cumulatively considerable.

5.1.2 Agricultural Resources

Future Tier 3 and Tier 4 solar energy facilities enabled under the Project could directly convert farmland into non-agricultural uses or otherwise impair agricultural land productivity through constructing, operating, and maintaining facilities on agricultural land (Impact AG-1). Compliance with zoning code development standards, including compensation for the loss of prime farmland, would help to mitigate impacts. Additionally, implementation of the proposed amendments and mitigation measures, including MM AG-1, would reduce some or many of the impacts to important and otherwise designated farmland. However, the proposed amendments and mitigation measures would not preclude the conversion of important farmlands, nor would MM AG-1 require the land's return to agriculture after a certain time. The effectiveness of reducing all impacts would not be known. Therefore, even with implementation of MM AG-1 impacts would remain significant and unavoidable.

With regard to cumulative impacts, the Project would allow solar energy development that could involve cumulative effects resulting in the loss of or conversion of agricultural lands to non-agricultural uses, or otherwise reduce productivity for remaining agricultural lands due to land use conflicts. Therefore, the Project in combination with future development and related projects in the unincorporated County would result in a potentially significant impact to agricultural resources. Even with implementation of proposed mitigation, the Project would incrementally contribute to a cumulative loss of farmland and impacts would be cumulatively significant and unavoidable.

5.1.3 Cultural Resources

Implementation of MMs CR-2 through CR-5 would reduce many of the potential direct and indirect adverse effects to archaeological and unique archaeological resources associated with the Project. However, given the high cultural sensitivity of the Project area, there is the potential for unintended impacts to unknown resources. Further, because the specific locations and designs for future projects are unknown at this time, impacts are considered significant and unavoidable. Additionally, although implementation of MMs PR-1 through PR-4 would lessen the Project's contribution toward cumulative effects on paleontological resources, impacts could be cumulatively considerable, and the impact would be significant.

Implementation of MMs TCR-1 through TCR-3 could reduce direct and indirect adverse effects to tribal cultural resources associated with individual Tier 2 solar energy systems and Tiers 3 and 4 solar energy facility projects to an insignificant level. However, given the high sensitivity of the Project area, there is the potential for unintended impacts to unknown tribal cultural resources. Further, because the specific locations and designs for future projects are unknown at this time, impacts are considered significant and unavoidable.

Even with implementation of MMs CR-1 through CR-6 and similar anticipated mitigation requirements for related projects in areas of heightened sensitivity within unincorporated Santa Barbara County, the Project may still result in a cumulatively considerable contribution to archaeological and unique archaeological resources. With regard to tribal cultural resources, even with implementation of MMs TCR-1 through TCR-3 and similar anticipated mitigation requirements for related projects in areas of heightened sensitivity within unincorporated Santa Barbara County, the Project may still result in a cumulatively considerable contribution to tribal cultural resource impacts. In addition, the incremental impact of the future solar energy facilities enabled by the Project, combined with those of the cumulative projects, could result in a cumulative impact on paleontological resources. Therefore, the Project would contribute to a significant and unavoidable cumulative impact.

5.2 Growth-Inducing Impacts

CEQA Guidelines Section 15126.2(e) requires a discussion of a proposed project's potential to foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. This includes consideration of projects that would remove obstacles to population growth. Growth does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects. Under CEQA, growth is not to be considered necessarily detrimental, beneficial, or of significant consequence. Induced growth is considered a significant impact only if it can be demonstrated that the potential growth, in some other way, significantly affects the environment. In general, a project may foster physical, economic, or population growth in a geographic area if it meets any one of the criteria identified below:

- The project results in the urbanization of land in a remote location (leapfrog development);
- The project removes an impediment to growth (e.g., the establishment of an essential public service, or the provision of new access to an area);
- The project establishes a precedent-setting action that could lead to physical adverse changes in the environment (e.g., a change in zoning or general plan amendment approval); or
- Economic expansion or growth occurs in an area in response to the project (e.g., changes in revenue base, employment expansion, etc.).

If a project meets any one of these criteria, it may be considered growth inducing. Generally, growth-inducing projects are either located in isolated, undeveloped, or underdeveloped areas, necessitating the extension of major infrastructure, such as sewer and water facilities or roadways, or encourage premature or unplanned growth. In urban areas, growth-inducing projects typically involve proposed plans or policies that alleviate barriers to growth or increase development opportunities.

