DRAFT

Program Environmental Impact Report

County of Santa Clara Rural Zoning Amendments and Agricultural Impact Threshold

JULY 2025

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Executive Summary

Chapter 1 of this Program Environmental Impact Report (PEIR) provides a summary of the proposed County of Santa Clara ("County") Rural Zoning Amendments and Agricultural Impact Threshold ("Project"), its environmental consequences, mitigation measures, and alternatives.

ES.1 Introduction

This PEIR has been prepared by the County to evaluate potential environmental effects that would result from implementation of the Project. This PEIR has been prepared in conformance with the California Environmental Quality Act of 1970 (CEQA) statutes (California Public Resources Code Section 2100 et seq., as amended) and its implementing guidelines (California Code of Regulations [CCR] Title 14, Section 15000 et seq.). The proposed rural zoning amendments and adoption of the agricultural impact threshold constitute a "Project" as defined in the CEQA Guidelines Section 15378. Pursuant to Section 15367 of the State CEQA Guidelines, the County is the lead agency for the Project. This summary also provides a brief description of the Project, alternatives to the Project, and areas of controversy known to the County. In addition, this chapter provides a table summarizing: (1) the potential environmental impacts that would occur as the result of the proposed project; (2) the level of impact significance before mitigation; (3) the proposed mitigation measures that would avoid or reduce significant environmental impacts; and (4) the level of impact significance after mitigation measures are implemented.

ES.2 Environmental Procedures

CEQA requires the preparation of an EIR for any project that a lead agency determines may have a significant impact on the environment. CEQA also establishes mechanisms whereby the public and decision makers can be informed about the nature of the project being proposed and the extent and types of impacts that the project and its alternatives would have on the environment if they were to be implemented.

The basic purposes of CEQA are as follows (14 CCR 15002):

1. Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities;
2. Identify the ways that impacts to the environment can be avoided or significantly reduced;
3. Prevent significant, avoidable impacts to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental 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.

An EIR is also one of various decision-making tools used by a lead agency to consider the merits and disadvantages of a project that is subject to its discretionary authority. Prior to approving a proposed project, the lead agency must consider the information contained in the EIR, determine whether the EIR was properly prepared in accordance with CEQA and the CEQA Guidelines, determine that it reflects the independent judgment of the lead agency, adopt findings concerning the project's significant environmental impacts and alternatives, and adopt a Statement of Overriding Considerations if the proposed project would result in significant impacts that cannot be avoided.

ES.2.1 EIR Organization

This PEIR is organized as follows:

Chapter ES, Executive Summary, of the PEIR is provided at the beginning of this document. This summary outlines the conclusions of the environmental analysis and provides a summary of the Project and the Project alternatives analyzed in the PEIR. This section also includes a table summarizing all environmental impacts identified in this PEIR along with the associated mitigation measures proposed to reduce or avoid each impact.

Chapter 1, Introduction, serves as a forward to this PEIR, introducing the Project, the applicable environmental procedures, and the organization of the PEIR.

Chapter 2, Project Description, provides a thorough description of the Project elements, the purpose and need for the Project, Project objectives, and Project components.

Chapter 3, Environmental Analysis, describes the potential environmental impacts of the Project, as well as proposed mitigation measures to reduce or avoid any potentially significant impacts. The discussion in Chapter 3 is organized by 18 environmental issue areas as follows:

- Section 3.1 - Aesthetics
- Section 3.2 – Agriculture and Forestry Resources
- Section 3.3 – Air Quality
- Section 3.4 – Biological Resources
- Section 3.5 – Cultural and Tribal Cultural Resources
- Section 3.6 – Energy
- Section 3.7 – Geology and Soils
- Section 3.8 – Greenhouse Gas Emissions
- Section 3.9 – Hazards and Hazardous Materials
- Section 3.10 – Hydrology and Water Quality
- Section 3.11 – Land Use and Planning
- Section 3.12 – Mineral Resources
- Section 3.13 – Noise and Vibration
- Section 3.14 – Population and Housing
- Section 3.15 – Public Services and Recreation
- Section 3.16 – Transportation
- Section 3.17 – Utilities and Service Systems
- Section 3.18 – Wildfire

The PEIR assesses how the Project would impact each of the above-listed resource areas. Each environmental issue addressed in this PEIR is presented in terms of the following subsections:

- **Environmental Setting:** Provides information describing the existing setting on and/or surrounding the project area that may be subject to change as a result of implementation of the Project. This setting discussion describes the conditions that existed when the NOP was sent to responsible agencies and the State Clearinghouse.
- **Relevant Plans, Policies, and Ordinances:** Provides a discussion of federal, state, regional, and local regulations, plans, policies, and ordinances applicable to the Project.
- **Thresholds of Significance:** Provides criteria for determining the significance of Project impacts for each environmental issue.
- **Methodology:** Provides the methods and approach for determining the level of significance for the Project impacts.
- **Environmental Impacts:** Provides a discussion of the characteristics of the Project that may have an impact on the environment, analyzes the nature and extent to which the Project is expected to change the existing environment, and indicates whether the Project's impacts would meet or exceed the levels of significance thresholds.
- **Cumulative Impacts:** Provides a discussion of the characteristics of the Project that may have a cumulative impact on the environment.
- **Mitigation Measures:** Identifies mitigation measures to reduce significant adverse impacts to the extent feasible.
- **Level of Significance After Mitigation:** Provides a discussion of significant unavoidable environmental impacts that cannot be feasibly mitigated or avoided, potentially significant environmental impacts that can be feasibly mitigated or avoided and impacts that are not significant.
- **References:** Lists the sources cited during preparation of the PEIR.

Chapter 4, Other CEQA Considerations, addresses significant environmental impacts that cannot be avoided, the significant irreversible environmental changes that would result from implementation of the Project, and growth-inducing impacts associated with the Project, and potential secondary impacts of mitigation measures implemented to reduce the impacts of the Project.

Chapter 5, Alternatives, discusses alternatives to the Project, including a No Project Alternative. This subsection describes the rationale for selecting the range of alternatives discussed in the PEIR and identifies the alternatives considered by the County that were rejected from further discussion as infeasible during the scoping process. Lastly, Chapter 5 includes a discussion of the environmental impacts of the alternatives that were carried forward for analysis and identifies the environmentally superior alternative.

Chapter 6, List of Preparers, gives names and contact information of those responsible for writing this PEIR.

Appendices include various technical studies prepared for the Project, as listed in the Table of Contents.

ES.2.2 Type and Purpose of PEIR

This document is intended to serve as a PEIR under CEQA. Use of a PEIR provides the County (as lead agency) with the opportunity to consider broad policy alternatives and program wide mitigation measures, and provides the County with the opportunity to address subsequent project-specific impacts within the programmatic framework.

According to CEQA Guidelines Section 15168(a), a PEIR may be prepared on a series of actions that can be characterized as one large project and are related either:

1. Geographically
2. As logical parts in the chain of contemplated actions
3. In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or
4. As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

The Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. A PEIR is appropriate for the proposed project under criteria (1) and (3) under Section 15168(a). The CEQA Guidelines encourage the use of PEIRs, citing five advantages in Section 15168(b):

1. Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action,
2. Ensure consideration of cumulative impacts that might be slighted in a case-by-case analysis,
3. Avoid duplicative reconsideration of basic policy considerations,
4. Allow the Lead Agency to consider broad policy alternatives and program-wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts, and
5. Allow reduction in paperwork.

The intended use of this PEIR is twofold. First, it evaluates the potential environmental effects of amending the Zoning Ordinance. While the Project does not directly authorize any particular development project, by revising certain zoning requirements and establishing an agricultural impact threshold, it could result in indirect impacts to the environment. Second, the PEIR provides a first-tier analysis that may provide CEQA coverage for subsequent individual projects (CEQA Guidelines Section 15168[c]). When a PEIR is relied on for a subsequent activity, the lead agency must incorporate feasible mitigation measures and alternatives developed in the PEIR into the subsequent activities. If a subsequent activity would have potentially significant effects that were not examined in the PEIR, the project may be subject to further CEQA review.

CEQA Guidelines Section 15183 narrows subsequent analysis of subsequent projects to issues that are specific to the project or parcel or were not adequately addressed in a certified community-level EIR. Further environmental review of a subsequent projects is not required if it meets the criteria of Section 15183(c), such that all potential impacts were either addressed in the prior PEIR or can be substantially mitigated by the imposition of uniformly applied development policies or standards.

ES.3 Project Location

Santa Clara County encompasses approximately 1,312 square miles and spans the southern boundary of the San Francisco Bay to the north, Diablo Range to the east, and Santa Cruz Mountains to the west. Santa Clara County is bordered by Alameda County to the north, San Joaquin County to the northeast, Stanislaus County to the east,

Merced County to the southeast, San Benito County to the south, Santa Cruz County to the west, and San Mateo County to the northwest. The project area is limited to unincorporated County lands.

The unincorporated areas in the eastern and southwestern reaches of Santa Clara County are composed largely of sparsely populated rural land. The unincorporated areas in the northern/central portion of Santa Clara County consist of noncontiguous land areas, which are often referred to as "unincorporated urban islands" and notably contain the Stanford University campus. The amendments to the Zoning Ordinance would primarily affect the four rural zoning districts (Exclusive Agriculture, Agricultural Ranchlands, Hillsides, and Rural Residential), although changes to use classifications and definitions would apply countywide. In addition, the proposed Agricultural Impact Threshold would apply to all of the zoning districts in the County. These districts are Exclusive Agriculture, Agricultural Ranchlands, Hillsides, and Rural Residential. The proposed threshold of significance would apply to all lands subject to the jurisdiction of the County, and would thus include parcels in the unincorporated area that contain farmland outside these four rural zoning districts. The regional location of Santa Clara County and the project area are shown in Figure 2-1, Regional Context.

ES.4 Project Summary

ES.4.1 Summary Description

The Santa Clara Valley Agricultural Plan (Ag Plan) was adopted in January 2018 and created a comprehensive regional framework to preserve the remaining working lands and support a vibrant agricultural economy while mitigating climate change (County of Santa Clara 2018). Despite this plan, undeveloped and actively farmed properties in unincorporated rural areas of Santa Clara County continue to be advertised for estate home development, which in turn has created challenges for neighboring farm operations and has inflated the cost of productive agricultural land to prohibitively expensive levels for working farmers and ranchers to access. The County also does not currently have any objective development standards limiting the footprint or development area for single-family residences or any other uses in the rural areas, excluding parcels subject to Williamson Act contracts or the Coyote Valley Climate Resilience combining district. The Project would update how development is regulated in rural zoning districts within Santa Clara County by clarifying, simplifying, and standardizing the permit process for agriculture-supportive uses, aligning development in the Exclusive Agriculture zoning district with existing County land use policies, and replacing the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA.

The Project's objectives would combine existing agricultural use classifications into a new use classification, introduce development standards to limit the size of non-agricultural development, standardize permit processing for agricultural uses, and facilitate uses in rural zoning districts that enhance agricultural viability and align with the County General Plan. Another objective of the Project is to address and replace difficult-to-asses, subjective, "local-serving" language in the County General Plan and Zoning Ordinance. The County proposes to remove the subjective language and use objective development standards to address the General Plan intent of such provisions. The proposed objective development standards primarily rely upon the "cumulative building site coverage," previously referred to in the County Zoning Ordinance as "lot coverage." The County's shift from subjective to objective standards will ensure there is equity in treatment between religious and nonreligious assemblies and institutions and maintain compliance with the federal Religious Land Use and Institutionalized Persons Act (RLUIPA).

The conversion of a property's use from agricultural to non-agricultural poses the greatest threat of farmland loss and degradation. To provide more certainty in the processing of discretionary development applications on farmland, while establishing a standard that is protective of valuable farmland, the County proposes to establish a threshold of significance to evaluate and determine a proposed project's potential impact to agricultural resources. The threshold of significance that the County is proposing would evaluate a project's agricultural impacts under CEQA as there is currently no adopted methodology for evaluating and determining potentially significant impacts to agricultural resources from development projects proposed on farmland.

ES.4.2 Project Objectives

The following objectives have been established for the Project:

Rural Zoning Amendments

Objective 1. Clarify, simplify and standardize the permit processes for uses directly supportive of agriculture.

Objective 2. Align future development in the Exclusive Agriculture zoning district with existing County General Plan policies.

Objective 3. Replace "local-serving" provisions with objective development standards.

Santa Clara County Agricultural Impact Threshold

Objective 4. Promote consistency in the environmental review process.

Objective 5. Protect valuable farmland.

ES.5 Summary of Project Alternatives

ES.5.1 Alterative A: No-Project Alternative

Under the No Project Alternative, the County would continue to regulate development within the rural zoning districts (Exclusive Agriculture, Agricultural Ranchlands, Hillsides, and Rural Residential) using the currently adopted Zoning Ordinance. The existing ordinance does not contain consistent objective development standards for non-residential uses, such as limits to cumulative building site coverage, but instead relies on a vague and subjective "local-serving" standard, and only in certain instances. This standard evaluates similar development within the project vicinity to determine when allowable intensity of development would be similar to existing development. While this process serves to somewhat limit development in the rural areas, it is difficult to implement and does not provide certainty for property owners (since each application must be assessed on an individual basis, based on extensive research of existing development in the project vicinity). In addition, single-family residences in the rural areas do not have any objective development limitations, other than setbacks and height requirements. Consequently, large estate homes are often constructed on these parcels, creating a residential footprint and siting of the development that effectively prevents the property from being used for agricultural purposes.

The existing ordinance provides the same permitting processes for agriculture-related uses without a consistent approach to the size or intensity of the project. Under the No Project Alternative, all such projects would continue to be processed as discretionary projects. While the discretionary process allows for additional environmental and planning review, it creates additional barriers to project applicants who wish to develop limited-scale agriculture-supportive uses. This creates a disincentive to development that could support agricultural operations and limit the conversion of agricultural lands.

Under the No Project Alternative, no County threshold of significance for conversion of farmland would be adopted. Analysis of impacts to agricultural resources under CEQA would continue to be done on a project-by-project basis

ES.5.2 Alternative B: Implementation of the Rural Zoning Amendments without Agricultural Impact Threshold

Alternative B would not establish a CEQA significance threshold for farmland conversion impacts but would still implement the proposed amendments in the Zoning Ordinance. The rationale for this alternative is to explore the effects of amending the Zoning Ordinance without establishing an agricultural impact threshold.

ES.5.3 Alternative C: Implementation of the Rural Zoning Amendments and Agricultural Impact Threshold Only Without the "Limited" Use Cateogry

This alternative would update the Zoning Ordinance as proposed with one notable change: the introduction of the "Limited" sub-category for Agricultural Processing, Agricultural Sales/Events, and Places of Worship would be eliminated. Instead, these uses would be processed in the same manner as their larger, "General" counterparts. There would be no ministerial approval pathway for such uses. All other components of the rural zoning amendments, including consolidation of the various use descriptions, removing certain uses from the Exclusive Agriculture zoning district, and replacing "local-serving" standards with objective development standards would still occur. This alternative would also establish a CEQA significance threshold for farmland conversion impacts.

ES.5.4 Alternative D: Implementation of the Rural Zoning Amendments and a Reduced Agricultural Impact Threshold

This alternative would update the Zoning Ordinance and would establish a CEQA significance threshold for farmland conversion impacts of 2.5 acres (as compared to 5 acres). The rationale for the five-acre threshold is discussed in Section 3.2, Agriculture and Forestry Resources.

ES.5.5 Environmentally Superior Alternative

The alternatives are discussed in Chapter 5, including a comparison of the environmental benefits. An EIR must identify an "environmentally superior" alternative; and, where the no project alternative is environmentally superior, the EIR is then required to identify an alternative from among the others evaluated as environmentally superior (14 CCR 15126.6[e][2]).

As discussed in Section 5.7, Alternative D may be considered the environmentally superior alternative, in that it would increase the acreage of farmland subject to the impact threshold from 34,186 acres to 35,968, an increase of 5%. However, it does not avoid a significant impact, and would increase the financial and regulatory burden on small property owners seeking approval of discretionary projects.

ES.6 Issues To Be Resolved

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR contain issues to be resolved including the choice among alternatives and whether or how to mitigate significant impacts. With regard to the Project, the major issues to be resolved include decisions by the lead agency as to the following:

1. Whether the benefits of the Project override those environmental impacts which cannot be feasibly avoided or mitigated to a level of insignificance.
2. Whether there are any alternatives to the Project that would substantially lessen any of the significant impacts of the Project and achieve most of the basic Project objectives.

ES.7 Areas of Controversy

A Notice of Preparation for this PEIR was released on March 28, 2022, beginning the 30-day public scoping period for the EIR (Appendix A). During the public scoping period, input is obtained from public agencies and the general public regarding the environmental issues and concerns that may potentially result from the Project. Comments on the NOP were received from five agencies, which are provided in Appendix A. The County hosted the virtual Scoping Meeting on Thursday, April 14, 2022, from 6:00 p.m. to 7:30 p.m. At the conclusion of the presentation, attendees of the webinar were able to provide comments and questions about the proposed project to County staff and the project consultants during the question-and-answer portion of the meeting.

The primary areas of controversy identified by the public and agencies included the following potential issues (the PEIR section that addresses the issue raised is provided in parentheses):

- Impacts to agricultural resources (Agriculture and Forestry Resources)
- AB 52 and SB 18 consultation requirements (Cultural and Tribal Cultural Resources)
- Impacts to habitat and special status species (Biological Resources)
- Impacts to state transportation network (Transportation)
- Potential hazardous materials impacts (Hazards and Hazardous Materials)

ES.8 Summary of Environmental Impacts, Mitigation Measures, And Levels of Significance After Mitigation

Table ES-1 summarizes the conclusions of the environmental analysis contained in this PEIR. Impacts are identified as significant or less than significant and for all potentially significant impacts mitigation measures are identified. The level of significance after imposition of the mitigation measures is also presented.

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
Aesthetics			
AE-1: Have a substantial adverse effect on a scenic vista.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
AE-2: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
AE-3: Substantially degrade the existing visual character or quality of the site and its surroundings.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
AE-4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Agriculture and Forestry Services			
AG-1: 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.	Potentially Significant	AG-1 ▪ For each acre of **farmland to be converted** as a result of the project, an **affirmative agricultural conservation easement** shall be secured for **equivalent farmland**, within the same **sub-area** as the project site, prior to issuance of Building Permits. - **"Farmland to be converted"** means the cumulative area of the subject parcel(s) that is classified as one of five farmland categories in the 2022 FMMP map series, and that is not otherwise protected by an affirmative agricultural conservation easement meeting the County's standard below.	Significant and Unavoidable

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
		- **"Affirmative Agricultural Conservation Easement,"** or ACE, means a recorded easement in perpetuity that requires active and ongoing agricultural production and limits other uses on the property to those that are directly supportive of and compatible with onsite agriculture. Through an ACE, a property owner voluntarily conveys to a qualified conservation entity the right to enforce such restrictions in perpetuity. An ACE shall be held by a qualified conservation entity approved by the County, which must be either a private land trust accredited by the Land Trust Alliance or a public agency dedicated to agricultural land conservation. The ACE shall expressly name the County as a third-party beneficiary with the right to enforce the easement. An ACE may include no more than two building envelopes, designating an area in which future development may occur, sited such that they would not impair ongoing agricultural activity within the easement area. The area of such building envelope(s) shall not count toward the 1:1 mitigation requirement. An ACE shall be considered affirmative when it includes a "productivity provision," requiring the subject land to be managed for productive agricultural uses, with reasonable allowances for when temporary fallowing is necessary or appropriate.	