The Project would allow utility-scale solar and smaller scales of solar energy generation facilities to be developed on land previously not available for such use in order for the County to come closer to meeting its renewable energy goals. In addition to renewable energy generation, the Project seeks to remove barriers to energy capture and storage by facilitating the permitting of energy storage facilities. The Project would help the County meet ambitious renewable energy reduction goals established at state and local levels in accordance with the County's adopted Strategic Energy Plan (SEP). The Project would implement a County-wide regulatory framework to facilitate the development of solar energy generation

and storage facilities in areas where such uses were previously not permitted. The Project would provide clarity and streamlining to the permitting process by removing regulatory barriers identified in the County's SEP. These changes are aimed at aligning local regulations with the County's adopted policy objectives such as advancing renewable energy generation in support of the Climate Action Plan (CAP) goals and increasing energy resilience.

The Project would encourage renewable energy development in areas that can accommodate such use. It is expected that future solar energy systems and facilities enabled under the Project may include battery energy storage systems (ESS), which would store excess solar energy with abilities to discharge it later. The integration of solar with associated battery ESS systems would help expand renewable energy sources and improve grid reliability in the County. The Project does not involve the extension of essential public utilities that are considered catalysts for growth such as water, sewer, road access, or schools. The Project would provide needed energy for existing and future, planned development in a more sustainable manner and would create a more resilient energy grid. Thus, the Project would support community sustainability and not induce growth.

Implementation of the Project may create a temporary increase in construction jobs during the construction and decommissioning activities associated with future solar energy development. In addition, operation and maintenance would require a limited number of permanent jobs. Most construction workers and personnel required during construction, operation and decommissioning would likely be located in the region. The Project would not be considered growth-inducing as construction and decommissioning would be temporary, and it is unlikely that it would require substantial numbers of people to relocate to Santa Barbara County. Additionally, it is likely that the permanent personnel needed during operations would be employed from the existing workforce found in Santa Barbara County or would periodically travel to the facilities for occasional maintenance.

5.3 Significant Irreversible Environmental Changes

CEQA Guidelines Section 15126.2(d) requires a discussion of:

> *"…significant irreversible environmental changes which would be caused by the proposed project should it be implemented. Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified."*

Analysis of environmental impacts of the Project considers effects on the environment from future uses and related development under the Project. The Project would allow future development of solar energy facilities on land within various zoning designations. The development, operation, and decommissioning of solar energy facilities would entail the commitment of non-renewable energy resources; human resources; and small amounts of other resources such as sand and gravel, asphalt, steel, copper, lead, other metals, and water resources, most of which are non-renewable or locally limited resources. Resources that

would be permanently or continually consumed during the life of the Project include electricity, transportation fuels, and miscellaneous materials to be used as supplies for certain uses. However, the amount and rate of consumption of these resources would not result in the inefficient or wasteful use of resources, as further described in Section 3.6, *Energy*. Compliance with all state and local regulations, development standards, and applicable building codes would ensure that natural resources are conserved to the maximum extent feasible. While future construction, operation, and decommissioning activities anticipated to occur as a result of the Project would result in the irretrievable commitment of non-renewable energy resources (primarily in the form of fossil fuels, including fuel oil, natural gas, and gasoline for automobiles and construction equipment), consumption of such resources is associated with any development in the region and is not unique or unusual to the Project. Additionally, the solar energy facilities that would be developed as a result of the Project would reduce the County's reliance on nonrenewable natural resources.

The Project would not be expected to result in environmental accidents that have the potential to cause irreversible damage to the natural or human environment. While construction for new development would result in the limited use, transport, storage, and disposal of common hazardous materials, all activities would comply with applicable federal and state laws related to hazardous materials transport, use, and storage, which would significantly reduce the likelihood and severity of accidents that could result in irreversible environmental damage. See Section 3.8, *Hazards and Hazardous Materials*, for a more detailed discussion of these issues. Overall, since the proposed Project does not involve substantial environmental hazards or unreasonably consume non-renewable resources, the irreversible environmental changes that would result from the implementation of the Project would be insignificant.

5.4 Reasons the Project is Being Proposed Notwithstanding its Significant Unavoidable Impacts

In addition to identification of the Project's significant unavoidable impacts, Section 15126.2(c) of the State CEQA Guidelines requires a description of the reasons why a Project is being proposed, notwithstanding significant unavoidable impacts associated with the Project. The reasons why the Project has been proposed are grounded in the underlying purpose of the Project. As discussed in Chapter 2, *Project Description*, of this Program EIR, the underlying purpose of the Project is to stimulate local renewable energy generation by allowing solar development in various areas of the County by establishing a streamlined permitting process to promote utility-scale solar development.

As discussed above, the Project would result in significant and unavoidable impacts with respect to aesthetics, agriculture resources, and cultural resources (archaeological resources, tribal cultural resources, and paleontological resources). However, notwithstanding these significant and unavoidable environmental impacts, the Project is proposed so that the County can improve renewable energy generation and depend less on fossil fuels. The Project is proposed to allow the County to streamline permit requirements for a range of solar energy systems, including community-scale systems and smaller ground-mounted and rooftop solar energy systems with minimal or negligible land-use impacts, and to clarify the permitting path for battery energy storage systems.