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
		- **"Equivalent farmland"** means that the land subject to the ACE (rounded to the nearest 0.25 acre) shall be equal to or greater than the acreage of the farmland to be converted, shall consist of no less than five acres of contiguous farmland, and shall be of equal or greater agricultural quality, as determined by the most recent FMMP map series. For these purposes, the ranking of farmland categories shall be: 1) Prime Farmland, 2) Farmland of Statewide Importance, 3) Unique Farmland, 4) Farmland of Local Importance, and 5) Farmland of Local Potential. - **"Sub-area"** means one of two geographic groupings of farmland in Santa Clara Valley: the Coyote Valley sub-area and the South County sub-area. ▪ Applicants required to mitigate agricultural impacts may do so through the dedication or acquisition of an ACE onsite, offsite, or a combination of both, to meet the standards above. For example, the applicant may choose to implement their mitigation through entirely off-site conservation or choose to convey a perpetual easement over the remaining undeveloped farmland portion of the subject parcel(s) (outside of any area designated as a building envelope). Onsite conservation of farmland would reduce the amount of offsite farmland conservation required to meet the 1:1 ratio.	

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
		▪ To fulfill the requisite ACE standards, applicants must work with a private land trust accredited by the Land Trust Alliance, or a public agency dedicated to agricultural land conservation that has been approved by the County for participation in the SCCAMP. Close involvement of the land trust or public agency will be necessary to receive and hold the requisite ACE(s), whether onsite or offsite. ▪ At the applicant's request, the Director of the Department of Planning & Development may approve one or more alternative means of mitigation, provided the Director finds, based on a preponderance of the evidence in the record, that the alternative means requested by the applicant shall actually result in mitigation that meets the above standards and requirements. For example, such alternative means of mitigation may include funding the offsite acquisition of an ACE through a private land trust accredited by the Land Trust Alliance, or through a mitigation program administered by a public agency, provided that such funding actually results in one or more ACEs on farmland in Santa Clara County, of equal or greater acreage, and of equal or greater agricultural quality, to the farmland converted as a result of the proposed project. ▪ Should the County establish a future fee-based agricultural mitigation program meeting the requirements of this mitigation measure, the applicant may mitigate as described above, or participate in that program.	
AG-2: Conflict with existing zoning for agricultural use, or a Williamson Act contract.	No Impact	No mitigation measures are required.	Not Applicable

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
AG-3: Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)).	No Impact	No mitigation measures are required.	Not Applicable
AG-4: Result in the loss of forest land or conversion of forest land to nonforest use.	No Impact	No mitigation measures are required.	Not Applicable
AG-5: Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to nonforest use.	No Impact	No mitigation measures are required.	Not Applicable
Air Quality			
AQ-1 Conflict with or obstruct implementation of the applicable air quality plan.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
AQ-2 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.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
AQ-3 Expose sensitive receptors to substantial pollutant concentrations.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
AQ-4 Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Biological Resources			
BIO-1 Development of the Project would impact, either directly or through habitat	Less Than Significant Impact	No mitigation measures are required.	Not Applicable

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
modifications, species identified as 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.			
BIO-2 Development of the Project would result in the loss of riparian habitat or sensitive natural communities identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
BIO-3 The Project would impact on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
BIO-4 The Project would affect wildlife movement of 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.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
BIO-5 The Project would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
BIO-6 The Project would conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community	Less Than Significant Impact	No mitigation measures are required.	Not Applicable

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
Conservation Plan, or other approved local, regional, or state habitat conservation plan.			
Cultural Resources and Tribal Resources			
CUL-1 Cause a substantial adverse change in the significance of an historical resource pursuant to Section 15064.5.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
CUL-2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
CUL-3 Disturb any human remains, including those interred outside of formal cemeteries.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
CUL-4 Would result in 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.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Energy			
E-1 Would result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
E-2 Would conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
Geology and Soils			
GEO-1 Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:			
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. (Refer to Division of Mines and Geology Special Publication 42.)	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
ii) Strong seismic ground shaking.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
iii) Seismic-related ground failure, including liquefaction.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
iv) Landslides	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
GEO-2 Result in substantial soil erosion or the loss of topsoil.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
GEO-3 Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
GEO-4 Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial risks to life or property.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
GEO-5 Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems	Less Than Significant Impact	No mitigation measures are required.	Not Applicable

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
where sewers are not available for the disposal of waste water.			
GEO-6 Directly or indirectly destroy a unique paleontological resource or site or unique geological feature.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable.
Greenhouse Gas Emissions			
GHG-1 Generate GHG emissions, either directly or indirectly, that may have a significant effect on the environment.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
GHG-2 Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Hazards and Hazardous Materials			
HAZ-1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
HAZ-2: 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.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
HAZ-3: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of an existing or proposed school.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
HAZ-4: Be located on a site which is included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 and, as a result, would create a	Less Than Significant Impact	No mitigation measures are required.	Not Applicable

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
significant hazard to the public or the environment.			
HAZ-5: 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 result in a safety hazard for people residing or working in the Project Area.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
HAZ-6: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
HAZ-7: Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to the urbanized areas or where residences are intermixed with wildlands.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Hydrology			
HYD-1 Violate and water-quality standards or waste-discharge requirements.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
HYD-2: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
HYD-3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
HYD-4: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
HYD-5: Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
HYD-6: Otherwise substantially degrade water quality.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
HYD-7: Be in a flood hazard, tsunami, or seiche zones, and risk release of pollutants due to project inundation.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
HYD-8: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Land Use			
LU-1: Physically divide an established community.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
LU-2: Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
LU-3: Conflict with any applicable habitat conservation plan or natural community conservation plan.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Mineral Resources			
M-1: Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
M-2: Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Noise and Vibration			
NOI-1: Result in a temporary (short-term) increase in community noise levels that would cause a substantial increase in ambient noise levels and exceed County standards?	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
NOI-2: Result in a permanent increase in community noise levels that would cause a substantial increase in ambient noise levels and exceed County standards	Less Than Significant Impact	No mitigation measures are required.	Not Applicable

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
NOI-3: Expose existing residential areas to excessive vibration due to project construction or operation	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
NOI-4: Expose people residing or working in the project area to excessive noise levels if the Project is 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.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Population and Housing			
POP-1: Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).	No Impact	No mitigation measures are required.	Not Applicable
POP-2: Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere or displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.	No Impact	No mitigation measures are required.	Not Applicable
Public Services and Recreation			
PS-1: Result in a substantial adverse physical impact associated with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other	Less Than Significant Impact	No mitigation measures are required.	Not Applicable

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
performance objectives for fire protection services, police protection services, schools, parks, and/or other public facilities			
PS-2: Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
PS–3: Includes recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	No Impact	No mitigation measures are required.	Not Applicable
Transportation			
TRA-1: Conflict with an applicable plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
TRA-2: Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
TRA-3: Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
TRA-4: Result in inadequate emergency access.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Utilities and Service Systems			
U-1: Would require or result in the construction of new water or wastewater treatment facilities or expansion of existing	Less Than Significant Impact	No mitigation measures are required.	Not Applicable

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
facilities, the construction of which could cause significant environmental effects.			
U-2: Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
U-3: Result in a determination by the wastewater treatment provider which serves or may serve the project that is has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
U-4: 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 fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
Wildfire			
WF-1: Substantially impair an adopted emergency response plan or emergency evacuation plan.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
WF-2: 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.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable
WF-3: Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water	Less Than Significant Impact	No mitigation measures are required.	Not Applicable

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact	Mitigation Measure(s)	Level of Significance After Mitigation
sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.			
WF-4: 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.	Less Than Significant Impact	No mitigation measures are required.	Not Applicable

ES.9 References

County of Santa Clara. 1994. *Santa Clara County General Plan*. *Book B. Part 3: Rural Unincorporated Area Issues and Policies.* Adopted December 20, 1994. https://plandev.sccgov.org/sites/g/files/exjcpb941/files/GP_BookB_HealthElement.

County of Santa Clara. 2018. *Santa Clara Valley Agricultural Plan: Investing in our Working Lands for Regional Resilience.* Accessed August 19, 2024. https://www.openspaceauthority.org/system/user_files/Documents/Grids/current_projects/SCV_ActionPlan_010318.pdf.

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1 Introduction

Chapter 1 is an introduction to the Program Environmental Impact Report (PEIR) for the County of Santa Clara (County) Rural Zoning Amendments and Agricultural Impact Threshold (Project). The introduction describes the process of environmental review under the California Environmental Quality Act (CEQA) and the purposes of the PEIR.

1.1 Purpose of Environmental Impact Report

This PEIR was prepared by the County to evaluate potential environmental effects that would result from implementation of the Project. This PEIR was prepared in conformance with the California Environmental Quality Act (CEQA) statute (California Public Resources Code Section 21000, et seq.) and its implementing guidelines (14 CCR 15000 et seq., hereinafter "CEQA Guidelines"). The proposed project constitutes a "Project" as defined in CEQA Guidelines Section 15378. Pursuant to Section 15367 of the CEQA Guidelines, the County is the lead agency for the Project.

CEQA requires the preparation of an EIR for any project that a lead agency determines may have a significant impact on the environment. According to Section 21002.1(a) of CEQA:

> The purpose of an environmental impact report is to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided.

CEQA also establishes mechanisms whereby the public and decision makers can be informed about the nature of the project being proposed and the extent and types of impacts that the project and its alternatives would have on the environment if they were to be implemented.

The basic purposes of CEQA are as follows, pursuant to CEQA Guidelines Section 15002(a):

1. Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities.
2. Identify the ways that impacts to the environment can be avoided or significantly reduced.
3. Prevent significant, avoidable impacts to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
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.

This PEIR was prepared in accordance with CEQA Guidelines Section 15151, which defines the standards for EIR adequacy as follows:

> An EIR 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. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR

should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

1.2 Project Overview

The Project would involve adoption of zoning amendments that would impact the rural zoning districts within unincorporated Santa Clara County. The proposed amendments to the Zoning Ordinance would update how development is regulated in rural zoning districts with three primary changes:

1. Clarify, simplify, and standardize the permit processes for uses directly supportive of agriculture.
    a. Combine existing agricultural use classifications for *Agricultural Sales and Agriculturally Related Entertainment & Commercial Uses* into a new use classification called *Agricultural Sales/Events,* and removing the *Wineries* use classification. Activities related to wineries would be included in the revised use classifications of *Agricultural Sales/Events* and *Agricultural Processing.*
    b. Expand the *Agricultural Sales/Events* use classification, expanding the uses currently allowed as ancillary to a winery to be allowed as ancillary for all types of agricultural operations.
    c. Categorize *Agricultural Sales/Events* as either *Limited* or *General* in scale, according to square footage, and streamline the permitting of smaller-scale *Limited* projects, which could be approved ministerially while larger-scale *General* projects would require discretionary approval.
2. Align future development in the Exclusive Agriculture zoning district with existing County General Plan policies.
    a. Prevent the development of new uses in the *Exclusive Agriculture* zoning district that do not "clearly enhance the long-term viability of local agriculture and agricultural lands" or are otherwise inconsistent with the General Plan.
    b. Require that certain agricultural uses prone to misuse (i.e., *Nurseries* and *Agricultural Sales/Events*) comply with basic standards to prevent ongoing code enforcement issues.
    c. Allow for a cumulative area of 60 acres of new greenhouse and mushroom farm development in the Coyote Valley Climate Resilience (-cv) combining district as a limited exception to the existing maximum development area of two acres per parcel in the -cv combining district.
3. Replace "local-serving" provisions with objective development standards.
4. Replace subjective "local-serving" provisions with simple, objective development standards, that apply to all non-agricultural uses in rural zoning districts. Establishing new limitations to the *Cumulative Building Site Coverage* per parcel will regulate the size, scale, and intensity of development in rural zoning districts. The existing terminology of *Lot Coverage* would be replaced by *Cumulative Building Site Coverage.* Make conforming changes to General Plan policies (e.g., policy R-LU 57 and R-LU 127).
    a. Replace the existing use classification of *Religious Institutions* with *Places of Worship*, categorize them according to size, either *Limited* or *General*, and streamlining the process of smaller-scale *Places of Worship—Limited* for the rural zoning districts.
    b. Adopting General Plan Amendments to remove subjective "local-serving" references in the General Plan. These measures will ensure ongoing RLUIPA compliance.

The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The proposed threshold of significance would apply to all land use development subject to the

jurisdiction of the County, and would thus include parcels in the unincorporated area that contain farmland outside the four rural zoning districts.

5. Promote consistency in the environmental review process.
    a. Proposed threshold of significance:
        i. A project's impacts to agricultural resources would be considered potentially significant if five or more acres of the subject parcel(s) proposed for development is identified as valuable farmland, which will ensure that projects are evaluated on a consistent and objective basis and will promote efficiency and predictability in the CEQA review process.
6. Protect valuable farmland.
    a. Proposed threshold of significance:
        i. Implementation of the proposed threshold would capture 91.78% of all valuable farmland in the unincorporated area. In other words, only 8.22% of the County's valuable farmland is located on parcels smaller than five acres.

Please refer to Chapter 2, Project Description, for a complete description of the project, its location, and the necessary approvals to implement the project.

1.3 Type, Purpose, and Intended Uses of the PEIR

This document is intended to serve as a PEIR under CEQA. Use of a PEIR provides the County (as lead agency) with the opportunity to consider broad policy alternatives and program wide mitigation measures, as well as cumulative impacts. The PEIR further provides the County with opportunity to consider and address subsequent project-specific impacts within the framework of the program-level analysis. According to CEQA Guidelines Section 15168(a), a PEIR may be prepared on a series of actions that can be characterized as one large project and are related either:

1. Geographically
2. As logical parts in the chain of contemplated actions
3. In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or
4. As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

The CEQA Guidelines encourage the use of PEIRs, citing five advantages in Section 15168(b):

1. Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action,
2. Ensure consideration of cumulative impacts that might be slighted in a case-by-case analysis,
3. Avoid duplicative reconsideration of basic policy considerations,
4. Allow the Lead Agency to consider broad policy alternatives and program-wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts, and
5. Allow reduction in paperwork.

The intended use of this PEIR is twofold. First, it evaluates the potential environmental effects of amending the Zoning Ordinance. While the Project does not directly authorize any particular site-specific development project, by revising certain zoning requirements and establishing the agricultural impact threshold, it could result in indirect impacts to the environment. Second, the PEIR provides a first-tier analysis that may provide CEQA coverage for subsequent individual projects (CEQA Guidelines Section 15168[c]). When a PEIR is relied on for a subsequent activity, the lead agency must incorporate feasible mitigation measures and alternatives developed in the PEIR into the subsequent activities. If a subsequent activity would have potentially significant effects that were not examined in the PEIR, the project may be subject to further CEQA review.

CEQA Guidelines Section 15183 narrows subsequent analysis of subsequent projects to issues that are specific to the project or parcel or were not adequately addressed in a certified PEIR. Further environmental review of subsequent projects is not required if it meets the criteria of Section 15183(c), such that all potential impacts were either addressed in the prior PEIR or can be substantially mitigated by the imposition of uniformly applied development policies or standards.

1.4 Notice of Preparation

The County has complied with the CEQA Guidelines by providing opportunities for early participation in the environmental review process. Specifically, in accordance with Section 15082(a) of the CEQA Guidelines, the County circulated a Notice of Preparation (NOP) for a 30-day public review and scoping period. The NOP was sent to the State Clearinghouse, public agencies, special districts, responsible and trustee agencies, and other interested parties for a public review period that began on March 28, 2022, and ended on April 27, 2022 (CEQA Public Review and Scoping Period). The purpose of the NOP is to formally convey that the County, as the lead agency, is soliciting input regarding the scope and proposed content of the PEIR.

Copies of the NOP were made available for electronic download on the County's website at https://plandev.sccgov.org/ordinances-codes/planning-studies/rural-zoning-updates.

The NOP included a description of the proposed project, identification of potential environmental effects associated with proposed project approval and implementation, and an invitation to agencies and the public to review and comment on the NOP. The NOP and comments are provided in Appendix A of this PEIR. Five state agencies commented on the NOP. The NOP comment letters, which contain environmental concerns, are listed in Table 1-1, along with a summary of the environmental issues raised and the PEIR section where the environmental topics are addressed.

Table 1-1. Notice of Preparation and Comment Letters Summary

Sender of Comments	Date Received	General Summary of Comments	Addressed In Section(s)
Individuals			
—	—	No written non-agency comments received.	—
State/Regional/Local Agency			
Dept. of Conservation	4/7/22	Impacts to agricultural resources	3.2
NAHC	4/15/22	AB 52 and SB 18 consultation requirements	3.5
CDFW	4/22/22	Impacts to habitat and special status species	3.4
Caltrans	4/22/22	Impacts to state transportation network	3.16
DTSC	4/27/22	Potential hazardous materials impacts	3.9

1.5 Scoping Meeting

Pursuant to CEQA Section 21083.9 and CEQA Guidelines Section 15082(c), the lead agency is required to conduct at least one scoping meeting for all projects of state-wide, regional, or area-wide significance as outlined in Section 15206 of the CEQA Guidelines. The scoping meeting is for jurisdictional agencies and interested persons or groups to provide comments regarding, but not limited to, the range of actions, alternatives, mitigation measures, and environmental effects to be analyzed in the EIR.

The County hosted a virtual Scoping Meeting on Thursday, April 14, 2022, from 6:00 p.m. to 7:30 p.m. The meeting was held online, through a webinar type format, with the option to participate by telephone. At the conclusion of the presentation, attendees of the webinar were able to provide comments and questions about the proposed project to County staff and the project consultants during the question and answer portion of the meeting.

1.6 Public Review of the Draft PEIR

In accordance with the CEQA Guidelines, the Draft PEIR shall be made available for a public review period of not less than 45 days. A Notice of Availability (NOA) of the Draft PEIR is distributed to responsible and trustee agencies, other local, state, and federal agencies with jurisdiction, bordering cities and counties, and any party who previously requested notice.

Please refer to the NOA for the comment due date, and the physical and email addresses where comments regarding the adequacy of the Draft PEIR may be sent.

1.7 Final EIR

Following the close of the public comment period on the Draft PEIR, a Final PEIR will be prepared that will include all written comments received during the public review period, and responses to the comments that raise environmental issues related to the proposed project. The Final PEIR may also include minor revisions to the Draft PEIR and additional information as determined by the County.

As required by CEQA, written responses to comments submitted by public agencies will be provided to those agencies for review at least 10 days prior to any hearing by the Board of Supervisors (Board) to consider and potentially approve the Project. Prior to project approval, the Board must certify the EIR as complying with the requirements of CEQA and make specific findings regarding each potentially significant impact identified in the Final PEIR.

1.8 Mitigation Monitoring Procedures

CEQA Guidelines Section 15097 requires the lead agency to adopt a program for monitoring or reporting on the required revisions and the measures it has imposed to mitigate or avoid significant environmental effects. A Mitigation Monitoring and Reporting Program for the proposed project will be completed as part of the Final PEIR, prior to consideration of the proposed project by the County Planning Commission and Board of Supervisors.