In addition, the Project would encourage the development of varying sizes and types of solar energy systems within the unincorporated areas of the County in order to meet ambitious state and local emission

reduction goals. The proposed amendments include development requirements that are intended to protect valued resources, such as views, agricultural resources, and biological resources. The Project would result in the removal of some of the County regulatory barriers that were identified in the Strategic Energy Plan. One of the goals of the amendments is to clarify the permitting process for solar energy systems and facilities as well as battery ESS. Through the development of clear standards and defined tiers of solar energy systems and facilities as well as the inclusion of development standards to protect resources, the County aims to increase renewable energy generation thereby reducing the County's reliance on fossil fuels. The Project will support the regional resilience and provide electricity availability during Public Safety Power Shutoffs and local severe weather or disaster events.

5.5 Potential Secondary Effects Related to Project Mitigation Measures

CEQA Guidelines Section 15126.4(a)(1)(D) requires that if a mitigation measure proposed to address the significant effects of the Project would cause one or more significant effects in addition to those caused by the Project, the effects of the mitigation measure shall be discussed but, in less detail, than the significant effects of the Project. Accordingly, the mitigation measures proposed to address significant Project impacts were evaluated to determine if significant secondary impacts associated with their implementation would occur. The following provides a discussion of the subject areas in which mitigation measures are required, as well as any potential secondary significant effects that could occur as a result of their implementation. The Program EIR includes mitigation measures that will be implemented when future solar energy systems and facilities are proposed. Generally, the mitigation measures require the necessary analyses to ensure that potential significant environmental impacts are avoided or reduced with the development of the future solar energy projects. For the reasons stated below, implementation of the Project mitigation measures would not result in significant secondary impacts.

5.5.1 Aesthetics

MM AV-1 requires design considerations for all future solar facilities contemplated under the Project. Future solar facilities would be required to conform to setback standards, height limitations, landscape screening plan requirements, and lighting requirements, subject to County review. MM AV-1 would ensure that siting and design measures would be implemented to reduce visual impacts, and no further impacts would occur with its implementation. Therefore, this mitigation measure would not result in significant secondary impacts on the environment.

5.5.2 Agriculture

MM AG-1 would require an agricultural viability analysis prior to approval of a future solar energy facility in order to document the baseline conditions of the existing agricultural use and to describe potential solar or agrivoltaics development on the parcels. The analysis would consist of a Land Evaluation and Site Assessment (LESA) for the subject parcels proposed for solar energy facility use. The analysis would follow standard U.S. Department of Agriculture LESA system methodology (USDA 2022 or successor) or a similar method recognized by the University of California Cooperative Extension or other locally recognized agricultural standard, subject to County approval. Since MM AG-1 would result in the preparation of a document establishing baseline conditions, no further impacts would occur with its

implementation. Therefore, this mitigation measure would not result in significant secondary impacts on the environment.

5.5.3 Air Quality

MM AQ-1 requires the implementation of dust control measures during the construction of future solar energy systems and facilities. MM AQ-2 requires construction contractors to comply with measures to reduce potential Valley Fever impacts during heavy grading where the top 12 inches of soil would be disturbed, and in locations with potential Valley Fever fungal spores. These air quality mitigation measures would serve to control dust during construction and to ensure that Valley Fever impact reduction strategies are followed during construction that would reduce impacts, and no further impacts would occur with their implementation. Therefore, these mitigation measures would not result in significant secondary impacts on the environment.

5.5.4 Biological Resources

MM BIO-2 through BIO-4, and BIO-10 through BIO-12 require a variety of biological resource surveys before and during construction. Mitigation Measure BIO-3 requires qualified biologists to assess project sites prior to siting and requires a 500-foot buffer for special-status species, sensitive natural communities, aquatic resources, and wildlife corridors. Mapping and avoidance are required where feasible. MM BIO-2, BIO-4, and BIO-10 through BIO-12 require that if suitable habitat is found prior to or during construction, protocol or focused surveys must be conducted for listed and non-listed species. Avoidance buffers must be implemented, or if avoidance is not feasible, agency coordination and mitigation such as habitat restoration, species relocation, and permitting are required. MM BIO-13 requires consultation with USFWS if designated critical habitats with a federal nexus will potentially be impacted by construction.

MM BIO-5, BIO-7, and BIO-8 address construction and worker protocols. MM BIO-5 requires all personnel to complete a Worker Environmental Awareness Program prior to construction in areas with sensitive resources. MM BIO-7 requires the implementation of BMPs for construction and decommissioning to minimize impacts including, but not limited to, reduced speed limits, wildlife-safe trenching, trash management, night-work restrictions, spill prevention, and dust/noise controls. MM BIO-8 requires qualified biologists to monitor sensitive areas during construction and decommissioning and have authority to halt work if species are at work.