2 Project Description

The proposed County of Santa Clara ("County") Rural Zoning Amendments and Agricultural Impact Threshold ("Project") would amend the County of Santa Clara Zoning Ordinance as it pertains to the Exclusive Agriculture, Agricultural Ranchlands, Hillsides, and Rural Residential zoning districts (referred to hereafter as the "rural zoning districts") and establish a threshold of significance for evaluating impacts to agricultural resources from development projects proposed on farmland. The proposed Zoning Ordinance Amendments would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the rural zoning districts with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards, in addition to related miscellaneous amendments. The Project also includes amendments to the County General Plan to remove subjective language referencing "local-serving." To address potential impacts to agricultural resources, the Project would establish a threshold of significance for evaluating the effects of future development. The proposed project is further described below.

2.1 Project Location

Santa Clara County encompasses approximately 1,312 square miles and spans the southern boundary of the San Francisco Bay to the north, Diablo Range to the east, and Santa Cruz Mountains to the west. The County is bordered by Alameda County to the north, San Joaquin County to the northeast, Stanislaus County to the east, Merced County to the southeast, San Benito County to the south, Santa Cruz County to the west, and San Mateo County to the northwest. The regional location of the County is shown in Figure 2-1, Project Location.

The unincorporated areas in the eastern and southwestern reaches of the County are composed largely of sparsely populated rural land. The unincorporated areas in the northern and central portion of the County consist of the Stanford University campus and noncontiguous land areas surrounded by city boundaries, which are often referred to as "unincorporated urban islands."

The project area for the zoning amendments consists of the four rural zoning districts within unincorporated Santa Clara County: Exclusive Agriculture, Agricultural Ranchlands, Hillsides, and Rural Residential. The proposed threshold of significance would apply to all lands subject to the jurisdiction of the County, and would thus include parcels in the unincorporated area that contain farmland outside these four rural zoning districts. In addition, proposed changes to zoning classifications and terminology in the Zoning Ordinance would apply throughout out the County, in all zoning districts.

2.2 Project Background and Need

Rural Zoning Ordinance Amendments

Santa Clara County has a rich agricultural history and was once recognized as the "Valley of Heart's Delight" famous for its orchards and canneries. Today it is better recognized as Silicon Valley and is the most populous County in the Bay Area. In the past 30 years alone, Santa Clara County has lost 21,171 acres of its farmland and rangeland to development, and an additional 28,391 acres of farmland and rangeland in the County are at risk of conversion in the near future (County of Santa Clara 2018). Despite this, Santa Clara Valley retains agricultural lands and an important farming industry, with over 1,000 farms has an important farming industry with a total output value of

$1.6 billion dollars and in 2023 the annual agricultural production value totaled $371,000,000 (Santa Clara County Department of Agriculture [SCCDA] 2014).

The Santa Clara Valley Agricultural Plan (Ag Plan) was adopted in January 2018 to shift the land use paradigm and create a comprehensive regional framework to preserve the remaining working lands and support a vibrant agricultural economy while mitigating climate change (County of Santa Clara 2018). As discussed in Section 3.2.2 of the Ag Plan, the majority of Santa Clara County's farmland was lost primarily because of the incremental subdivision of farmland and development of low-density, rural residential estates. Development of large estates or "ranchette" single-family residences in rural areas has led to the conversion of farmland properties from primarily agricultural use, in addition to compromising the ability of nearby properties to remain in agricultural production. Despite the greater cost and difficulty of developing in rural areas, undeveloped and actively farmed properties in unincorporated rural areas of Santa Clara County continue to be advertised for estate home development, creating challenges for neighboring farm operations and inflating the cost of productive agricultural land to prohibitively expensive levels for working farmers and ranchers to access (County of Santa Clara 2018).

As explored during the preparation of the Ag Plan, and as discussed at length during the subsequent convenings of the Agricultural Preservation Task Force, rural residential estate development on prime farmland is one of the primary drivers of farmland loss and a significant threat to the continued agricultural viability of Santa Clara Valley.

Excluding parcels subject to Williamson Act contracts or the Coyote Valley Climate Resilience combining district, the County does not currently have any objective development standards limiting the cumulative building site coverage or development area for single-family residences or any other uses in the rural base districts. Consequently, large estate homes are often constructed on the county's remaining farmland parcels, establishing a new residential use that typically precludes the property from being used for agricultural purposes. While on-site housing for agricultural workers can be a critical asset to the commercial viability of an agricultural property, an estate home that is unrestricted in size and lot coverage is not compatible with the County General Plan's intent for rural zoning districts, in particular the Exclusive Agriculture zoning district. General Plan Policy R-RC 62 specifically states that "Residential uses in agricultural areas may be allowed for persons directly involved in on-site agricultural operations as an ancillary or supportive use of agriculture."

With this Project, the County proposes introducing objective development standards to limit the size of non-agricultural development, standardize permit processing for agricultural uses, and otherwise facilitate uses in rural zoning districts that enhance agricultural viability and align with the County General Plan.

Another objective of the Project is to replace difficult-to-asses, subjective, "local-serving" language in the County General Plan and Zoning Ordinance. County General Plan Policy R-LU 57 states that, in areas zoned Rural Residential, "Residential, agricultural and open space uses are the primary uses. Commercial, industrial and institutional uses may be established only where they are sized to be local-serving in nature" (County of Santa Clara 1994). Zoning Ordinance § 2.20.090 provides guidance on how to apply the local-serving policies. However, determining if a commercial, industrial, or institutional use is sized to be local-serving in nature has proven to be onerous, subjective, and confusing to the public as well as County staff and decision-makers. The County proposes to remove the subjective language in the General Plan and Zoning Ordinance § 2.20.090, and instead use objective development standards to address the intent of General Plan Policy R-LU 57 and related provisions. The proposed objective development standards primarily rely upon the "cumulative building site coverage," previously referred to in the County Zoning Ordinance as "lot coverage." The County's shift from subjective to objective standards will ensure there is equity in treatment between religious and nonreligious assemblies and institutions and maintain compliance with the federal Religious Land Use and Institutionalized Persons Act (RLUIPA).

Santa Clara County Agricultural Threshold of Significance

The conversion of a property's use from agricultural to non-agricultural poses the greatest threat of farmland loss and degradation. To provide more certainty in the processing of discretionary development applications on farmland parcels, while establishing a standard that is protective of farmland, the County proposes to establish a threshold of significance to evaluate and determine a proposed project's potential impact to agricultural resources.

For purposes of the proposed threshold, "farmland" includes five farmland categories in the County, as classified by the State's Farmland Mapping and Monitoring Program (FMMP). These categories include:

- Prime Farmland
- Farmland of Statewide Importance
- Unique Farmland
- Farmland of Local Importance
- Farmland of Local Potential

A sixth FMMP category, Grazing Land, is considered agricultural land, but is not considered "farmland." The FMMP, and these categories, are discussed in greater detail in Section 3.2, Agriculture and Forestry Resources.

2.3 Project Objectives

The purpose of the Project is to update how development is regulated in rural zoning districts within the County, establish a threshold of significance for evaluating the potential agricultural impacts from future projects, and create an agricultural mitigation program to address such impacts. The following objectives have been established for the Project:

Rural Zoning Amendments

Objective 1. Clarify, simplify and standardize the permit processes for uses directly supportive of agriculture.

Objective 2. Align future development in the Exclusive Agriculture zoning district with existing County General Plan policies.

Objective 3. Replace "local-serving" provisions with objective development standards.

Santa Clara County Agricultural Threshold of Significance

Objective 4. Promote consistency in the environmental review process.

Objective 5. Protect farmland within the County.

2.4 Project Description

The Project has five primary objectives that would be achieved as follows:

Rural Zoning Amendments

1. Clarify, simplify, and standardize the permit processes for uses directly supportive of agriculture.

a. **Issue:** Existing ordinance describes multiple agriculture related uses, each with a separate but overlapping definition (i.e., ag processing, ag sales, ag entertainment, wineries, etc.) and different permitting requirements in different rural zoning districts.

b. Proposed amendments:

i. Combine existing agricultural use classifications for *Agricultural Sales* and *Agriculturally Related Entertainment & Commercial Uses* into a new use classification called *Agriculture Sales/Events,* and remove the *Wineries* use classification. Activities related to wineries would be included in the revised use classifications of *Agricultural Sales/Events* and *Agricultural Processing*.

ii. Expand the *Agricultural Sales/Events* use classification to allow uses that are currently allowed as ancillary to a winery to be allowed as ancillary for all types of agricultural operations.

iii. Categorize *Agricultural Sales/Events* as either *Limited* or *General* in scale, according to square footage, and streamline the permitting of smaller-scale *Limited* projects, which could be approved ministerially while larger-scale *General* projects would require discretionary approval.

2. Align future development in the Exclusive Agriculture zoning district with existing County General Plan policies.

a. **Issue:** Existing Zoning Ordinance conditionally allows several entirely non-agricultural uses (i.e., golf courses, hospitals and clinics, commercial kennels, etc.) in the Exclusive Agriculture zoning district, while the General Plan (policy R-LU 11) limits new uses in such zoning to be directly related or supportive of agriculture, and the Zoning Ordinance (section 2.20.050) states that new uses in the Exclusive Agriculture zoning district "must clearly enhance the long-term viability of local agriculture and agricultural lands."

b. Proposed amendments:

i. Prevent the development of new uses in the *Exclusive Agriculture* zoning district that do not "clearly enhance the long-term viability of local agriculture and agricultural lands" or are otherwise inconsistent with the General Plan.

ii. Require that certain agricultural uses prone to misuse (i.e., *Nurseries* and *Agricultural Sales/Events*) comply with basic standards to prevent ongoing code enforcement issues.

iii. Allow for a cumulative area of 60 acres of new greenhouse and mushroom farm development in the Coyote Valley Climate Resilience (-cv) combining district as a limited exception to the existing maximum development area of two acres per parcel in the -cv combining district.

3. Replace "local-serving" provisions with objective development standards.

a. **Issue:** Existing Zoning Ordinance and General Plan policies regulate certain non-residential uses in rural areas according to "local-serving" provisions that are difficult to understand and implement, which unnecessarily increases uncertainty and processing time during the planning entitlement process (County of Santa Clara 1994).

b. Proposed amendments:

i. Replace subjective "local-serving" provisions with simple, objective development standards, that apply to all non-agricultural uses in rural zoning districts. Establishing new limitations to the *Cumulative Building Site Coverage* per parcel will regulate the size, scale, and intensity of development in rural zoning districts. The existing terminology of *Lot Coverage* would be replaced by *Cumulative Building Site Coverage.* Make conforming changes to General Plan policies (e.g., policy R-LU 57 and R-LU 127.

ii. Replace the existing use classification of *Religious Institutions* with *Places of Worship*, categorize them according to size, either *Limited* or *General*, and streamline the processing of smaller-scale

Places of Worship—Limited for the rural zoning districts. These measures will ensure ongoing RLUIPA compliance.

Santa Clara County Agricultural Threshold of Significance

4. Promote consistency in the environmental review process.
    a. **Issue:** The County does not currently have a formally-adopted methodology for evaluating and determining potentially significant impacts to agricultural resources from development projects proposed on farmland. Section 15064.7(b) of the CEQA Guidelines encourages public agencies to develop and publish thresholds of significance that the agency uses in the determination of the significance of environmental effects. The County currently uses the Land Evaluation and Site Assessment (LESA) model, which is an optional farmland assessment methodology developed by the California Department of Conservation in 1997, as recommended by Appendix G of the CEQA Guidelines.
    b. Proposed threshold of significance:
        i. A project's impacts to agricultural resources would be considered potentially significant if five or more acres of the subject parcel(s) proposed for development is identified as farmland, which will ensure that projects are evaluated on a consistent and objective basis and will promote efficiency and predictability in the CEQA review process.
5. Protect farmland.
    a. **Issue**: As discussed in Section 2.2, above, the conversion of farmland has been a substantial environmental issue in the County. The conversion of agricultural parcels to small estate, or "ranchette" residential development has been identified as a major driver of farmland loss.
    b. Proposed threshold of significance:
        i. Implementation of the proposed threshold would capture 91.78% of all farmland in the unincorporated area. In other words, only 8.22% of the County's farmland is located on parcels smaller than five acres.

2.4.1 Clarifying, Simplifying, and Standardizing Uses Directly Supportive of Agriculture

To expand and standardize separate but often overlapping definitions of existing non-residential agriculture-supportive uses (i.e., agricultural processing, agricultural sales, agricultural entertainment, wineries, etc.), the Project would combine and redefine several use classifications in the Zoning Ordinance (Chapter 2.10). Existing agricultural use classifications for *Agricultural Sales* and *Agriculturally Related Entertainment & Commercial Uses* would be combined into the new use classification of *Agricultural Sales/Events,* which would be broadened to encompass more activities considered ancillary to an agricultural operation. The existing use classification of *Wineries* would be removed and future winery projects would be categorized as some combination of three simplified and more broadly applied classifications: *Agriculture*, *Agricultural Sales/Events,* and *Agricultural Processing*.

Agricultural Sales/Events and *Agricultural Processing* projects below a certain "Limited" size threshold would be permitted using a nondiscretionary, ministerial Planning Clearance within all four rural zoning districts. Streamlining such projects would facilitate the development of agriculture-supportive uses that are beneficial to the preservation and ongoing viability of county agricultural lands by building capacity for agricultural operations through expanded

infrastructure and diversified business practices. Projects exceeding the "*Limited*" threshold would be subject to a discretionary permit process. The proposed threshold for ministerial approval would be between 1,200 and 5,000 square feet for *Agricultural Sales/Events* and between 5,000 and 10,000 square feet for *Agricultural Processing*, after consideration and recommendation by the Planning Commission, and final determination by the County Board of Supervisors.

The use classifications discussed here are depicted in the overview table below, which depicts the proposed reorganization of uses supportive of agriculture. The proposed amendments change several uses currently allowed "by right" to require a Planning Clearance. Uses allowed "by right" do not require a land use entitlement. A Planning Clearance is a ministerial, nondiscretionary process for uses that require adherence to the Zoning Ordinance but for which no discretionary permit is required. Uses allowed with a planning clearance require that an applicant verify and provide sufficient evidence to establish that the proposed use adheres to the Zoning Ordinance.

Table 2-1. Existing and Proposed Agricultural Uses Classifications

Use Classifications	Zoning			
	A	AR	HS	RR
Existing				
Agricultural Processing				
Small Scale	R	R	R	R
Medium Scale	A	—	—	—
Large Scale	U	—	—	—
Agricultural Sales				
Limited	R	R	R	R
Farmers' Market	U	U	—	—
Agriculturally Related Entertainment & Commercial Uses	U	—	—	—
Wineries				
Small Scale	R	R	R	R
Medium Scale	S	S	S	S
Large Scale	U	U	U	U
Proposed				
Agricultural Processing				
Limited	C	C	C	C
General	S	U	U	U
Agricultural Sales/Events				
Limited	C	C	C	C
General	S	U	U	U

Legend: A - Exclusive Agriculture, AR - Agricultural Ranchlands, HS - Hillside, RR - Rural Residential, C – Planning Clearance, R – By Right, S – Special Permit, U – Use Permit.

2.4.2 Revising Uses Allowed in Exclusive Agriculture Zoning District

The Project would no longer allow the development of new uses in the Exclusive Agriculture zoning district that are inconsistent with the Zoning Ordinance requirement that uses "clearly enhance the long-term viability of local agriculture and agricultural lands," and related General Plan policies (County of Santa Clara 1994).

New development of the following use classifications would no longer be permitted in the Exclusive Agriculture zoning district:

- Community Care – Expanded
- Residential – Communal Institutional
- Aircraft Landing Strips – Private
- Butcheries
- Camps and Retreats
- Cemeteries
- Clubs – Private and Nonprofit
- Golf Courses and Country Clubs
- Hospital and Clinics
- Hunting and Fishing Preserves
- Informational Displays
- Kennels – Commercial
- Laboratories and Testing Services (Limited)
- Manufacturing: Small Scale Rural
- Museums
- Non-profit Institutions
- Radio-Controlled Model Aircraft Facilities
- Oil and Gas Extraction
- Places of Worship (previously Religious Institutions)
- Radio-Controlled Model Aircraft Facilities
- Reception Facilities
- Recreational Playgrounds and Sports Fields
- Recycling Facilities
- Schools
- Surface Mining
- Truck Sales and Services: Storage
- Underground Mining
- Veterinary Clinics and Hospitals
- Well-Drilling Operations
- Wind Energy Conversions Systems – Commercial

No change is proposed to these use classifications in the other rural zoning districts: Agricultural Ranchlands, Hillsides, and Rural Residential. Within the Exclusive Agriculture zone, legally established non-conforming uses may continue to operate consistent with Chapter 4.5 of the Zoning Ordinance.

***Nurseries* Use Classification.** Revision to the use classification of *Nurseries* is proposed to address the misuse of the category as a means of illegally establishing facilities that are incompatible with agriculture and not allowed in the Exclusive Agriculture zoning district. Some facilities currently classified as nurseries frequently pave over and otherwise degrade farmland soils through imported base rock and other forms of development. The Project would revise the *Nurseries* land use classification and respective permitting processes to ensure that nurseries dependent upon paving or developing farmland soils are supportive of agriculture as defined in the Zoning Ordinance. Under the proposal, the distinction between wholesale and retail nurseries would be removed and the remaining singular land use classification would be allowed pursuant to a Special Permit application and subject to conditions that limit such development to agricultural operations.

***Agricultural Sales/Events* Use Classification.** Another revision to address the misuse of an agricultural land use classification is to require on-site agriculture for the establishment of new *Agricultural Sales/Events* development.

The County has repeatedly encountered facilities operating through the existing *Wineries* classification with only a tenuous connection, if any, to the production of wine and/or cultivation of wine grapes. Facilities that do not "clearly enhance the long-term viability of local agriculture and agricultural lands" are not permissible under the County General Plan policies and Zoning Ordinance. Under the proposed amendments, a prerequisite for new development of *Agricultural Sales/Events* facilities would be active on-site agricultural production.

***Places of Worship* Use Classification.** The Project would rename the use classification *Religious Institutions* to *Places of Worship*.

2.4.3 Development Standards

The proposed amendments would remove existing "local-serving" provisions (Zoning Ordinance § 2.20.090), which are difficult to assess and implement and involve a subjective, convoluted, project-by-project process to evaluate if the size, scale, and intensity of a project is typical of "local-serving" uses in a rural community. In place of these "local-serving" provisions, clear objective development standards would be adopted that would consistently restrict cumulative building site coverage of all non-agricultural development in all four rural zoning districts. As such, the proposed standards would be more easily understood by applicants and property owners and more easily administered by Planning staff.

The proposed maximum cumulative building site coverage per parcel in the rural zoning districts would be between 7,500 and 12,500 square feet, as determined by the Board of Supervisors. This would include all non-agricultural structures on the parcel, including residential structures. Properties with existing development that is legal but nonconforming with the proposed development standards would have the ability to re-develop but not expand the existing legal cumulative building site coverage.

One of the specific uses currently subject to the "local-serving" provisions is *Religious Institutions*, which the amendments propose to rename *Places of Worship*. In lieu of applying "local-serving" provisions, such uses would be categorized according to size, either Limited or General. Smaller-scale projects (Places of Worship—Limited) would be subject to a ministerial nondiscretionary process in the rural zoning districts. The proposed maximum limit for ministerial approval would be between 1,200 and 5,000 square feet, as determined by the Board of Supervisors. These measures will ensure ongoing RLUIPA compliance.