MM BIO-6 and BIO-9 address mitigation and restoration planning. MM BIO-6 requires the implementation of preventative measures and equipment cleaning prior to entering work areas during construction to control the spread of invasive plants. MM BIO-9 requires the restoration of temporarily disturbed areas for decommissioning using a qualified revegetation plan with native species and monitoring until habitat recovery is achieved.

MM BIO-14 through BIO-16 address requirements related to habitat protection if resources would potentially be impacted by construction. MM BIO-14 requires that solar energy facilities are designed to avoid sensitive natural communities. If avoidance is not feasible, impacts to sensitive natural communities shall be mitigated at a minimum of a 1:1 ratio. MM BIO-15 requires construction to avoid wetlands and waterways if they are present. If impacts occur, appropriate permits must be secured, and mitigation must

be provided. MM BIO-16 requires future solar energy systems and facilities to maintain a minimum 100-foot buffer or greater from identified wildlife corridors or habitat linkages.

These mitigation measures for biological resources would implement protection strategies before and during construction and decommissioning that would reduce impacts, and no further impacts would occur with their implementation. As a result, these mitigation measures would not result in significant secondary impacts on the environment.

5.5.5 Cultural, Paleontological, and Tribal Resources

Under MM CR-1, the County requires that a Planning and Development (P&D)-qualified architectural historian that meets the Secretary of the Interior's Professional Qualification Standards assess the significance of historic buildings, recommend appropriate preservation measures, and ensure compliance with County Standard Conditions of Approval. Requirements under this measure vary depending on the solar project type and are implemented during the building permit review and issuance process for Tiers 1 and 2 solar energy systems, and during project review for Tiers 3 and 4 solar energy facilities.

MMs CR-2 and CR-6 require that all work be stopped or redirected immediately if archaeological remains and/or human remains are discovered during construction activities. The owner/applicant must promptly notify County P&D staff and retain a P&D-approved archaeologist and Native American representative to evaluate the archaeological findings, determine its significance in accordance with the County Archaeological Guidelines, and implement any necessary mitigation. The County Coroner must be notified if human remains are discovered and no further disturbance is allowed at the discovery site. If the remains are identified as Native American, the Coroner must contact the California Native American Heritage commission (NAHC) within 24 hours. The NAHC will identify and notify most likely descendants who may inspect the site and make recommendations for the appropriate treatment or reburial of remains. This requirement must be printed on all grading and building plans and is subject to plan check and field monitoring by County P&D staff.

MMs CR-3 through CR-5 require that prior to issuance of a permit for ground disturbing activities a phased archaeological investigation beginning with a Phase 1 archaeological survey and, if needed, a Phase 2 subsurface test and Phase 3 data recovery shall be prepared in accordance with County Archaeological Guidelines. In addition, archaeological and Native American monitors must be present during earth-disturbing activities within archaeological site areas, with monitoring agreements and personnel details submitted to County P&D before construction begins. To protect known archaeological resources, temporary fencing and a 50-foot buffer must be installed when work is proposed within 100 feet of a site and maintained throughout construction, subject to County verification and compliance monitoring.

MMs TCR-1 through TCR-3 require that for Tier 2 through Tier 4 solar energy systems and facilities, the owner/applicant retain a P&D-approved Native American Representative to conduct tribal and cultural resource mitigation. In addition, a Native American Monitor must be present during all ground disturbance, maintaining daily logs of activities and conduct a sensitivity training for construction personnel. If potential tribal cultural resources are encountered, the County's qualified archaeologist, in consultation with the Native American Monitor, may temporarily halt work, establish a protective buffer, and coordinate with the Tribe and County to determine significance and treatment. A treatment plan must be

prepared in consultation with the Tribe and approved by the County if a tribal cultural resource is identified. Recovered resources may be curated by the Tribe, a qualified institution, or used for educational purposes, and any confidential information must be withheld from public disclosure per the California Public Records Act.

MMs PR-1 through PR-4 require that for Tier 3 and Tier 4 solar energy facilities, the owner/applicant assesses potential impacts to significant paleontological resources prior to permit issuance by mapping proposed ground disturbance and identifying areas with high paleontological sensitivity. If such areas are present, a Qualified Paleontologist must be retained to conduct worker training on fossil recognition and procedures. Paleontological monitoring must occur during ground-disturbing activities in sensitive areas, with the ability to divert work if a fossil is discovered. If a significant fossil is found, a 50-foot buffer must be established, and the fossil recovered, documented, and curated at a qualified institution, or donated to a local school if not accepted. A final report summarizing monitoring efforts, findings, and fossil disposition must be submitted to the appropriate entities.

MMs CR-1 through CR-5 would protect historic and archaeological resources, MM CR-6 would address human remains, MMs TCR-1 through TCR-3 would reduce potential impacts to tribal cultural resources, and MMs PR-1 through PR-4 would reduce potential impacts to paleontological resources. The activities involved with assessing cultural resources would not require additional ground disturbance or cause changes in the physical environment. Therefore, these mitigation measures would not result in significant secondary impacts on the environment.

5.5.6 Greenhouse Gas Emissions

MM GHG-1 requires that Tier 3 and Tier 4 solar energy facilities evaluate construction and decommissioning GHG emissions against the County's *Environmental Thresholds and Guidelines Manual* brightline threshold if applicable. If emissions would exceed the threshold, they must be reduced through verifiable, enforceable, and additional measures consistent with Health and Safety Code (HSC) §38562(d)(1) and (2). Acceptable reduction strategies include using low or zero-emission construction equipment, purchasing qualified carbon credits (preferably local), and implementing measures that significantly reduce vehicle trips or trip length. Documentation of emissions, equipment specifications, and reduction strategies must be submitted to County Planning and Development for approval.

MM GHG-1 would implement emissions reduction strategies during construction and decommissioning that would reduce impacts, and no further impacts would occur with their implementation. Therefore, these mitigation measures would not result in significant secondary impacts on the environment.

5.5.7 Hazards and Hazardous Materials

MM HAZ-1 requires that if potential contamination is identified during the application process for Tier 3 or Tier 4 solar energy facilities, the County may require an Environmental Site Assessment. If contaminated soils or hazardous conditions are discovered during construction, the applicant must prepare a Site Management Plan outlining procedures for treatment, excavation, and safe handling of contaminated materials, including transport and disposal. The plan must also address safe groundwater handling during dewatering. Any discoveries of contamination must be reported to appropriate agencies,

and cleanup must follow their recommendations. All activities must comply with the Site Management Plan and relevant federal, state, and local regulations.

MM HAZ-2 requires that applicants proposing to use helicopters for gen-tie line installation obtain approval from the Federal Aviation Administration (FAA) prior to construction. A FAA Traffic Coordination Plan must be developed in consultation with the FAA and applicable Airport Land Use Compatibility Plans and may include flight restrictions and coordination protocols. The plan must be approved by the FAA before construction begins.

These mitigation measures would reduce potential contamination hazards prior to development and during the construction period, and no further impacts would occur. Therefore, these mitigation measures would not result in significant secondary impacts on the environment.

5.5.8 Noise

Mitigation Measures NOI-1 through NOI-3 address potential noise and vibration impacts from solar energy systems and facilities construction. If pile driving occurs within 50 feet of noise-sensitive receptors, temporary noise barriers made of solid or sound-deadening materials must be installed to block direct line-of-sight to noise-sensitive receptors. Construction activities for Tier 2, 3, and 4 projects must be limited to specific weekday hours depending on the project location and no work allowed on weekends or state holidays, except for non-noise-generating interior tasks. Signs detailing these restrictions must be posted at site entrances prior to construction. To minimize structural damage from vibration, pile driving must be conducted at least 60 feet away from any off-site buildings or structures.

These mitigation measures for noise and vibration would reduce potential noise and vibration impacts during the construction period of solar energy systems and facilities, and no further impacts would occur. Therefore, these mitigation measures would not result in significant secondary impacts on the environment.

5.5.9 Transportation

MM T-1 requires applicants of Tier 2 solar energy systems, as needed, and Tier 3 and Tier 4 solar energy facilities to prepare and implement a Construction Traffic Control Plan to minimize construction-related impacts on road operations, safety, parking, alternative transportation, and emergency access. The plan must include details such as detour routes, construction timelines, and measures to ensure continued access for emergency vehicles, driveways, and transit services. It must also address pedestrian and bicycle safety, provide off-street parking for construction vehicles, and include appropriate signage, flaggers, and notifications to emergency services and contractors. All elements must comply with local standards and Caltrans' California MUTCD.

MM T-1 would serve to minimize transportation-related impacts during the construction period, and no further impacts would occur. Therefore, these mitigation measures would not result in significant secondary impacts on the environment.

5.5.10 Utilities

MM UT-1 requires that utility-scale solar energy facilities (Tier 4) with a footprint of 40 acres or more prepare a Water Supply Assessment (WSA) demonstrating sufficient water availability to meet the project's operational and future water demands over a 20-year period under normal, dry, and multiple dry-year conditions. The WSA must comply with SB 610 and California Water Code Section 10912 (or current applicable laws), include analysis of impacts on surface and groundwater, and provide evidence from the water provider confirming the ability to supply the project. The WSA is subject to County review and approval.