To support the viability of new greenhouse and mushroom farm development, specifically within the Coyote Valley Climate Resilience (-cv) Combining District, the maximum development area of 2 acres per parcel would be waived up to a cumulative area of 60 acres throughout the -cv combining district. This proposed exception to the -cv development area limitation would only apply to the development of new greenhouses and mushroom farms. Once a cumulative area of 60 acres has been developed within the -cv combining district, future greenhouse and mushroom farm development would be subject to the existing the -cv development area limitation.

2.4.4 CEQA Threshold of Significance for Agricultural Impacts

Although not required by CEQA, adopting thresholds of significance provides a consistent and clear standard for determining whether the impacts of proposed projects are likely to be significant, and is recommended by the CEQA Guidelines (Section 15064.7[b]). To evaluate and determine a proposed project's potential impact to agricultural resources, the County proposes to use the California Department of Conservation Farmland Mapping and Monitoring Program (FMMP). The FMMP prepares, updates, and maintains Important Farmland Series Maps, which

delineate agricultural lands according to soil quality and current use, which is evaluated every two years by analyzing aerial photography. There are nine land use categories tracked by FMMP, five of which are classified as farmland (also referred to in this EIR as "farmland"): Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Farmland of Local Potential. Other non-farmland categories include Grazing Land, Urban and Built-up Land, Other Land, and Water Area.

The proposed threshold of significance for project-specific agricultural impacts is determined by evaluating the area of FMMP farmland on a parcel where a new non-agricultural use is being developed. Unless otherwise affirmatively protected, farmland is presumed to be converted upon the development of new non-agricultural uses on the site. Specifically, the impact to agricultural resources would be significant if the cumulative area of the parcel(s) affected by a project consists of five or more acres of land that was delineated as one or more of the five farmland categories on the 2020 FMMP map series. If a non-agricultural project is proposed on one or more parcels with a cumulative area of five acres or more that are classified as one or more of the five FMMP farmland categories, then the Project would exceed the County's threshold and the project would have a significant impact on agricultural resources due to conversion of farmland.

2.5 Required Project Approvals

Approval of zoning ordinance amendments is a local legislative action that does not require other public agency approvals. The County of Santa Clara Planning Commission will consider and make a recommendation to the Board of Supervisors who will consider and make the final determination on the proposed ordinance and General Plan amendments.

Development and adoption of the proposed Threshold of Significance for Agricultural Impacts requires compliance with CEQA Guidelines Section 15064.7, which requires the threshold to be developed through a public review process, be supported by substantial evidence, and be adopted by the Board of Supervisors by ordinance, resolution, rule, or regulation. The public review process would consist of the PEIR process as well as the hearings before the County Planning Commission and Board of Supervisors.

Prior to approving the project, the Board must certify the PEIR, make all necessary CEQA findings, and adopt a Mitigation Monitoring and Reporting Program.

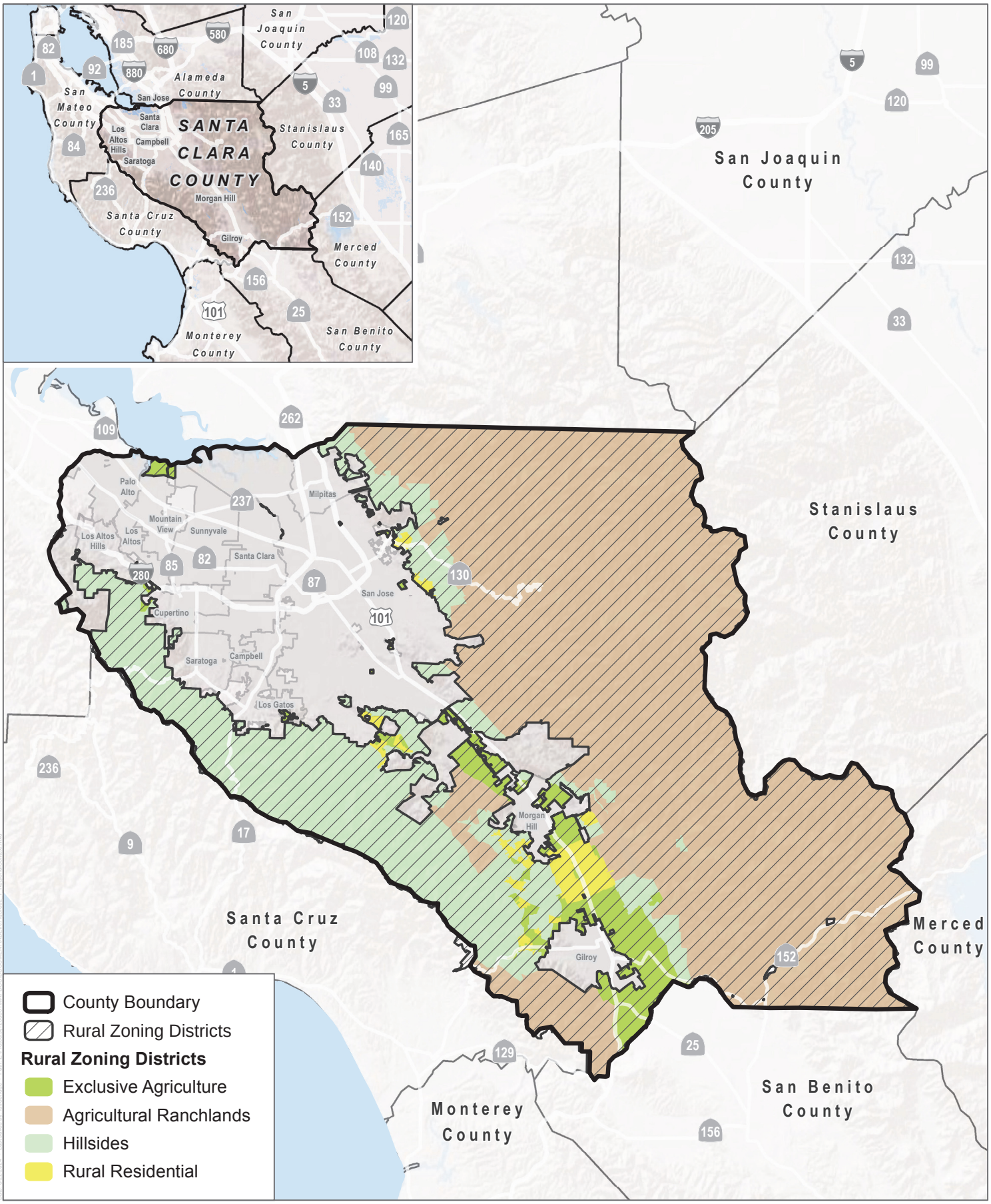
2.6 References

County of Santa Clara. 1994. *Santa Clara County General Plan*. *Book B. Part 3: Rural Unincorporated Area Issues and Policies.* Adopted December 20, 1994. https://plandev.sccgov.org/sites/g/files/exjcpb941/files/GP_BookB_HealthElement.

County of Santa Clara. 2018. *Santa Clara Valley Agricultural Plan: Investing in our Working Lands for Regional Resilience.* Accessed August 19, 2024. https://www.openspaceauthority.org/system/user_files/Documents/Grids/current_projects/SCV_ActionPlan_010318.pdf.

County of Santa Clara. 2022. Crop Report 2022. Accessed July 24, 2024. https://ag.sccgov.org/crop-reports-newsletters-monthly-agricultural-updates.

Santa Clara County Department of Agriculture (SCCDA). 2014. The Economic Contribution of Agriculture to the County of Santa Clara. Accessed June 24, 2025. https://files.santaclaracounty.gov/migrated/AG_Economic_Report_WEB_Final.pdf.



SOURCE: ESRI 2022, Santa Clara County 2022

DUDEK

0 4 8 Miles

FIGURE 2-1

Project Location

Santa Clara County Rural Zoning Ordinance Amendments EIR

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3.0 Introduction to the Environmental Analysis

3.0.1 Scope of the EIR Analysis

This section of the Program Environmental Impact Report (PEIR) discusses the environmental and regulatory setting, impacts, and mitigation measures for each of the following technical issue areas (Sections 3.1 through 3.18):

3.1 Aesthetics
3.2 Agricultural and Forestry Resources
3.3 Air Quality
3.4 Biological Resources
3.5 Cultural and Tribal Cultural Resources
3.6 Energy
3.7 Geology and Soils
3.8 Greenhouse Gas Emissions
3.9 Hazards and Hazardous Materials
3.10 Hydrology and Water Quality
3.11 Land Use and Planning
3.12 Mineral Resources
3.13 Noise
3.14 Population and Housing
3.15 Public Services and Recreation
3.16 Transportation
3.17 Utilities and Service Systems
3.18 Wildfire

The County of Santa Clara ("County") Rural Zoning Amendments and Agricultural Impact Threshold ("Project") proposes amendments to the Zoning Ordinance and establishment of a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The amendments to the Zoning Ordinance would update how development is regulated in rural zoning districts in unincorporated Santa Clara County through three primary changes to the existing ordinance: (1) clarify, simplify, and standardize the permit processes for uses directly supportive of agriculture, (2) align future development in the Exclusive Agriculture zoning district with existing County General Plan policies, and (3) replace "local-serving" provisions with objective development standards. The Santa Clara County Agricultural Threshold of Significance is intended to: (4) promote consistency in the environmental review process and (5) protect farmland. The proposed amendments to the zoning ordinance would primarily affect the Exclusive Agriculture, Agricultural Ranchlands, Hillsides, and Rural Residential zoning districts, although the revised zoning classifications and definitions would apply in all zoning districts. The proposed threshold of significance would apply to all lands subject to the jurisdiction of the County, and would thus include parcels in the unincorporated area that contain farmland outside the four rural zoning districts.

Environmental Setting

According to subdivision (a) of Section 15125 of the California Environmental Quality Act (CEQA) Guidelines, an EIR must include a description of the existing physical environmental conditions in the vicinity of the project as they exist at the time when the Notice of Preparation (NOP) is published. This "environmental setting" will normally constitute the "baseline condition" against which project-related impacts are compared. Therefore, the baseline conditions for this PEIR, unless noted otherwise, are based on conditions that existed in March/April 2022, when the NOP was published and circulated. The CEQA Guidelines recognize that the data for establishing an environmental baseline are flexible. Because physical environmental conditions may vary over a range of time, the use of environmental baselines that differ from the date of the NOP is reasonable and appropriate in certain circumstances when doing so results in a more accurate or conservative environmental analysis.

Section Format

Each section begins with a description of the project's **environmental setting** and **regulatory setting** as it pertains to a particular issue.

The regulatory setting provides a summary of applicable federal, state, and local laws, regulations, plans, policies that are relevant to each issue area. The regulatory setting description in each section is followed by a discussion of **project-level impacts**. Because this EIR is a programmatic EIR, the analysis of project-level impacts will necessarily be at a programmatic level. The project-specific impacts discussion is followed by an analysis of the **cumulative impacts** of the project. The impact portion of each section includes an impact statement, prefaced by a number for ease of identification followed by an analysis of that impact and a determination of whether the impact would be significant (that is, exceed the applicable threshold) or less than significant (that is, below the applicable threshold). If a significant impact is identified, one or more mitigation measures are recommended, if available, to reduce the severity of the impact. All **mitigation measures** are identified at the end of each impact discussion. The degree to which the identified mitigation measure(s) would reduce the impact is also described. The project-level impact section is followed by an analysis of the cumulative impacts.

An example of an impact statement is shown below.

4.2-1: The proposed project could have a substantial adverse effect on a candidate, sensitive, or special-status species.

A discussion of potential impacts of the Project is presented in paragraph form. The impacts associated with implementation of the project are evaluated and compared to the threshold of significance for the particular impact. The analysis discusses the applicable local (including General Plan goals, policies, implementing actions, etc.), State, and federal laws and regulations/standards that would reduce impacts, and assumes that the project would comply with them. In many instances, the actions that are necessary to reduce a project impact are already required by compliance with existing laws or requirements. Further, it is assumed that the project applicant would obtain all necessary permits and comply with all required conditions of those permits. The impact analysis concludes with a determination of the impact's significance in **bold type** (e.g.**, potentially significant impact, less-than-significant, no impact**).

Mitigation Measures

Following each potentially significant impact identified in the environmental analysis, a discussion of feasible mitigation measures is included. As a policy-level EIR (zoning ordinance), whenever possible, the PEIR will identify County policies that would avoid or reduce the environmental impact. This approach is discussed in CEQA Guidelines Section 15126.4(a)(2), which reads in part: "In the case of the adoption of a plan, policy, regulation, or other public project, mitigation measures can be incorporated into the plan, policy, regulation, or project design."

If existing or proposed policies and regulations would not reduce the impact to a less-than-significant level, additional feasible mitigation measures will be discussed.

Mitigation measures, if applicable, are numbered and presented in the following format.

BIO-1: Statement of what, if any, mitigation measures are required.

CEQA Guidelines Section 15370 defines mitigation as:

- Avoiding the impact altogether by not taking a certain action or parts of an action;
- Minimizing impacts by limiting the degree of magnitude of the action and its implementation;
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and
- Compensating for the impact by replacing or providing substitute resources or environments.

In some instances, contribution of a project's fair-share to an established program provided there is a "reasonable plan for mitigation" and fair-share contributions are clearly designated to mitigate the impact are considered adequate mitigation for both project and cumulative impacts under CEQA.[1]

Terminology Used in the PEIR

This PEIR uses the following terminology to describe environmental effects of the proposed project:

Standards of Significance: A set of criteria used by the lead agency to determine at what level or "threshold" an impact would be considered significant. Standards of significance used in this PEIR include those set forth in CEQA Guidelines Section 15065 (Mandatory Findings of Significance); those derived from questions set forth in Appendix G to the CEQA Guidelines; criteria based on regulatory standards of local, state, and federal agencies; and criteria based on goals and policies identified in the County of Santa Clara General Plan and other applicable planning documents. In fashioning criteria based on these sources, County staff and the PEIR preparers have also relied on their own professional judgment and experience in some instances.

[1] See *Save Our Peninsula Com. v. Monterey County Bd. of Supervisors,* (2001) 87 Cal.App.4th 99, 141; and CEQA Guidelines, §15130, subd. (a)(3) ([recognizing that a project's contribution to a cumulative impact may be less than cumulatively considerable where "the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact"]). See also *Anderson First Coalition v. City of Anderson,* (2005) 130 Cal.App.4th 1173).

Less-than-Significant Impact: A project impact is considered less than significant when it does not reach the standard of significance, indicating that there would be no substantial change in the environment. No mitigation is required for less-than-significant impacts.

Potentially Significant Impact: A potentially significant impact is an environmental effect that could cause a substantial adverse change in the environment; however, additional information is needed regarding the extent of the impact to make the determination of significance. For CEQA purposes, a potentially significant impact is treated as if it were a significant impact.

Significant Impact: A project impact is considered significant if it results in a substantial adverse change in the physical conditions of the environment. Significant impacts are identified by the evaluation of project effects in the context of specified significance criteria. When available, potentially feasible mitigation measures and/or project alternatives are identified to reduce these effects to the environment.

Significant and Unavoidable Impact: A project impact is considered significant and unavoidable if it results in a substantial adverse change in the physical conditions of the environment and there are no potentially feasible mitigation measures and/or project alternatives available to reduce these effects to less than significant.

3.0.2 Cumulative Analysis

According to CEQA, "cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines, Section 15355). CEQA requires that cumulative impacts be discussed when the "project's incremental effect is cumulatively considerable" (CEQA Guidelines, Section 15130 (a)).

An analysis of cumulative impacts follows the evaluation of project impacts under existing conditions in each section in Chapter 3. As defined in CEQA Guidelines, Section 15355, cumulative impacts refer to two or more past, present and/or reasonably foreseeable future actions which, when considered together, result in a significant impact. The cumulative impacts analyze the extent to which the project would contribute to cumulative impacts, and whether that contribution would be cumulatively considerable (i.e., would cause a cumulative condition to be significant and/or substantially increase the severity of a cumulative impact that would be significant whether or not the project was developed).

The cumulative setting for the proposed project includes other projects that would occur within the County (i.e., general plan and policy updates, zoning amendments) or policies that govern non-discretionary actions within the County (i.e., statewide regulations). For the purposes of this PEIR and analysis of cumulative projects, the analysis of cumulative impacts relies primarily on the plans for land use and growth in Santa Clara County.

Santa Clara County Housing Element Update. The Housing Element is a mandatory element, or chapter, of the General Plan that primarily addresses the housing needs of the unincorporated areas in the County of Santa Clara. A Housing Element must be updated on an eight-year cycle or as otherwise determined by the State Department of Housing and Community Development (HCD). Housing Element update cycles now correlate with regional transportation processes, as conducted by the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) (County of Santa Clara 2022a). According to the Plan Bay Area 2050 update, Santa Clara County is projected to result in a 73 percent growth in households and 46 percent growth in jobs through 2050 (MTC/ABAG 2021).

Agricultural Employee Housing Zoning Ordinance Amendments. Santa Clara County adopted Zoning Ordinance amendments to streamline the permitting process for agricultural employee housing within the unincorporated county. The amendments provide a range of options to address critical housing needs of farmers and ranchers by enabling the provision of housing for workers and families to occur quickly and at lower permit costs (County of Santa Clara 2022b).

Senate Bill 9. Senate Bill (SB) 9, the California Housing Opportunity and More Efficiency (HOME) Act, streamlines the process for a homeowner to create a duplex or subdivide an existing lot in a U.S. Census designated urban or urbanized area. Any new housing created as a result of this bill must meet a specific list of qualifications that protects historic districts, preserves environmental quality and the look of communities, and prevents tenants from being displaced(State of California 2022). While most designated urban or urbanized areas occur outside of the rural zoning districts, County GIS data indicates there are parcels, particularly in the rural residential zones near San Martin, that may be subject to SB 9. There are very few parcels in the rural zoning districts that are subject to SB 9.

3.03 References

County of Santa Clara. 2022a. “Housing Element Update.” Notice. 2023-2031. 2022.

County of Santa Clara. 2022b. “Agricultural Employee Housing Zoning Ordinance Amendment.” Notice. 2022.

MTC-ABAG (Metropolitan Transportation Commission – Association of Bay Area Governments). 2021. *Plan Bay Area 2050. The Final Blueprint. Growth Pattern.* Updated January 21, 2021.

State of California. 2022. The California Home Act. 2022.

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3.1 Aesthetics

This section of the Program Environmental Impact Report (PEIR) evaluates potential impacts to the visual appearance and character of the rural zoning districts of unincorporated areas of Santa Clara County (project area) from implementation of the proposed County of Santa Clara ("County") Rural Zoning Amendments and Agricultural Impact Threshold ("Project"). This section includes a discussion of the qualitative aesthetic characteristics of the existing environment that would potentially be degraded by implementation of the Project. The following evaluation assesses the potential impacts related to visual character, scenic vistas, scenic highways, and light and glare.

3.1.1 Environmental Setting

The visual setting of Santa Clara County is comprised of both the built and natural environments, as well as the interface between the two. Built environments include commercial, office, residential, industrial, institutional, and public uses. Natural environments include mountains, hillsides, creeks, stream sides, Baylands, ranchlands, agricultural lands and parks.