MM UT-2 requires that the applicant prepare and submit a Solid Waste Management and Diversion Plan to the County for approval prior to construction and decommissioning. The plan must demonstrate how at least 65 percent of inert materials will be recycled, reused, or diverted from landfills and include worker training, on-site recycling storage, a materials pick-up area, and a tracking system for monthly reporting of waste generation and diversion. If the project is determined, in consultation with the County, to generate less than 350 tons of solid waste, documentation of this determination may be submitted in place of the full plan and reporting requirements.

The mitigation measures would ensure that environmental impacts are reduced and no further impacts would occur. Therefore, these mitigation measures would not result in significant secondary impacts on the environment.

5.5.11 Wildfire

MM T-1 requires the preparation and implementation of a Traffic Control Plan to address emergency access to ensure that emergency vehicles and evacuees would be able to bypass traffic associated with construction of solar energy systems and facilities. MM WF-1 mandates preparation of an Operation Site Safety Management Plan, approved by the appropriate fire district before building permit issuance, which must include regular equipment inspections, vegetation clearance, battery ESS fire suppression protocols, and a Fire Hazard Analysis for battery ESS over 70 kW. Mitigation Measure WF-2 outlines ignition risk reduction measures during construction, including the use of properly equipped vehicles, wildfire safety training for personnel, on-site communication and water availability, vegetation management, smoking restrictions, and hot work permits to prevent brush or grass fires.

MM T-1 would reduce transportation impacts related to emergency access and MM WF-1 and MM WF-2 would reduce fire-related impacts. The requirements of these mitigation measures would not result in further impacts. Therefore, these mitigation measures would not result in significant secondary impacts on the environment.

5.6 Effects Found Not to Be Significant

CEQA Guidelines Section 15128 states that an EIR shall contain a brief statement indicating reasons that various possible significant effects of a Project were determined not to be significant and were not discussed in detail in the Draft PEIR. This section discusses those issue areas that were determined not to require further analysis in this Draft PEIR.

5.6.1 Agriculture and Forestry Resources

Agriculture is evaluated in Section 3.2, Agricultural Resources. CEQA Guidelines Appendix G contains two thresholds related to Forestry Resources. CEQA Forestry Resources Threshold (c) addresses whether a project would conflict with zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined in Public Resources Code section 4526), or timberland zoned Timberland Production. The Project area does not contain zoning for forest land, timberland, or timberland zoned Timberland Production (as defined by Govt. Code section 51104(g)), nor does the Project propose the rezoning of any of these areas. CEQA Forestry Resources Threshold (d) addresses whether the Project would result in the loss of forest land or conversion of forest land to non-forest use. Since the Project area does not include land zoned as forest land, timberland, or timberland zoned Timberland Production, there would be no potentially significant adverse impacts related to the loss or conversion of forest land with implementation of the Project.

5.6.2 Geology and Soils

CEQA Guidelines Appendix G contains six thresholds related to Geology and Soils. Threshold (a) addresses the risk of loss, injury, or death involving seismic hazards such as the rupture of a known earthquake fault, strong seismic ground shaking, ground failure such as liquefaction, and landslides. Threshold (b) addresses substantial soil erosion and the loss of topsoil. Similarly, thresholds (c) and (d) discuss soil and geologic unit stability, addressing expansive soils, subsidence, liquefaction, and landslides. Threshold (e) addresses soil suitability for septic tanks or alternative wastewater disposal systems. Threshold (f) addresses the loss of paleontological resources, which is discussed in Section 3.5, *Cultural Resources*, of this Program EIR.

As outlined in the Santa Barbara County Safety and Seismic Element, the County is susceptible to impacts related to seismic and geologic hazards. Proposed ordinance amendments associated with the Project stipulate that Tier 3 and Tier 4 solar energy facilities shall be designed and located in a manner to minimize adverse geologic impacts. These avoidance and minimization efforts include avoiding steep slopes, slope stabilization efforts, and the consideration of soil types. All future solar energy facilities enabled by the Project would be required to comply with the seismic design criteria of the California Building Code (CBC), which requires that all structures be constructed to withstand anticipated ground shaking from regional fault sources. Applicants/owners of future solar energy facilities may also be required to retain a licensed geotechnical engineer to design the components of the solar energy facility to withstand probable seismically induced ground shaking. All future solar energy facilities would also be required to adhere to the Santa Barbara County Safety and Seismic Element, which includes geological and seismic hazard protection measures. Additional permits, such as the NPDES Construction General Stormwater Permit, would be issued for future solar energy facilities that disturb over one acre of soil and would include erosion control measures. The County standard conditions of approval would also be implemented to reduce erosion and limit conditions that could otherwise destabilize slopes. WatConv-03, for example requires that an owner/applicant re-vegetate graded areas upon completion of construction. Such requirements would be included in grading or building plans subject to County review and inspection. With adherence to local, state, and federal regulations, future solar energy facilities enabled by the Project would not result in impacts related to geologic or seismic hazards.