Scenic Vistas and Corridors

Scenic vistas include the Diablo Range to the east, Santa Cruz Mountains to the west, undeveloped Baylands at the southern tip of San Francisco Bay, ranchlands in the valley floor, agricultural lands in the southern portion of the County, parks such as Henry Coe State Park and San Francisco Bay National Wildlife Refuge, and creeks and stream sides throughout the County. Of these scenic features, the Diablo Range and Santa Cruz Mountains play a major role in defining a majority of County's open space areas (County of Santa Clara. General Plan Draft Environmental Impact Report, 1994). These landforms not only create dramatic backdrops against developed communities, but also provide extensive environmental and public benefits to residents because they contain a majority of native plant and animal species within the hilly and mountainous terrain.

Scenic viewsheds vary by location and community and can include ridgelines, unique rock outcroppings, waterfalls, ocean views or various other unusual or scenic landforms. The varied topography of Santa Clara County allows for an assortment of long-range views from the valley floor to the foothills and mountains, as well as long range views from the foothills and mountains to the valley floor. The impact of the Project with respect to these scenic resources is addressed below in Section 3.1.5, Environmental Impacts.

Scenic Highways

In 1963, the State Legislature established the California Scenic Highway Program. Under the Program guidelines, a highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view.

Within Santa Clara County, there is only one Officially Designated state scenic highways, Route 9, that extends from Saratoga to Los Gatos. There are also several Eligible state scenic highways which include Route 17, extending from Santa Cruz to Los Gatos, Route 35, extending from Half Moon Bay to Santa Cruz Mountains, Route 152 near San Felipe, Route 156, extending from Castroville to northeast Hollister, and Route 280, extending from San Francisco to Campbell (Caltrans 2019).

In addition to state-designated scenic highways, Santa Clara County has adopted the Scenic Road System for the County. The Scenic Road System includes three basic classifications: 1) state scenic routes within the country (which includes all state highways currently designated by the state as scenic highways or purposed for such designation); 2) county scenic routes, which includes scenic freeways (those not proposed for state scenic highway designation) and expressways, scenic arterial routes, and scenic rural roads; and 3) local roads requiring scenic protection (County of Santa Clara 1994a*).*

Visual Character

Santa Clara County is a large and visually diverse area. The visual setting of Santa Clara County is comprised of three basic landscape areas: 1) the flat bayside and valley lands that extends through the center of the County from San Francisco Bay to Gilroy; 2) the semi-arid hills of the Diablo Range to the east; and 3) luscious, steep-sided slopes of the Santa Cruz Mountains to the west (County of Santa Clara1994b). The project area includes only the unincorporated areas of Santa Clara County. The unincorporated areas in the eastern and southwestern reaches of the County are composed largely of sparsely populated land. The unincorporated areas in the northern/central portion of the County consist of noncontiguous land areas. These unincorporated areas are shown in Figure 2-1, Project Location. The project area is limited to unincorporated County lands. The amendments to the Zoning Ordinance would primarily affect the four rural zoning districts (Exclusive Agriculture, Agricultural Ranchlands, Hillsides, and Rural Residential) as shown in Figure 2-2, although changes to use classifications and definitions would apply countywide. In addition, the proposed Agricultural Impact Threshold would apply to all of the zoning districts in the County.

The overall characteristics of the four rural zoning districts are described below.

Exclusive Agriculture

Exclusive Agriculture zoning districts are dominantly located in the southcentral portions of Santa Clara County. According to the County's Zoning Ordinance, the purpose of the Exclusive Agriculture zoning district, also known as the A district, is to preserve and encourage the long-term viability of agriculture and agricultural lands, recognizing the vital contributions agriculture makes to the economy and quality of life within the county. The intent of this district is to reserve those lands most suitable for agricultural production for agricultural and appropriate related uses. This zoning district provides stability for ongoing agricultural operations and provide for new uses necessary to support a viable local agriculture industry. This district is also intended to retain open space uses those lands which may be suitable for future urbanization until they are included within a city's urban service area and public facilities and services can be economically provided, consistent with community plans and objectives. This district is meant to apply to all portions of the county designated as Agriculture: Large-Scale, Agriculture: Medium-Scale, and Open Space Reserve in the general plan (County of Santa Clara 2003).

Agricultural Ranchlands

Agricultural Ranchlands lands are in in the southwestern and eastern portions of Santa Clara County. According to the County's Zoning Ordinance, the purpose of Agricultural Ranchlands district, also known as the AR district, is to preserve ranching, the natural resources, and the rural character of the areas to which it applies. Permitted uses include ranching or agriculture, low-intensity recreation, mineral extraction, and land in its natural state. Very-low-intensity residential, commercial, industrial and institutional uses may also be allowed if they are sized to primarily serve the rural ranchland residents or are necessary for the enhancement and protection of the natural resources

of the area and do not require a substantially higher level of service than presently provided. This district is meant to apply to all parcels designated Ranchlands in the General Plan (County of Santa Clara 2003).

Hillsides

The Hillsides are dominantly located on the along the western side of the Santa Clara County, travelling from Los Altos Hills to Gilroy. According to the General Plan EIR, some of the character-defining features of the Hillsides Planning Area include the rolling hillsides, the Santa Clara Valley, oak woodlands, riparian areas and orchards (County of Santa Clara 1994b). According to the County's Zoning Ordinance, the purpose of the Hillside district, also known as the HS district, is to preserve mountainous lands unplanned or unsuited for urban development primarily in open space and to promote those uses which support and enhance a rural character, which protect and promote wise use of natural resources, and which avoid the risks imposed by natural hazards found in these areas. These lands are watersheds and may also provide such important resources as minerals, forests, animal habitat, rare or locally unique plant and animal communities, historic and archeological sites, scenic beauty, grazing lands, and recreational areas. Additionally, lands zoned Hillside define the setting or viewshed for the urban area of Santa Clara County (County of Santa Clara 2003).

Rural Residential

Rural Residential Areas are in San Martin, located in the southern region of Santa Clara County. According to the County's Zoning Ordinance, the purpose of the Rural Residential district, also known as the RR district, is to permit rural residential development in certain limited unincorporated areas of Santa Clara County designated by the General Plan. Residential, agricultural and open space uses are the primary uses intended within the district (County of Santa Clara 2003).

3.1.2 Relevant Plans, Policies, and Ordinances

Federal

There are no federal regulations related to aesthetics relevant to the Project.

State

The following state regulations pertaining to aesthetics would apply to the Project.

California Scenic Highway Program

The State Scenic Highway Program was created in 1963 to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. Through the California Scenic Highway Mapping Program, the California Department of Transportation (Caltrans) designates routes that are eligible to become state or county scenic highways, as well as historic parkways. These determinations are based on the scenic value of the lands surrounding these roadways, as well as how readily visible these resources are to those driving on the roadway. As described above, Route 9, which extends from Saratoga to Los Gatos, is an officially designated scenic highway.

California Building Code

The California Building Code, Part 2 of Title 24 in the California Code of Regulations (CCR), is based on the International Building Code and combines three types of building standards from three different origins:

- Building standards that have been adopted by State agencies without change from building standards contained in the International Building Code.
- Building standards that have been adopted and adapted from the International Building Code to meet California conditions.
- Building standards, authorized by the California legislature, that constitute extensive additions not covered by the International Building Code that have been adopted to address particular California concerns.

Title 24, California Building Standards Code, consists of regulations to control building standards throughout the state. The following components of Title 24 include standards related to lighting:

Title 24, Part 1 – California Building Code / Title 24, Part 3 – California Electrical Code

The California Building Code (Title 24, Part 1) and the California Electrical Code (Title 24, Part 3) stipulate minimum light intensities for pedestrian pathways, circulation ways, parking lots, and paths of egress.

Title 24, Part 6 – California Energy Code

The California Energy Code (Title 24, Part 6) stipulates allowances for lighting power and provides lighting control requirements for various lighting systems, with the aim of reducing energy consumption through efficient and effective use of lighting equipment. Section 130.2 sets forth requirements for outdoor lighting controls and luminaire cutoff requirements for non-residential uses. All outdoor luminaires rated above 150 watts shall comply with the backlight, up light, and glare (BUG) ratings in accordance with IES TM-15-11, Addendum A, and shall be provided with a minimum of 40% dimming capability activated to full on by motion sensor or other automatic control. This requirement does not apply to streetlights for the public right of way, signs, or building facade lighting.

Section 140.7 establishes outdoor lighting power density allowances in terms of watts per area for lighting sources other than signage for non-residential uses. The lighting allowances are provided by the Lighting Zone, as defined in Section 10-114 of the California Energy Code. Under Section 10-114, all urban areas within California are designated as Lighting Zone 3. Additional allowances are provided for Building Entrances or Exits, Outdoor Sales Frontage, Hardscape Ornamental Lighting, Building Facade Lighting, Canopies, Outdoor Dining, and Special Security Lighting for Retail Parking and Pedestrian Hardscape.

Section 130.3 stipulates sign lighting controls with any outdoor sign that is on during both day and nighttime hours must include a minimum 65% dimming at night. Section 140.8 of the California Energy Code sets forth lighting power density restrictions for signs.

Local

The following local/regional regulations pertaining to aesthetics would apply to the Project.

County of Santa Clara General Plan

The Growth and Development Element of the General Plan provides the following goals and policies potentially relevant to the project area (County of Santa Clara. 1994-2010 *Santa Clara County General Plan*. *Book B, 1994)*:

R-GD 3 Land uses and development permitted under County jurisdiction shall be consistent with the following major County policies: a. conservation of natural resources; b. avoidance of natural hazards and the prevention of pollution which could pose a threat to public health, safety, and welfare; c. minimizing demand for public services and costs to the general public of providing and maintaining services; d. preservation of rural character, rural lifestyle opportunities, and scenic resources; e. preservation of agriculture; and f. preventing unwanted or premature development that would preclude efficient conversion to urban uses and densities in areas suitable and intended for future annexation

The Transportation Element of the General Plan provides the following goals and policies potentially relevant to the project area.

R-TR 13 Maintain and enhance the scenic quality of county roadways.

The Parks and Recreation Element of the General Plan provides the following goals and policies potentially relevant to the Project:

R-PR 36 Local and state roads and highways traversing Santa Clara County's scenic rural and urban areas should be designated and protected as local or state scenic highways.

R-PR 41 The visual integrity of the scenic gateways to the South County (Pacheco Pass, Hecker Pass, Route 101 south of Gilroy, and a Coyote greenbelt area north of Morgan Hill) should be protected.

R-PR 52 Scenic routes which are historic routes into or through the county should be so designated and historic sites and features along them identified and enhanced where appropriate.

The Resource Conservation Element of the General Plan provides the following goals and policies potentially relevant to the Project (County of Santa Clara. 1994-2010 *Santa Clara County General Plan*. *Book B, 1994)*:

R-RC 39 Within areas immediately adjacent to the stream buffer area, new development should minimize environmental impacts on the protected buffer area, and screening of obtrusive or unsightly aspects of a project should be considered as a means of preserving the scenic value of riparian areas.

R-RC 95 The scenic and aesthetic qualities of both the natural and built environments should be preserved and enhanced for their importance to the overall quality of life for Santa Clara County.

R-RC 96 The general approach to scenic resource preservation for the rural unincorporated areas consists of the following strategies: 1. Minimize scenic impacts in rural areas through control of allowable development densities. 2. Limit development impacts on highly significant scenic resources, such as, ridgelines, prominent hillsides, streams, transportation corridors and county entranceways.

R-RC 97 Scenic qualities of the rural areas of Santa Clara County shall be maintained and enhanced through existing land use and development policies. Development compatible with scenic resource conservation should be encouraged.

R-RC 98 Hillsides, ridgelines, scenic transportation corridors, major county entryways, stream environments, and other areas designated as being of special scenic significance should receive utmost consideration and protection due to their prominence, visibility, and overall contribution to the quality of life in Santa Clara County.

The Land Use Element of the General Plan provides the following goals and policies potentially relevant to the project area (County of Santa Clara. 1994-2010 *Santa Clara County General Plan*. *Book B, 1994)*:

Hillsides

R-LU 16 Mountainous lands and foothills unsuitable and/or unplanned for annexation and urban development. Lands so designated shall be preserved largely in natural resource related and open space uses in order to: a. support and enhance rural character; b. protect and promote wise management of natural resources; c. avoid risks associated with the natural hazards characteristic of those areas; and d. protect the quality of reservoir watersheds critical to the region's water supply.

R-LU 17 These lands also contain such important resources as grazing lands, mineral deposits, forests, wildlife habitat, rare or locally unique plant and animal communities, historic and archeological sites, and recreational and scenic areas of regional importance, which serve to define the setting for the urbanized portions of Santa Clara County. Given the importance of these lands to the county's overall quality of life, allowable uses shall be consistent with the conservation and wise use of these resources and levels of development shall be limited to avoid increased demand for public services and facilities.

Ranchlands

R-LU 36 The general intent of the Ranchlands designation is to maintain the existing conditions of very low intensity uses, rural lifestyle, and limited public access. Development policies shall protect and enhance the continued use of the land for ranching.

The South County Joint Area Plan of the General Plan provides the following goals and policies potentially relevant to the Project (County of Santa Clara 1994b):

SC 15.8 Natural streamside and riparian areas should be left in their natural state, in order to preserve their value as percolation and recharge areas, natural habitat, scenic resources, recreation corridors and for bank stabilization. If flood control projects needed to protect presently existing development make this infeasible, disruption should be minimized, maintaining slow flow and stable banks through design and other appropriate mitigation measures.

SC 16.1 The South County includes a variety of types of open space areas, including: the Valley floor, stream corridors, lands around reservoirs, lands adjacent to scenic highways, the valleys, and the mountain areas beyond the foothills. Of these geographic areas, stream corridors lands around reservoirs, lands which provide greenbelts for the cities, and significant hillside features should receive highest priority for preservation as open space.

SC 16.6 The visual integrity of the scenic gateways to the South County (Pacheco Pass, Hecker Pass, Route 101 south of Gilroy, and a Coyote greenbelt area north of Morgan Hill) should be protected.

SC 16.8 The hillside/mountain areas to the east and the west should be limited to low-intensity rural uses compatible with open space in order to maintain their integrity as the South County's major scenic and natural resources. The Preservation 2020 Task Force recommendations should be used in that context.

SC 17.1 The County should continue its adopted land use policies for the unincorporated area in the South County in order to: a. promote a productive, primarily agricultural rural area; b. balance the needs of rural residents and landowners and the needs for effective natural resource management, enhanced rural scenic quality, and lands for planned urban growth, rural activities, and long term open space.

SC 17.11 In order to maintain the environmental quality and appearance of the rural area, the County should: a. consider adopting additional guidelines for the siting and landscaping of some types of rural land uses, and/or b. consider adopting such guidelines for certain areas, in addition to the San Martin area where design guidelines have already been adopted (e.g.: greenbelt areas, and scenic corridors like Pacheco Pass, Hecker Pass, and Paradise Valley-Watsonville Road.) c. continue to strengthen the consistent and fair enforcement of regulations relating to land use and maintenance.

Santa Clara County Zoning Ordinance

Santa Clara County maintains a variety of review procedures and design guidelines to help protect visual and scenic resources. The following sections provide a brief overview of the applicable sections.

Article 3, Section 20 – -d Design Review Combining Districts

The purpose of the -d Design Review combining districts is to designate certain visually and environmentally sensitive areas as requiring design review, with the intention of mitigating adverse visual impacts of development and encouraging quality design. Development within areas zoned "-d" (Design Review Overlay) shall be subject to the provisions of Chapter 5.50: Design Review. Certain areas designated in the ordinance may have additional policies that apply. Currently two such areas are designated: the Santa Clara Valley Viewshed (-d1) and Milpitas Hillsides (-d2).

Article 3, Section 30 – -sr Scenic Roads Combining District

The purpose of the -sr Scenic Roads combining district is to protect the visual character of scenic roads in Santa Clara County through special development and sign regulations. The -sr combining district applies to all designated scenic roads in unincorporated Santa Clara County. It includes detailed information on setbacks and design reviews (*Section 3.30.030 Setbacks and Design Review*), sign regulations (*Section 3.30.040 Signs*) and scenic road inventories (*Section 3.30.050 Scenic Roads Inventory*) in unincorporated Santa Clara County.

Article 3, Section 50 – -h Historic Preservation Combining District

The -h combining zoning district is intended to provide for the preservation of historic sites, historic structures, buildings of architectural significance, and other natural and human-made heritage resources which are included in the National Register of Historic Places, or which are otherwise designated as a registered cultural heritage resource. Historic Preservation zoning districts may also be utilized to protect and conserve sites and areas which are of special character, architectural value, or aesthetic interest, if such areas contain at least one registered historic place or resource. Such heritage resources deserve special consideration for preservation and enhancement due to the contribution they make to our collective understanding of the historic development and cultural heritage of the county, region, state, or nation.

Article 4, Section 40 – Signs

The purpose of this section, Signs, is to promote attractive signage that serves as an economic and aesthetic asset, comprehensively addresses aesthetic concerns of the public regarding visual clutter and visual blight in the environment and ensures that traffic safety hazards are not created. It includes detailed information on sign illumination lighting for different land uses, from which Sections 4.40.040 (Sign Illumination) and 4.40.050 (Nonresidential Uses—Attached Signs) pertain to the Project.

Article 5, Section 40 – Architecture and Site Approval

Architecture and site approval (ASA) is typically required in conjunction with certain commercial, institutional, office, industrial or multiple family residential uses, including such uses within the rural base districts. The purpose of ASA is to maintain the character and integrity of zoning districts by promoting quality development in harmony with the surrounding area, through consideration of all aspects of site configuration and design, and to generally promote the public health, safety and welfare.

Article 5, Section 50 – Design Review

The purpose of design review is to encourage quality design and to mitigate potential adverse visual impacts of development. Design review is required within the "-d" or "-h" combining zoning districts; within 100 feet of designated scenic roads on lots to which the "-sr" combining district applies; as a condition of approval of certain land development applications where necessary and appropriate to address specific design or visual impact issues or to implement certain mitigation measures established by the environmental review process; or when mandated by the zoning ordinance for certain land uses.

3.1.3 Thresholds of Significance

According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, a project would normally have a significant effect on the environment with respect to aesthetics if the project would:

AE-1: Have a substantial adverse effect on a scenic vista.

AE-2: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

AE-3: Substantially degrade the existing visual character or quality of the site and its surroundings.

AE-4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

3.1.4 Methodology

Aesthetic/Visual Character Analysis

The aesthetic/visual character analysis considers whether implementation of the Project would represent a potentially significant impact on the visual setting of the rural zoning districts and the extent to which allowable land uses would be aesthetically compatible with neighboring uses in terms of agricultural uses. This section

addresses protected views or view corridors and identifies potential visual impacts that could result from implementation of the Project.

Light and Glare Analysis

The light and glare analysis describes the existing light and glare environments in the project area, the potential light and glare sources under the Project, and evaluates whether the Project would create a new source of substantial light or glare which would adversely affect day or nighttime views in the project area.

3.1.5 Environmental Impacts

Impact AE-1: Would the project have a substantial adverse effect on a scenic vista?

As discussed in Section 3.1.1, Environmental Setting, Santa Clara County contains a variety of unique and significant visual resources. The discussion provided herein focuses on scenic vistas and corridors, excluding the Project's impacts on state and county scenic highways, which are addressed below.

The Project recognizes scenic highways and corridors (or routes), and hillsides and mountains, Baylands, ranchlands, agricultural lands, parks and creeks and stream sides as valuable scenic resources. The Project would be in unincorporated, non-urbanized areas of the County. The Project would promote agricultural uses within the rural zoning districts of the County. The Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. Although the Project would not directly construct new development, the Project has the potential to result in new agriculture-supportive development that was not previously permitted by right in the rural zoning districts. With this growth, viewsheds or scenic vistas would have the potential to be interrupted by new buildings and structures, which could detract from the quality of those vistas. For this reason, the Project would have the potential to impact scenic vistas in Santa Clara County. However, the Project would encourage smaller scale, agriculture-supportive development, and disallow several non-compatible uses within the Exclusive Agriculture zoning district, which would minimize changes within scenic vistas. Further, there are a variety of existing plans and policies (i.e., Santa Clara Zoning Ordinance, General Plan policies), which would serve to minimize these potential impacts.

Several sections of the Zoning Code such as Article 5, Section 40 (Architecture and Site Approval) and Article 5, Section 50 (Design Review) regulate physical development by controlling the appearance of new development. (refer to Section 4.1.2, Relevant Plans, Policies, and Ordinances).

For larger development projects (which do not qualify for the proposed streamlining provisions), requirements relating to a Special Permit (SP) or Use Permit (UP) would ensure that new development projects would be held to appropriate development standards of the County Code and subject to further review, including visual compatibility. Compliance with these provisions would be ensured through the County's development review and building permit process.

In addition to aspects of the existing regulatory framework that would lessen potential impacts to scenic vistas, a number of goals and policies of the General Plan, listed in Section 3.1.2, Relevant Plans, Policies,

and Ordinances, would also serve to minimize potential impacts by preventing degradation of existing vistas and promoting actions that would make existing scenic vistas more accessible to people. The County's General Plan Policies R-RC 95, R-RC 96, and R-LU 17, in particular, would ensure that scenic vistas in the project area are protected.

Due to potential new development that could result from the Project, the potential for a substantial adverse impact to a scenic vista could exist. However, compliance with existing regulatory setting, the goals and policies contained in the General Plan, and the Project's emphasis on smaller scale agriculture-supportive development and preservation of agricultural landscapes would serve to lessen potential impacts to scenic vistas associated with implementation of the Project. Additionally, approval of the Project itself does not authorize construction of development that would affect scenic vistas. Therefore, impacts would be **less than significant**.

Impact AE-2 Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The Project would be located within the unincorporated areas of Santa Clara County. Within Santa Clara County, there is only one Officially Designated state scenic highway, Route 9, that extends from Saratoga to Los Gatos. There are also several Eligible state scenic highways which include Route 17, extending from Santa Cruz to Los Gatos, Route 35, extending from Half Moon Bay to Santa Cruz Mountains, Route 152 near San Felipe, Route 156, extending from Castroville to northeast Hollister, and Route 280, extending from San Francisco to Campbell (Caltrans, "California State Scenic Highways," 2019).

While some development or changes could occur near adopted and eligible scenic highways, the development or changes that would occur would be minimal and would only occur near small stretches of the scenic highways. There are no other Eligible scenic highways that are within the areas surrounding the project area. As such, the Project would not damage scenic resources within a state scenic highway.

Further, a number of General Plan goals and policies listed in Section 3.1.2 would also serve to minimize potential impacts to scenic highways by preventing degradation of existing vistas, as well as by promoting actions that would make existing scenic vistas more accessible to individuals. Therefore, no significant impact would result from implementation of the Project with respect to the substantial alteration of scenic resources within a designated scenic highway, and impacts would be **less than significant**.

Impact AE-3 Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

The Project involves updates to the Zoning Ordinance to regulate development in rural zoning districts and accommodate agriculture-supportive uses. This type of land use development is consistent with the General Plan Policies R-RC 95, R-RC 96 and R-RC 97 that focus on preserving and enhancing aesthetic qualities of rural areas of the County. The Project would contribute to this through controlling development densities and limiting development impacts on the visual character of the County, thereby complementing the visual appeal of the site and its surroundings. Future individual projects resulting from the Project would be similar in nature to existing rural/agricultural uses and would therefore be consistent with the existing visual character and quality of the surrounding area.

Impacts would be **less than significant**.

Impact AE-4 Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The Project would include portions of unincorporated Santa Clara County, which are in a rural context. This means that some level of lighting and light pollution is already present in the area from passing vehicles on nearby streets and highways and rural residential development in the area.

The Project involves updates to the Zoning Ordinance to regulate development in rural zoning districts and accommodate agriculture-supportive uses. The Project would allow for additional development throughout the project area, which would have the potential to introduce new or additional sources of light into the project area and its surroundings. The County's Zoning Ordinance (Article 4 of the County Code) contains provisions intended to limit adverse light and glare impacts. For example, Section 4.40.040 (Sign Illumination) and 4.40.050 (Nonresidential Uses – Attached Signs) of Chapter 4.40 (Signs) require that no lighted signs be placed or directed so as to permit illumination to be directed or beamed upon a public street, highway, sidewalk or adjacent premise. Additionally, the California Building Code contains standards for outdoor lighting that are intended to reduce light pollution and glare by regulating light power and brightness, shielding, and sensor controls. These regulations would serve to mitigate potential impacts of development facilitated under the Project. Compliance with these and other applicable provisions of the County's Zoning Ordinance would be enforced through the County's development review and building permit process.

The new or additional sources of light would have the potential to affect day and nighttime views. However, due to the existing high levels of light and glare in the project area, and with implementation of aspects of the existing regulatory framework and policies associated with light and glare, the Project's impact would be **less than significant**.

3.1.6 Cumulative Impacts

Cumulative projects located in the project area would have the potential to result in a cumulative impact to aesthetic resources if in combination they would result in the removal or substantial adverse change of one or more features that contribute to the valued visual character or image of a neighborhood, community, state scenic highway, or localized area, such as a landmark (designated), historic resource, trees, or rock outcropping. The Project includes updates to the Zoning Ordinance to regulate development in rural zoning districts and accommodate agriculture-supportive uses. As stated in the analysis above, the zoning will occur within the rural zoning districts in unincorporated Santa Clara County.

Scenic Vistas and Scenic Resources

Despite urbanization, there are several scenic resources in the broader Santa Clara County, including hillsides, mountains, Baylands, ranchlands, agricultural lands, parks, and creeks and stream sides. The project area, along with cumulative projects, are within a non-urban environment. In general, visual resource impacts of the cumulative projects would be site-specific and would not be expected to combine with other projects in separate viewsheds to create a cumulative impact. However, other projects in close proximity to the project area could cumulatively change the scenic character of the area in combination with the Project. These projects would be required to comply with the development standards of the Zoning Ordinance that include massing, setbacks, and height limits. As with the Project, related projects would be subject to goals, policies, and regulations that reduce impacts on scenic resources to a less-than-significant level. If non-compliance with a particular regulation would result in a significant

impact, mitigation would be required to reduce impacts to the extent feasible. Therefore, impacts would be **less than significant** and the Project would not result in a cumulatively considerable impact related to scenic vistas or conflicts with scenic quality regulations.

Visual Character and Quality

The Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. Future individual development projects resulting from the Project would be similar in nature to existing rural/agricultural uses and would, therefore, be consistent with the existing visual character and quality of the surrounding area. Additionally, development allowed under the Project would be subject to goals, policies, and regulations that reduce impacts of the Project on visual character and quality to a less than significant level; the Project's contribution to County- wide, cumulative impacts would not be cumulatively considerable. Cumulative impacts of the Project related to visual character and quality would therefore be **less than significant**.

Light or Glare

The non-urbanized project area setting supports some level of nighttime lighting sources. The Project would have the potential to result in an incremental increase in light and glare associated with new development in the project area. In combination with cumulative projects, including those that may increase development within rural areas of the County, substantial impacts resulting from new sources of light and glare could occur. However, new lighting installed as a result of the Project, as well as cumulative projects, would be required to comply with applicable regulations included in the Zoning Ordinance and CBC Title 24 for new development. Therefore, impacts would be **less than significant** and the Project would not result in a cumulatively considerable impact related to light and glare.

3.1.7 Mitigation Measures

No mitigation is required.

3.1.8 Level of Significance After Mitigation

No significant unavoidable adverse impacts related to aesthetics have been identified. Aesthetic impacts would be less than significant.

3.1.9 References

Caltrans (California Department of Transportation). 2019. "California State Scenic Highways." https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways.

County of Santa Clara. 1994a. *Santa Clara County General Plan*. *Book B. Part 3: Rural Unincorporated Area Issues and Policies.* Adopted December 20, 1994. https://plandev.sccgov.org/sites/g/files/exjcpb941/files/GP_BookB_HealthElement.

County of Santa Clara. 1994b. General Plan Draft Environmental Impact Report. File No. 5722-00-00-94EIR. SCH No. 94023004. Chapter 5H Visual/Aesthetics. September 1994. https://plandev.sccgov.org/ordinances-codes/general-plan

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3.2 Agriculture and Forestry Resources

This section of the Program Environmental Impact Report (PEIR) evaluates potential impacts of the County of Santa Clara ("County") Rural Zoning Amendments and Agricultural Impact Threshold ("Project") on existing farmland and forestry resources. This section is based on the Project as described in detail in Chapter 2, Project Description. This section is also based on the County's existing General Plan and review of state farmland maps.

3.2.1 Environmental Setting

Mapped Farmland

Public Resources Code section 612 and Government Code section 65570 require California Department of Conservation (DOC) to prepare Important Farmland Series maps. The DOC's Farmland Mapping and Monitoring Program (FMMP) identifies farmland categories for lands in Santa Clara County. These lands are categorized and identified using modern soil surveys developed by the United States Department of Agriculture through technical soil ratings and current land use (DOC 2024b). These categories are used for reporting changes in land use as required for FMMPs biennial farmland conversion report.

FMMP farmland categories are defined by the DOC as follows (DOC 2024b):

Prime Farmland

Farmland with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

Farmland of Statewide Importance

Farmland 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 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

Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee. The County modified its definitions for Farmland of Local Importance in 2018 to include the following (DOC 2018b):

Small orchards and vineyards primarily in the foothill areas. Also land cultivated as dry cropland for grains and hay. Undeveloped lands that do not currently qualify for the Prime, Statewide, or Unique designations, but have been mapped as Prime, Statewide, Unique, or Local Importance designations by FMMP in the past.

Farmland of Local Potential (LP)

Farmland of Local Potential is a subcategory of Farmland of Local importance and aggregated with Farmland of Local Importance acreage in the land use conversion table. Four counties include Farmland of Local Potential. For Santa Clara County, it is defined as all lands having Prime and Statewide soil mapping units which are not irrigated, regardless of cropping history or irrigation water availability.

Farmland Categories in Unincorporated Santa Clara County

For the purposes of this Project, "farmland" or "FMMP farmland" refers to lands delineated on the FMMP map series as any of the five farmland categories defined above. The FMMP category of "Grazing Land" is considered agricultural land under the FMMP, but is not considered farmland. Other FMMP categories include: "Urban and Built-up Land," "Other Land," "Water," and "Area Not Mapped."

According to the 2020 FMMP maps, there are 38,310 acres of farmland in the unincorporated County, which is about 6% of the unincorporated area. Table 3.2-1 shows the total acres of each of the farmland categories in Santa Clara County's unincorporated area.

Table 3.2-1. FMMP Categories in Unincorporated Santa Clara County.

FMMP Land Use Category	Total Acreage
Prime Farmland	12,754
Farmland of Statewide Importance	3,214
Unique Farmland	1,747
Farmland of Local Importance	12,689
Farmland of Local Potential	7,774
Farmland Subtotal	*38,310*[1]
Grazing Land	351,407
Agricultural Land Subtotal	*389,717*[2]
Urban and Built-Up Land	20,489
Other Land	187,589
Water Area	3,671
Total	**601,499**

Notes:
1 Farmland Subtotal for Total Acres not added into grand total to avoid double counting.
2 Agricultural Land Subtotal for Total Acres not added into grand total to avoid double counting.
Totals may not add up due to rounding.
Source: DOC 2022

As shown in Figure 3.2-1, the largest contiguous areas of farmland in unincorporated Santa Clara County are located east and south of Gilroy and in the Coyote Valley area. Within unincorporated Santa Clara County, pockets of Farmland of Local Importance are located north and east of Gilroy, in Coyote Valley, and north and east of Anderson Lake.

Large swaths of Santa Clara County's unincorporated areas, including lands within the Hillsides zoning district, do not contain any farmland and are designated as "Other Land" under the FMMP. Urban and Built-Up Land also is prevalent in San Martin and the unincorporated areas between the Cities of Morgan Hill and Gilroy. Other Land and Urban and Built-Up Land account for approximately 31% and 3% of the Santa Clara County's unincorporated area, respectively.

Land designated for Grazing under the FMMP is located throughout the County's unincorporated area. As shown on Figure 3.2-1, Grazing land is found primarily in the eastern portion of the County, as well as areas west of the cities of Morgan Hill and Gilroy.

Table 3.2-2 shows the total acres of each FMMP category in each rural zoning district. As shown in the table, the Exclusive Agriculture zoning district has the largest total acres of FMMP farmland categories combined. The Exclusive Agricultural zoning district also has the largest total acres of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance. The largest total acres of Farmland of Local Potential and Grazing Land are in the Agricultural Ranchland rural zoning district.

Table 3.2-2. FMMP Categories in Rural Zoning Districts.

FMMP Land Use Category	Rural Zoning Districts				
	Agricultural Ranchland (acres)	Exclusive Agriculture (acres)	Hillside (acres)	Rural Residential (acres)	Total Acreage
Prime Farmland	912	10,510	255	802	**12,479**
Farmland of Statewide Importance	1	2,855	15	267	**3,139**
Unique Farmland	17	919	684	129	**1,749**
Farmland of Local Importance	3,212	5,882	1,758	1,447	**12,299**
Farmland of Local Potential	5,499	272	1,639	175	**7,585**
Farmland Subtotal	*9,641*	*20,438*	*4,352*	*2,820*	***37,252***[1]
Grazing Land	294,324	1,945	53,107	1,460	**350,836**
Agricultural Land Subtotal	*303,965*	*22,383*	*57,459*	*4,280*	***388,088***[2]
Urban and Built-Up Land	59	3,690	3,726	4,404	**11,879**
Other Land	95,534	6,361	81,805	2,913	**186,613**
Water Area	2,028	39	1,665	0	**3,731**
Total Acreage	**401,586**	**32,473**	**144,655**	**11,597**	**590,311**

Notes:
1 Farmland Subtotal for Total Acreage not added into grand total to avoid double counting.
2 Agricultural Land Subtotal for Total Acreage not added into grand total to avoid double counting.
Acreages in this table are based on parcel boundaries and may not match the unincorporated County totals shown in Table 3.2-1. Totals may not add up due to rounding.
Source: DOC 2022, County of Santa Clara 2025.

Based on the acreages in Table 3.2-1 and Table 3.2-2, over 99% of the farmland in unincorporated Santa Clara County occurs in the rural zoning districts.

Coyote Valley

Table 3.2-3 shows the total acres of each FMMP land use category in the Coyote Valley Climate Resilience Combining District. As shown in Table 3.2-3, FMMP farmland in Coyote Valley is mostly comprised of Farmland of

Local Importance and Prime Farmland. The approximate percentage of FMMP land use categories in Coyote Valley are indicated in parentheses: Prime Farmland (8%), Farmland of Statewide Importance (<1%), Farmland of Local Importance (17%), Farmland of Local Potential (2%), Unique Farmland (1%), and Grazing (49%). Other Land and Urban and Built-Up Land account for approximately 13% and 9% of Coyote Valley, respectively.

Table 3.2-3. FMMP Categories in Coyote Valley.

FMMP Land Use Category	Total Acreage
Prime Farmland	1,472
Farmland of Statewide Importance	34
Unique Farmland	245
Farmland of Local Importance	2,930
Farmland of Local Potential	390
FMMP Farmland Subtotal	*5,071*[1]
Grazing Land	8,532
Agricultural Land Subtotal	*13,603*[2]
Urban and Built-Up Land	1,543
Other Land	2,280
Total	**17,427**

Notes:
[1] FMMP Farmland Subtotal for Total Acreage not added into grand total to avoid double counting.
[2] Agricultural Land Subtotal for Total Acreage not added into grand total to avoid double counting.
Totals may not add up due to rounding.
Source: DOC 2022.

Farmland Conversion

Government Code section 65570 requires DOC to collect information regarding the amount of land converted to or from agricultural use on a county and statewide basis and to biennially report such data. DOC's farmland conversion reports are generally compiled and released at least two years after the end of the timeframe they cover because of the need to acquire aerial imagery at the end of the timeframe before mapping can begin. The most recent conversion report available for Santa Clara County covers the 2018 to 2020 reporting period. Table 3.2-4 shows farmland conversion trends from 2012 to 2020.

Table 3.2-4. Santa Clara County Farmland Land Use Conversion (2012 - 2020).

Land Use Category	Acres Lost (-)	Acres Gained (+)	Total Acreage Changed	Net Acreage Changed
2012 - 2014				
Prime Farmland	960	42	1,002	-918
Farmland of Statewide Importance	197	14	211	-183
Unique Farmland	170	88	208	-132
Farmland of Local Importance	109	1,214	1,323	1,105
Grazing Land	913	822	1,735	-91
Agricultural Land Total	**2,349**	**2,130**	**4,479**	**-219**
2014 - 2016				
Prime Farmland	1,204	422	1,626	-782

Table 3.2-4. Santa Clara County Farmland Land Use Conversion (2012 - 2020).

Land Use Category	Acres Lost (-)	Acres Gained (+)	Total Acreage Changed	Net Acreage Changed
Farmland of Statewide Importance	205	95	300	-110
Unique Farmland	416	202	618	-214
Farmland of Local Importance	574	1,050	1,624	476
Grazing Land	2,246	2,772	5,018	526
Agricultural Land Total	**4,645**	**4,541**	**9,186**	**-104**
2016 - 2018				
Prime Farmland	623	93	706	-540
Farmland of Statewide Importance	82	100	182	18
Unique Farmland	100	109	209	-9
Farmland of Local Importance	179	19,961	19,840	19,482
Grazing Land	19,274	2	19,276	-19,272
Agricultural Land Total	**20,258**	**19,955**	**40,213**	**-303**
2018- 2020				
Prime Farmland	460	61	521	-399
Farmland of Statewide Importance	55	63	118	8
Unique Farmland	65	25	90	-40
Farmland of Local Importance	366	501	867	135
Grazing Land	31	35	66	4
Agricultural Land Total	**977**	**685**	**1,662**	**-292**

Notes: Adapted from Table A-34 of Appendix A of the California Farmland Conversion Reports (DOC 2018a, DOC 2019, DOC 2024a, 2024c). Includes all land within Santa Clara County, including incorporated cities. Note that this report does not track Farmland of Local Potential separately and is included in Farmland of Local Importance.

As shown in Table 3.2-4, over the period of 2012 to 2020 Santa Clara County experienced loss of FMMP farmland, particularly in the Prime Farmland category. Between the years 2012 to 2020, Santa Clara County experienced a net loss of 2,639 acres of Prime Farmland, while overall conversion was lower, at 918 acres net loss (due to increases in Grazing Land and Farmland of Local Importance).