5.6.3 Hydrology and Water Quality

CEQA Guidelines Appendix G contains five thresholds related to Hydrology and Water Quality. Threshold (a) addresses the violation of water quality standards or waste discharge requirements. Threshold (b) addresses whether or not the Project would substantially decrease groundwater supplies or interfere substantially with groundwater recharge. Threshold (c) discusses changes to drainage patterns on site that could potentially result in substantial erosion, surface runoff, or impact flood flows. Threshold (d) addresses the risk of releasing pollutants due to project inundation in a flood hazard, tsunami, or seiche zone. Threshold (e) addresses conflicts with the implementation of water quality control plans or sustainable groundwater management plans. The County received a comment letter from the City of Carpinteria requesting the consideration of the water usage of utility-scale energy facilities to be analyzed, especially in regard to the Sustainable Groundwater Management Act (SGMA).

Water supply sources in Santa Barbara County consist of: local surface/stormwater; imported water; recycled water; groundwater; and ocean desalination. The average annual water supply for Santa Barbara County, at last estimation, was approximately 223,000 acre-feet per year (AFY), plus approximately 90,000 AFY in return flows to useable groundwater basins (expected to increase to 233,000 AFY plus about 100,000 AFY in return flow credits to the groundwater basins by 2040).[1] There are five major watersheds in Santa Barbara County: the Cuyama, San Antonio, Santa Barbara Coastal, Santa Maria, and Santa Ynez watersheds. There are nine groundwater basins recognized by the Department of Water Resources within Santa Barbara County: Carpinteria, Montecito, Santa Barbara, Foothill, Goleta, Santa Ynez River Valley, San Antonio Creek Valley, Santa Maria River Valley, and Cuyama Valley. The Carpinteria, Montecito, Santa Ynez River Valley, San Antonio Creek Valley, and the Cuyama Valley are considered medium- or high-priority basins under SGMA and are therefore required to complete a Groundwater Sustainability Plan. Additional information regarding water infrastructure, supply, SGMA, and pertinent water management regulations and plans is in Section 3.12, *Utilities and Service Systems*.

Water demand associated with Tier 3 and Tier 4 solar energy facilities would be primarily during construction. Water required during construction would be primarily for dust control measures. Water demand associated with future solar energy facilities, once constructed, would be primarily related to the maintenance of solar panels (e.g., washing solar panels) and potentially for on-site employee use, if on-site staff are present. As discussed in Section 3.12, Tier 3 and Tier 4 solar energy facilities may also be required to comply with Senate Bill (SB) 610. Future solar energy facilities that are larger than 40 acres of land and/or have a water demand equivalent to, or greater than, the amount of water required by a 500 dwelling unit project would be required to complete a site-specific water supply analysis to assess the availability of water to serve the Project in all year types. The Project seeks to facilitate solar energy development in areas that can accommodate their use through existing and proposed zoning code development standards, pertinent land use policies, and proposed MM UT-1 regarding water supply assessments if necessary. The Project would therefore not conflict with groundwater sustainability plans or, water quality control plans, nor would the Project substantially decrease groundwater supplies.

[1] Water supplies include local surface water, groundwater, imported State Water Project water, recycled water, and desalinated water. Data sourced from the "Santa Barbara County Water Supply and Demand Update, February 2003," prepared by the Santa Barbara County Water Agency and Boyle Engineering Corporation.

Potential water quality issues relating from Tier 3 or 4 solar energy facilities, including the potential for substantial erosion or release of pollutants, are discussed in Section 3.12 and also Section 3.8, *Hazards and Hazardous Materials*. Proposed ordinance amendments associated with the Project stipulate that Tier 3 and Tier 4 solar energy facilities shall be designed and located in a manner to minimize erosion, flooding, and the degradation of water quality during facility construction and operation. All future solar energy facilities enabled by the Project would be required to adhere to the water quality standards set forth in the County of Santa Barbara Storm Water Management Program, minimizing negative impacts associated with drainage changes or the unintended release of pollutants during a flood or tsunami. Additional permits such as the Construction General Permit, which would include the National Pollutant Discharge Elimination System permit, would be issued to future solar energy facilities that disturb over one acre of soil and would include erosion control measures. Furthermore, all future solar energy facilities would be required to comply with all local, state, and federal regulations regarding water quality and hydrology, including attaining any appropriate permits regarding impacts to surface and groundwater, as applicable. Additionally, the County standard conditions of approval would be required, which would limit related impacts. Therefore, future solar energy facilities enabled by the Project would not result in impacts related to hydrology and water quality.