Table 3.2-5 shows land conversions from 2018 to 2020. As shown, the largest change is from changes within the farmland categories, notably the fallowing of Prime Farmland or Farmland of Statewide Importance, resulting in reclassification as Farmland of Local Importance. Some of these changes are partially offset by lower farmland categories or Other Land becoming actively farmed. The second largest change is from urbanization, representing one third of conversion.

Table 3.2-5. Land Use Conversion Categories (2018 - 2020)

Land Use Category	P	SI	U	LI	Subtotal Farmland	Grazing Land	Urban Built-up Land	Other Land	Water Area	Total Converted to Another Use
P	--	0	14	376	390	0	39	31	0	460
SI	0	--	0	53	53	0	0	2	0	55
U	0	0	--	7	7	0	31	27	0	65
LI	51	63	0	--	114	0	166	86	0	366
Farmland Subtotal	*51*	*63*	*14*	*436*	*564*	*0*	*236*	*146*	*0*	*946*
Grazing Land	0	0	0	27	27	--	3	1	0	31
Urban Built-up Land	0	0	0	3	3	8	--	13	0	24
Other Land	10	0	11	35	56	27	183	--	0	266
Water Area	0	0	0	0	0	0	0	0	--	0
Total Conversion	**61**	**63**	**25**	**501**	**650**	**35**	**422**	**160**	**0**	**1,267**

Source: DOC 2024c
Notes: P = Prime Farmland; SI = Farmland of Statewide Importance; U = Unique Farmland; LI = Farmland of Local Importance. Note that this report does not track Farmland of Local Potential.

Parcel Size and Farmland Distribution

As shown in Table 3.2-2, there are 37,252 acres of farmland in the rural zoning districts. The rural zoning districts contain 16,084 parcels. However, 91.8% of the farmland is located on 1,473 parcels greater than 5 acres in size. While there is a large number of parcels 5 acres or smaller in these zones, 14,611 parcels, they contain only 3,066 acres of farmland. Looking at parcels greater than 2.5 acres, there are 1,956 parcels containing 35,968 acres of farmland. Furthermore, only 96.5 acres of farmland are located on parcels not located in the rural zoning districts, and 92.15 of these acres are located on only three parcels, each larger than five acres (County of Santa Clara 2025).

California Land Conservation Act of 1965 (Williamson Act) Lands

The Williamson Act (Government Code section 51200 et seq.) provides tax incentives to retain prime agricultural land and open space in agricultural use, which slows its conversion to urban development. The Williamson Act requires a 10-year contract between the County and landowners, requiring the land to be used for commercial agriculture and developed limited to compatible uses, in exchange for the land being taxed based on its agricultural use value rather than its full market value. The overall purpose of the Williamson Act is to protect agricultural lands from conversion to other uses. The Williamson Act is further described in Section 3.2.2, below.

Figure 3.2-2 depicts parcels within unincorporated Santa Clara County that are subject to Williamson Act contracts. Approximately 39% of the unincorporated area is covered by Williamson Act contracted land. Of this total, the majority is located in the eastern portion of Santa Clara County on lands that have a General Plan land use designation of Ranchlands and a zoning designation of Agricultural Ranchlands (AR). General Plan policies for the Ranchlands area are intended to protect and enhance the continued use of the land for ranching, consistent with the purposes of the Williamson Act. Likewise, the purpose of the AR zoning district is to preserve ranching and the character of rural areas. The AR district allows ranching, agriculture, and mineral extraction as permitted uses and is meant to apply to all parcels designated as Ranchlands in the General Plan.

Crop Production in Santa Clara County

The County's Division of Agriculture's 2023 Crop Report states that the overall agricultural production value in 2023 totaled $371,525,000, which represents a 3.5% increase from 2022. The report provides a breakdown of gross value by crop type (County of Santa Clara 2023):

Table 3.2-5. Santa Clara County 2023 Crop Production

Crop	Value
Nursery Crops	$127,970,000
Mushrooms	$79,982,000
Lettuce (including salad greens)	$34,507,000
Bell Peppers	$ 18,965,000
Bell Peppers Fresh Tomatoes	$ 17,461,000
Asian Vegetables	$10,274,000
Wine Grapes	$7,533,000
Processed Tomatoes	$6,904,000
Corn	$6,801,000
Broccoli	$6,340,000
Spinach	$5,511,000

Table 3.2-5. Santa Clara County 2023 Crop Production

Crop	Value
Cabbage	$5,127,000
Beans	$4,411,000
Cherries	$4,353,000
Steers and Heifers	$4,348,000
Rangeland	$3,301,000
Wax and Chili Peppers	$2,778,000
Seed Crops	$2,424,000
Garlic	$2,008,000
Squash	$1,462,000
Cows and Bulls	$1,416,000
Timber	$1,314,000
All Other Crops	$16,335,000
Total Gross Value	**$371,525,000**

Notes: Adapted from Santa Clara County's 2023 Crop Report (County of Santa Clara 2023).

The 2023 report also provides the harvested acreages for vegetable, fruit/nut, field, and seed crops, field and acreage for nursery crops (see Table 3.2-6, below). In 2023, Santa Clara County had 37 certified farmer's markets, and 83 organic growers.

Table 3.2-6. Santa Clara County 2022 Harvested Crop Acreages

Crop	Acreage
Vegetable	12,064 acres
Fruit/Nut	2,845 acres
Seed	619 acres
Nursery (field acreage)	938 acres

Notes: Adapted from Santa Clara County's 2023 Crop Report (County of Santa Clara 2023).

Forests

Forest land is defined as "land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits" (California Public Resources Code Section 12220[g]). Timberland is defined as "land…which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees" (California Public Resources Code Section 4526). Forests in unincorporated areas of Santa Clara County include mixed woodland and evergreen forests which are generally located in the County's Hillside zoning district (see Chapter 3.4, Biological Resources).

3.2.2 Relevant Laws, Ordinances, Plans, and Policies

Federal Laws

Farmland Protection Policy Act (7 United States Code [USC] Section 4201)

In 1981, Congress passed the Agriculture and Food Act (Public Law 97-98) which contained the Farmland Protection Policy Act (FPPA), Subtitle I of Title XV, Sections 1539–1549. The purpose of the FPPA is to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses. It additionally directs federal programs to be compatible with State and local policies for the protection of farmland. Under the FPPA, the term "farmland" includes Prime Farmland, Unique Farmland, and Farmland of Statewide or Local Importance. Farmland that is subject to FPPA requirements does not have to be currently used as cropland. It can be forestland, pastureland, or other land but not urban and built-up land or water. FPPA assures that, to the extent possible, federal programs are administered to be compatible with state and local units of government, and private programs and policies to protect farmland. Federal agencies are required to develop and review their policies and procedures related to implementing the FPPA every 2 years. The FPPA does not authorize the federal government to regulate the use of private or nonfederal land or, in any way, affect the property rights of owners. Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a Federal agency or rely on assistance from a federal agency (Natural Resources Conservation Service [NRCS], 2019).

State Laws

Farmland Mapping and Monitoring Program (Public Resources Code section 612; Government Code section 65570)

As mentioned above in Section 3.2.1, the DOC's FMMP produces Important Farmland Maps. Data is also released in statistical formats—principally the biennial California Farmland Conversion Report.

Williamson Act (Government Code section 51200 et seq.)

As discussed above, the Williamson Act enables local governments to enter into 10-year contracts with private landowners to restrict lands primarily used for commercial agriculture in return for reduced property tax assessments. The Williamson Act program is administered by the DOC, in conjunction with local governments that administer and enforce the individual contracts Each year the contract automatically renews unless a notice of nonrenewal is filed by the local government or landowner. Contracts may only be cancelled if strict findings are made. The County of Santa Clara maintains an active Williamson Act program.

Farmland Security Zones (Government Code sections 51296-51297.4)

The Farmland Security Zone Act was passed by the California State Legislature in 1998 and expands upon the Williamson Act; the program is sometimes referred to as the "Super Williamson Act." Under the provisions of this act, a landowner can apply for Farmland Security Zone status by entering into a contract with the County that is substantially similar to Williamson Act contracts, except it is for 20 years instead of 10 years. Like Williamson Act contracts, Farmland Security Zone contracts renew automatically each year for a standing period of 20 years. In return for the longer contract, property owners receive an additional 35% reduction in the taxable value of land and

improvements, beyond the Williamson Act tax benefits. The County of Santa Clara maintains an active Farmland Security Zone program.

Local

The following local/regional regulations and policies pertaining to agriculture and forestry resources would apply to the Project. These regulations and policies are currently in place. As described in Chapter 2, Project Description, the Project would modify and in certain instances replace existing local regulations and policies.

County of Santa Clara General Plan

The Resource Conservation Chapter of the General Plan provides the following policies relevant to the Project and agriculture and forestry resources (County Santa Clara 1994):

Policy C-RC 37. Agriculture should be encouraged and agricultural lands retained for their vital contributions to the overall economy, quality of life, and for their functional importance to Santa Clara County, in particular:

- local food production capability;
- productive use land not intended for urban development; and
- protection of public health and safety.

Policy C-RC 38. General public awareness and understanding of the importance of agriculture and the goals of agricultural preservation should be encouraged countywide.

Policy C-RC 39. Adequate inventories, mapping and monitoring of the agricultural land supply should be provided, and consistent definitions of agricultural land, forms of measurement, and monitoring between state and local governments encouraged.

Policy C-RC 40. Long term land use stability and dependability to preserve agriculture shall be maintained and enhanced by the following general means:

- limiting the loss of valuable farmland from unnecessary and/or premature urban expansion and development;
- regulating non-agricultural uses in agricultural areas, and their intensity and impacts on adjacent lands;
- maintaining agriculturally-viable parcel sizes; and
- minimizing conflicts between adjacent agricultural and non-agricultural land uses, through such means as right-to-farm legislation and mediation of nuisance claims.

Policy C-RC 41. In addition to general land use and development controls, agricultural areas of greatest potential long term viability should be identified and formally designated for permanent preservation.

Policy C-RC 42. Interjurisdictional coordination and cooperation necessary to achieve agricultural preservation goals and strategies should be encouraged.

These goals should include:

- preservation of remaining areas of large and medium scale agriculture in South County;
- encouragement of retention of agricultural lands in San Benito County adjoining South County agricultural areas; and
- discouragement of Urban Service Area (USA) expansions into agricultural areas when LAFCO determines that a city's USA contains more land than is needed to accommodate five years of projected growth and development

Policy C-RC 43. Long term economic viability of agricultural activities shall be maintained and enhanced by providing

- improved markets for locally-grown products;
- property tax relief;
- appropriate application of "renewable," organic agriculture and other innovative, cost-efficient growing techniques; and
- adequate agricultural worker housing supply.

Policy R-RC 61. Allowable land uses in exclusive agricultural areas shall be limited to

- agricultural and ancillary uses,
- uses necessary to directly support local agriculture, and
- other uses compatible with agriculture which clearly enhance the long term viability of local agriculture and agricultural lands.

Policy R-RC 62. Residential uses in agricultural areas may be allowed for persons directly involved in on-site agricultural operations as an ancillary or supportive use of agriculture.

Policy R-RC 63. Farm worker housing shall be an allowable use in the zoning districts governing agricultural areas.

County of Santa Clara Ordinance Code

Zoning Ordinance (Title C, Appendix I)

The County's Zoning Ordinance is located in Title C, Appendix I, of the County of Santa Clara Ordinance Code. The function of the Zoning Ordinance is to divide unincorporated territory of Santa Clara County into geographical districts designated as zoning districts. The Zoning Ordinance establishes regulations limiting the use of land and structure, the location, height and bulk of structures, the open space about buildings and principal uses, and provides for other measures that are intended to accomplish the purposes of the Zoning Ordinance and General Plan.

Chapter 2.20, Rural Base Districts, of the Zoning Ordinance establishes four rural zoning districts that would be affected by the Project. The intent of the rural base districts is to maintain and preserve the predominantly rural character of lands to which they are applied. The rural base districts further regulate the types of land uses and intensity of development permitted in agricultural areas in a manner that implements the General Plan, protects natural resources, and maintains compatibility between uses. There are four rural zoning districts that apply to agricultural lands:

A – Exclusive Agriculture

The purpose of this zoning district is to preserve and encourage the long-term viability of agriculture and agricultural lands, recognizing the vital contributions agriculture makes to the economy and quality of life within the unincorporated areas of Santa Clara County. The intent of this district is to reserve those lands most suitable for agricultural production as farmland and appropriate related uses. This zoning district is intended to provide stability for ongoing agricultural operations and provide for new uses necessary to support a viable local agriculture industry. This district is meant to apply to all portions of the unincorporated areas of Santa Clara County designated as Agriculture: Large-Scale, Agriculture: Medium-Scale, and Open Space Reserve in the General Plan. (Zoning Ordinance section 2.20.010(A).) As depicted in Figure 2-1, much of Santa Clara County's unincorporated lands assigned this base zoning district are in the southern portion of Santa Clara County around the Cities of Morgan Hill and Gilroy.

AR – Agricultural Ranchlands

The purpose of this zoning district is to preserve ranching the natural resources, and the rural character of the areas to which it applies. Permitted uses include ranching or agriculture, low-intensity recreation, mineral extraction, and land in its natural state. Very low-intensity residential, commercial, industrial and institutional uses may also be allowed if they are sized to primarily serve the rural ranchland residents or are necessary for the enhancement and protection of the natural resources of the area and do not require a substantially higher level of service than presently provided. This district is meant to apply to all parcels designated as Ranchlands in the General Plan. (Zoning Ordinance section 2.20.020(B).) As depicted in Figure 2-1, much of Santa Clara County's unincorporated lands assigned this base zoning district are along the eastern half of Santa Clara County, abutting the Diablo Mountain range.

H - Hillsides

The purpose of the Hillsides district, also known as the HS district, is to preserve mountainous lands unplanned or unsuited for urban development primarily in open space and to promote those uses which support and enhance a rural character, which protect and promote wise use of natural resources, and which avoid the risks imposed by natural hazards found in these areas. These lands are watersheds and may also provide such important resources as minerals, forests, animal habitat, rare or locally unique plant and animal communities, historic and archeological sites, scenic beauty, grazing lands, and recreational areas. Additionally, lands zoned Hillsides define the setting or viewshed for the urban area of Santa Clara County.

Development shall be limited to avoid the need for public services and facilities. Permitted uses include agriculture and grazing, very low-density residential use, low density, low-intensity recreation, mineral and other resource extraction, and land in its natural state. Low-intensity commercial, industrial, and institutional uses may also be allowed if they require a remote, rural setting to primarily serve the rural residents or community, or if they support the recreational or productive use, study, appreciation, or enhancement of the natural environment. Clustering of development, particularly residential, is encouraged to preserve contiguous open space and achieve efficiency in the provision of access to dwellings. This district is meant to apply to all parcels designated Hillsides in the General Plan. (Zoning Ordinance section 2.20.020(C).)

RR – Rural Residential

The purpose of the Rural Residential district, also known as the RR district, is to permit rural residential development in certain limited unincorporated areas of Santa Clara County designated by the General Plan. Residential, agricultural, and open space uses are the primary uses intended within the district. Agriculture-related uses that are not permitted by right may also be permitted through the applicable discretionary review process if deemed compatible with residential uses. Commercial, industrial, and institutional uses may be established only where they are sized to be rural in nature. This district is meant to apply to all parcels designated Rural Residential in the general plan. (Zoning Ordinance section 2.20.020(D).)

3.2.3 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a sample form that may be tailored to satisfy individual agencies' needs and project circumstances, a project would have a significant effect on the environment with respect to agriculture and forestry resources if the project would:

AG-1: 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. Farmland of Local Importance (including Farmland of Local Potential) is also considered Farmland under the Santa Clara County FMMP.

AG-2: Conflict with existing zoning for agricultural use, or a Williamson Act contract.

AG-3: Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)).

AG-4: Result in the loss of forest land or conversion of forest land to nonforest use.

AG-5: Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to nonforest use.

3.2.4 Methodology

The existing General Plan, zoning maps, vegetation data, and review of state farmland maps were used to evaluate known agricultural, timberland, and/or forest resources located within the project area. The potential for the Project to impact agricultural, timber, and/or forest resources is dependent on the Zoning Ordinance updates and their effect on rural zoning districts that currently govern agricultural lands.

Item AG-1, conversion of farmland, is stated generally, without a quantitative standard. As stated in Appendix G of the CEQA Guidelines, the Land Evaluation and Site Assessment (LESA) model developed by the Department of Conservation may be used to evaluate the significance of farmland conversion. The LESA model requires several data sources, including soil surveys, water availability, parcel data, current land use, and land use restrictions (such as Williamson Act or conservation easements). The County currently uses the LESA model when considering conversion of farmland to non-agricultural uses. Running the LESA model is fairly time-consuming, involving the gathering of site-specific and regional data. Some of the LESA factors, such as water availability, may be subject to interpretation (or may be difficult to verify). The use of the LESA model therefore requires commitment of County

staff time, and timely receipt of information from project proponents, property owners, and/or water providers. The LESA model also creates some uncertainty for project applicants – as they often will not know if their project would significantly impact farmland before an application is made, and therefore may not be aware of potential mitigation costs. The proposed project would implement a "bright line" threshold of five acres, i.e., conversion of five or more acres of farmland to a non-agricultural use would be considered a significant impact on the environment. The advantage of the bright line threshold is that it still provides a substantial level of protection for farmland resources in the County, but reduces the administrative burden and provides more certainly for project proponents when developing projects.

Farmland conversion is interpreted as a change in land use from agricultural use to a non-agricultural land use. Introduction of a non-agricultural land use, such as commercial, residential, or institutional development, on a parcel containing farmland, is assumed to convert that parcel to a non-agricultural use. The exception to this is the development of agriculture-supportive uses, as discussed in this PEIR, which require the presence of active agriculture on the project site or otherwise directly support agricultural activities.

3.2.5 Environmental Impacts

Impact AG-1 Would the project 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?

An objective of the Project is to strengthen implementation of the County's General Plan policies for continued agricultural viability. The Project involves Zoning Ordinance Amendments that would apply to lands within the four zoning districts that include lands designated as farmland under the State's FMMP. The Project would change how development is regulated in the Exclusive Agriculture zoning district with the intent of preserving farmland. The Project would not directly authorize development, nor introduce new land uses that would convert farmland to non-agricultural use. Nor would the proposed Zoning Ordinance Amendments change existing boundaries of the zoning districts or total land acreages covered by those districts.

The Project would implement General Plan strategies and policies aimed at preserving the resources and character of rural lands. (County General Plan, Growth and Development chapter, Strategy #1, p. K-2). These strategies and policies allow residential and certain non-residential uses in the rural areas according to "local-serving" provisions. (County General Plan, pp. K-2, Q-10, Q-11, Q-24.) The General Plan states that "[t]he County evaluates these local-serving uses based on size, scale and intensity, and not on the origins of users. (County General Plan, p. K-2.) However, as noted in Chapter 2, Project Description, the County has historically used subjective methods to determine whether proposed uses are "local serving." These methods have been difficult to understand and implement, which can increase uncertainty and processing time during the planning entitlement process. The proposed amendments would replace subjective "local-serving" provisions with simple, objective development standards that would apply to all non-agricultural uses in rural areas. The amendments would establish a maximum Cumulative Building Site Coverage per parcel as the mechanism for regulating the size, scale, and intensity of development in the four rural zoning districts. The existing Lot Coverage standard would be replaced by Cumulative Building Site Coverage. These amendments would provide clarity to the planning entitlement process for property owners and allow County staff to more effectively implement General Plan policies for rural unincorporated areas.