5.6.4 Mineral Resources

CEQA guidelines Appendix G includes two thresholds regarding the loss of availability of a known mineral resources that would be of value to the region or a locally important mineral resource recovery site. Mineral resources, including oil and gas fields, are located throughout Santa Barbara County. As discussed in Section 3.9, *Land Use Planning*, future solar energy facilities enabled by the Project would be consistent with the Land Use designations outlined in community and general plans in Santa Barbara County. Potential land use changes to mineral resource facilities, such as the Mariposa Reina oil processing facility site, would be conducted once the site has been closed, allowing for the site to be repurposed. Furthermore, the Project seeks to facilitate solar energy development in areas that can accommodate its use; therefore, the Project would not result in the loss of the availability of a known or locally important mineral resource.

5.6.5 Population and Housing

The Project is not expected to induce substantial population growth in the unincorporated County because it would not induce substantial population growth in an area directly through the development of residential units and employment growth or indirectly through the extension of roads or other infrastructure. The Project would help the County to meet aggressive state and local emission reduction goals and would result in an increase in available and reliable electrical capacity for the county. Therefore, an indirect increase in the population would not result from the additional availability of electrical capacity to the county.

Tier 1 solar energy systems (rooftop and small ground-mounted systems) and Tier 2 systems (large ground-mounted solar energy systems) would not displace existing housing or population. These systems would be structural design features such as solar carports, solar shade structures, and building-integrated solar energy systems. Tier 3 (community-scale) and Tier 4 (utility-scale) solar energy systems would be

located on large parcels of land; however, the Project seeks to facilitate solar energy development in areas that can accommodate their use. Therefore, no existing housing or population would be displaced.

The development of future solar energy projects enabled under the Project could generate short-term employment opportunities during construction and decommissioning. While Tier 3 and Tier 4 facilities would have a longer construction period, the construction period would be temporary, and any workforce employed from outside the county would have a negligible effect on employment in the county. Therefore, the Project would not be considered growth-inducing as it would not substantially affect short or long-term employment opportunities and would not introduce additional permanent populations or encourage future growth.

5.6.6 Public Services

The Project would not have the potential for significant impacts associated with public services. The Project is nonresidential in nature and, as stated above, would not directly or indirectly induce population growth. Therefore, the Project would not increase demand for schools, police services, fire services, parks, or other public facilities such that new or expanded facilities would be required. This condition precludes the possibility of related impacts. No impacts would occur.

5.6.7 Recreation

As indicated above, the Project is nonresidential in nature and would not directly or indirectly induce population growth. Therefore, the Project would not increase the demand for recreational facilities such that new or expanded facilities would be required. This condition precludes the possibility of related impacts. No impacts would occur.

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CHAPTER 6
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CHAPTER 7
List of Preparers

7.1 Lead Agency

County of Santa Barbara
Planning & Development
123 E. Anapamu Street
Santa Barbara CA 93101

Zoë Carlson	Senior Planner
Alex Tuttle	Deputy Director
Whitney Wilkinson	Supervising Planner
Eva Marrero	Planner

7.2 Environmental Impact Report

Environmental Science Associates (ESA)
575 Market Street, Suite 3700
San Francisco, CA 94105

Selena Whitney, AICP	Project Director; Alternatives
Luci Hise-Fisher, AICP	Project Manager; Project Description, Environmental Impact Analysis, Alternatives
Savannah Battista, MS	Deputy Project Manager; Project Description, Introduction, Executive Summary, Wildfire
Maria Hensel	Aesthetics, Agriculture, Utilities and Service Systems
Michael Burns	Hazards and Hazardous Materials
Emily Kline	Hazards and Hazardous Materials, Other CEQA Considerations
Marisol Guzman	Land Use and Planning, Other CEQA Considerations
Maile Tanaka	Biological Resources
James Clark	Cultural Resources and Tribal Cultural Resources
Alison Garcia Keller	Cultural Resources
Sara Dietler	Cultural Resources and Tribal Cultural Resources
Russel Shapiro	Paleontological Resources

Juliana Medan	Transportation
Jonathan Teofilo	Transportation
Alan Sako	Air Quality, Energy, Greenhouse Gas Emissions, Noise and Vibration
Tim Witwer	Noise and Vibration
Caleb Mantanona	Air Quality, Energy, Greenhouse Gas Emissions
Anaya Ward	Noise and Vibration
Wes McCullough	GIS
Lisa Bautista	Publications

7.3 Entities Consulted

County of Santa Barbara Departments

County Fire Department

General Services Department

Public Works Department