The Project would simplify land use classifications and allow and facilitate agriculture-supportive uses that are beneficial to the preservation and ongoing viability of county agricultural lands. These uses include processing, sales, and events related to agriculture. Projects below a certain size threshold would be permitted using a nondiscretionary, ministerial Planning Clearance within all four rural zoning districts. Projects above the "*Limited*" size threshold would be subject to a discretionary permit (Special Permit or Use Permit). The intent of this change is to streamline smaller scale agriculture-supportive uses that bolster the ongoing viability of farming and ranching in Santa Clara County.

The Project would align development in the Exclusive Agriculture zoning district with County General Plan policies by no longer allowing land uses that are inconsistent with preservation of farmland and General Plan Policy R-RC 61. Removal of these uses would discourage conversion of farmland.

The Project would establish a threshold of significance to evaluate future proposed projects' potential impact to agricultural resources under CEQA. For this proposed threshold, the County would use the State's 2022 FMMP map series to establish the baseline condition. A project's impact to agricultural resources would be considered potentially significant if five or more acres of the subject parcel is identified as FMMP farmland (the five FMMP categories described in Section 3.2.1). This would ensure that projects are evaluated on a consistent and objective basis and promote efficiency and predictability in the CEQA review process. The proposed threshold of five acres is protective of the environment as it would cover 91.8% of the County's FMMP farmland. As such, nearly all of the FMMP farmland in Santa Clara County would be captured by this five-acre threshold and would thus be subject to mitigation. It should be noted that ministerially approved non-agricultural projects, such as Limited Places of Worship, could result in conversion of more than five acres of farmland that would not be subject to the significance threshold (since non-discretionary development approval is not considered a "project" under CEQA). However, the Project would also restrict such non-agricultural in the Exclusive Agriculture zoning district, which would reduce this potential source of farmland conversion.

In addition, certain land uses, while not converting to a non-agricultural use, may result in physical development that prevents in-ground cultivation of agricultural crops. Specifically, the development of mushroom farms and greenhouses may develop farmland while still maintaining the agricultural use of the land and therefore not constitute a conversion. Up to 60 acres of farmland within Coyote Valley may be subject to expansion of these uses.

In summary, the Project would encourage the preservation of farmland by (1) limiting the nonagricultural building site coverage within the rural zoning districts, (2) simplifying the review process for uses directly supportive of agriculture, (3) excluding certain uses within the Exclusive Agriculture zoning district that could result in farmland conversions, and (4) establishing a threshold of significance for impacts to farmland.

Therefore, while the Project provides many benefits to farmland and the agricultural economy in the unincorporated Santa Clara County, it would not prevent future conversion of farmland. This would be a **potentially significant** impact. CEQA requires that feasible mitigation measures (or alternatives) be implemented for projects that would have a significant effect on the environment. As discussed below, feasible mitigation would substantially reduce, but not avoid the impact related to conversion of farmland.

Impact AG-2 Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

The project area for the Rural Zoning Amendments includes lands with rural base zoning designations of A, AR, HS, and RR, which include most of the land currently subject to Williamson Act contracts. The Project would not change the existing boundaries of the rural zoning districts or the total land acreages in those districts or affect existing Williamson Act contracts. Adoption of the Zoning Ordinance Amendments and Agricultural Impact Threshold would modify how development is regulated in these zoning districts with regard to the Williamson Act. Unincorporated areas of the Santa Clara County that are subject to Williamson Act contracts and outside A, AR, HS, or RR zoning districts would also be subject to the proposed threshold.

The proposed Zoning Ordinance Amendments are intended to clarify, simplify, and standardize the permitting process for uses directly supportive of agriculture. The Zoning Ordinance Amendments would combine existing agricultural use classifications for *Agricultural Sales* and *Agriculturally Related Entertainment & Commercial Uses* into a new use classification called *Agriculture Sales/Events*, and remove the *Wineries* use classification. Activities related to wineries would be captured in the revised use classifications of *Agricultural Sales/Events* and *Agricultural Processing*. Through the *Agricultural Sales/Events* use classification, the proposed amendments would also extend the uses currently allowed as ancillary to a winery to all types of agricultural operations. The Project would also categorize *Agricultural Sales/Events* as either *Limited* or *General* in scale, according to square footage. Permitting of smaller-scale *Limited* projects could be approved ministerially, while larger-scale *General* projects would require discretionary approval.

The Project would also align development in rural zoning districts by removing incompatible uses in the Exclusive Agriculture zoning district that are inconsistent with General Plan policies such as Policy R-RC 61, which states that allowable land uses in agricultural areas shall be limited to agricultural uses or ancillary uses that directly support local agriculture. New development of the following use classifications would no longer be permitted in this district:

- Community Care – Expanded
- Residential – Communal Institutional
- Aircraft Landing Strips – Private
- Butcheries
- Camps and Retreats
- Cemeteries
- Clubs – Private and Nonprofit
- Golf Courses and Country Clubs
- Golf Driving Ranges
- Hospital and Clinics
- Hunting and Fishing Preserves
- Informational Displays
- Kennels – Commercial
- Laboratories and Testing Services (Limited)
- Manufacturing: Small Scale Rural
- Museums
- Non-profit Institutions
- Radio-Controlled Model Aircraft Facilities
- Oil and Gas Extraction
- Places of Worship
- (previously Religious Institutions)
- Radio-Controlled Model Aircraft Facilities
- Reception Facilities
- Recreational Playgrounds and Sports Fields
- Recycling Facilities
- Schools
- Surface Mining
- Truck Sales and Services: Storage
- Underground Mining
- Veterinary Clinics and Hospitals
- Well-Drilling Operations
- Wind Energy Conversions Systems – Commercial

[1] Small scale community care (6 persons or less) is considered a residential use under State law and would therefore be allowed.

By eliminating these uses from the Exclusive Agriculture zoning district, the proposed zoning amendments would encourage small, agriculture-supportive uses, and encourage preservation of farmland. Within the Exclusive Agriculture zoning district, legally established non-conforming uses may continue to operate consistent with Chapter 4.5 of the Zoning Ordinance.

As discussed under Impact AG-1, the Project would modify how the County General Plan's "local-serving" provisions would be applied by replacing vague, subjective provisions with simple, objective development standards applicable to all non-agricultural uses in rural areas. This amendment would establish new limitations to the Cumulative Building Site Coverage per parcel and regulate the size, scale, and intensity of development in rural zoning districts. The existing terminology of Lot Coverage would be replaced by Cumulative Building Site Coverage. These amendments would provide clarity to the planning entitlement process for property owners and allow County staff to more effectively implement General Plan policies for rural unincorporated areas. Therefore, these amendments would benefit the implementation of existing policies and regulations.

By encouraging agriculture-supportive uses and eliminating uses that do not align with the County's General Plan policies in support of agriculture, the Zoning Ordinance Amendments would support continued agricultural use within the Exclusive Agriculture zoning district. In addition, implementation of the Agricultural Impact Threshold would result in new protections for agricultural land that would complement existing agricultural zoning and the objectives of the Williamson Act.

The Project would not conflict with agricultural zoning or Williamson Act contracts. For these reasons, **no impact** would occur.

Impact AG-3 Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)).?

Unincorporated areas of Santa Clara County do not have lands zoned for timberland production. There are areas of forest land that are generally located in the Hillsides zoning district. The Project would not facilitate development that could affect those forest lands. The Project includes amendments to the Zoning Ordinance that would simplify and streamline permitting processes for agriculture supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use polices, and replace subjective "local-serving" provisions with objective development standards. Therefore, the Project would not result in the loss or conversion of forest land and/or timberland, and **no impact** would occur.

Impact AG-4 Would the project result in the loss of forest land or conversion of forest land to nonforest use?

There are areas of forest land within the unincorporated areas of Santa Clara County, generally located in the hillside zoning district. The County's Zoning Ordinance currently allows the cutting and removal of commercial timber species and other solid wood forest products from timberlands for commercial purposes in the AR and HS zoning districts under the *Timber Harvest Operations - Commercial* use classification. This use is allowed in the AR and HS zoning district through the issuance of a use permit. Timber harvesting is not currently allowed in the A and RR zoning districts. The operation of Christmas tree farms and sale of Christmas trees are currently allowed by right in all rural base zoning districts through the *Agriculture* and *Agricultural Sales (Limited)* use classification.

As discussed under Impact AG-3, none of the proposed Zoning Ordinance Amendments would result in the loss of forestland or introduce new uses that would be incompatible with forestland. In fact, as discussed under Impact AG-1, the Project would create objective development standards that would limit the size and scale of new development in rural zoning districts. These standards, which would replace the current subjective "local-serving" provisions, may have beneficial impacts on forestland by reducing the total building site coverage on individual parcels. For these reasons, **no impact** would occur.

Impact AG-5 Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to nonforest use?

As noted under Impacts AG-1 and AG-2, the Project would not introduce new land uses into rural zoning districts that would result in the direct conversion of farmland to non-agricultural use. The Project would encourage agriculture-supportive uses and the preservation of farmland, including permanent protection of farmland through the SCCAMP. The Project would align development standards in rural zoning districts, remove incompatible uses from the Exclusive Agriculture zoning district, encourage small-scale agriculture-supportive uses, and encourage preservation of agricultural farmland. As discussed under Impacts AG-3 and AG-4, the County does not have designated timber production zoning districts. The Project would not introduce uses or policies that would be incompatible with timber production or encourage future conversion of forest land to nonforest use. Therefore, the Project would not cause changes to the existing environment that would result in conversion of either Farmland or forest land to a different use. However, as discussed above, the Project seeks to reduce the conversion of farmland but cannot completely avoid it. Overall, indirect conversion effects resulting from the Project to farmland or forest land, would be **less than significant**.

3.2.6 Cumulative Impacts

Cumulative projects listed in Section 3.0.2 of this PEIR include the Santa Clara County Housing Element Update, the Agricultural Employee Housing Zoning Ordinance Amendments, and the implementation of Senate Bill 9 in urban-designated areas. These projects would encourage the production of housing but would not authorize conversion of agricultural land to non-agricultural land, nor conflict with existing agricultural zoning or Williamson Act contracts. The Housing Element Update directs additional housing to unincorporated urban islands and the Stanford University campus, not rural areas.

However, the conversion of relatively small amounts of farmland can have cumulative effects. As shown in Table 3.2-4, conversion of farmland is an ongoing regional issue. While the proposed threshold of significance would identify and disclose impacts (and therefore require consideration of mitigation measures) for 91.8% of the farmland in the unincorporated County, parcels containing fewer than five acres of farmland would account for a total of 3,070.6 acres. Thus, cumulatively, an additional 3,070.6 acres would be exposed to risk of conversion. This is in addition to the 60 acres of potential conversion permitted in Coyote Valley to accommodate the expansion of mushroom farms and greenhouse operations. Thus, the impact of farmland conversion is considered both a direct and a cumulative **significant impact**.

3.2.7 Mitigation Measures

AG-1.

- For each acre of **farmland to be converted** as a result of a site-specific project subject to discretionary approval, an **affirmative agricultural conservation easement** shall be secured for **equivalent farmland**, within the same **sub-area** as the project site, prior to issuance of Building Permits.
  - **"Farmland to be converted"** means the cumulative area of the subject parcel(s) that is classified as one of five farmland categories in the 2022 FMMP map series, and that is not otherwise protected by an affirmative agricultural conservation easement meeting the County's standard below.
  - **"Affirmative Agricultural Conservation Easement,"** or ACE, means a recorded easement in perpetuity that requires active and ongoing agricultural production and limits other uses on the property to those that are directly supportive of and compatible with onsite agriculture. Through an ACE, a property owner voluntarily conveys to a qualified conservation entity the right to enforce such restrictions in perpetuity. An ACE shall be held by a qualified conservation entity approved by the County, which must be either a private land trust accredited by the Land Trust Alliance or a public agency dedicated to agricultural land conservation. The ACE shall expressly name the County as a third-party beneficiary with the right to enforce the easement. An ACE may include no more than two building envelopes, designating an area in which future development may occur, sited such that they would not impair ongoing agricultural activity within the easement area. The area of such building envelope(s) shall not count toward the 1:1 mitigation requirement. An ACE shall be considered affirmative when it includes a "productivity provision," requiring the subject land to be managed for productive agricultural uses, with reasonable allowances for when temporary fallowing is necessary or appropriate.
  - **"Equivalent farmland"** means that the land subject to the ACE (rounded to the nearest 0.25 acre) shall be equal to or greater than the acreage of the farmland to be converted, shall consist of no less than five acres of contiguous farmland, and shall be of equal or greater agricultural quality, as determined by the most recent FMMP map series. For these purposes, the ranking of agricultural quality shall fall into one of two farmland categories: 1) Prime Farmland, and 2) all other categories of farmland, i.e., Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Farmland of Local Potential.
  - **"Sub-area"** means one of two geographic groupings of farmland in Santa Clara Valley: the Coyote Valley sub-area and the South County sub-area.

- Applicants required to mitigate agricultural impacts may do so through the dedication or acquisition of an ACE onsite, offsite, or a combination of both, to meet the standards above. For example, the applicant may choose to implement their mitigation through entirely off-site conservation or choose to convey a perpetual easement over the remaining undeveloped farmland portion of the subject parcel(s) (outside of any area designated as a building envelope). Onsite conservation of farmland would reduce the amount of offsite farmland conservation required to meet the 1:1 ratio.
- To fulfill the requisite ACE standards, applicants must work with a private land trust accredited by the Land Trust Alliance, or a public agency dedicated to agricultural land conservation that has been approved by the County for participation in the SCCAMP. Close involvement of the land trust or public agency will be necessary to receive and hold the requisite ACE(s), whether onsite or offsite.
- At the applicant's request, the Director of the Department of Planning & Development may approve one or more alternative means of mitigation, provided the Director finds, based on a preponderance of the evidence in the record, that the alternative means requested by the applicant shall actually result in mitigation that meets the

above standards and requirements. For example, such alternative means of mitigation may include funding the offsite acquisition of an ACE through a private land trust accredited by the Land Trust Alliance, or through a mitigation program administered by a public agency, provided that such funding actually results in one or more ACEs on farmland in Santa Clara County, of equal or greater acreage, and of equal or greater agricultural quality, to the farmland converted as a result of the proposed project.

- Should the County establish a future fee-based agricultural mitigation program meeting the requirements of this mitigation measure, the applicant may mitigate as described above, or participate in that program.

3.2.8 Level of Significance After Mitigation

The use of affirmative agricultural conservation easements would permanently preserve an amount of farmland equivalent to the farmland being converted. Affirmative agricultural easements are supported by the CEQA Guidelines and have been viewed by the courts as a means to reduce the impacts of agricultural conversion (*V Lions Farming, LLC v. County of Kern, et al. [*2024] 100 Cal.App.5th 412). However, such easements do not fully replace the agricultural uses being converted. Thus, even at a 1:1 mitigation ratio, future development in the County would result in a net loss of agricultural land. Therefore, the Project would result in a **significant and unavoidable** impact related to the conversion of farmland

3.2.9 References

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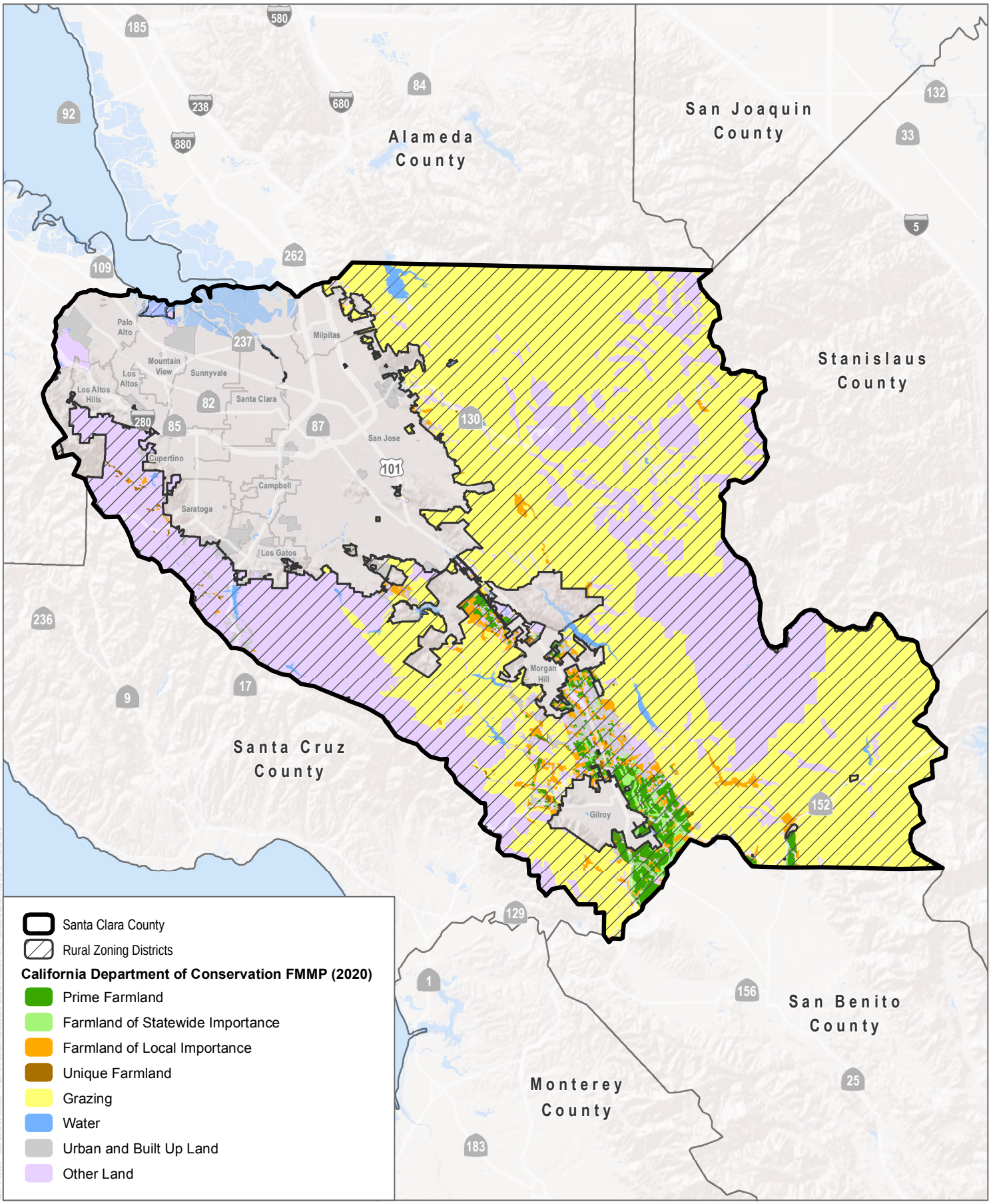
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SOURCE: ESRI 2022, CA Dept. of Conservation 2020

FIGURE 3.2-1

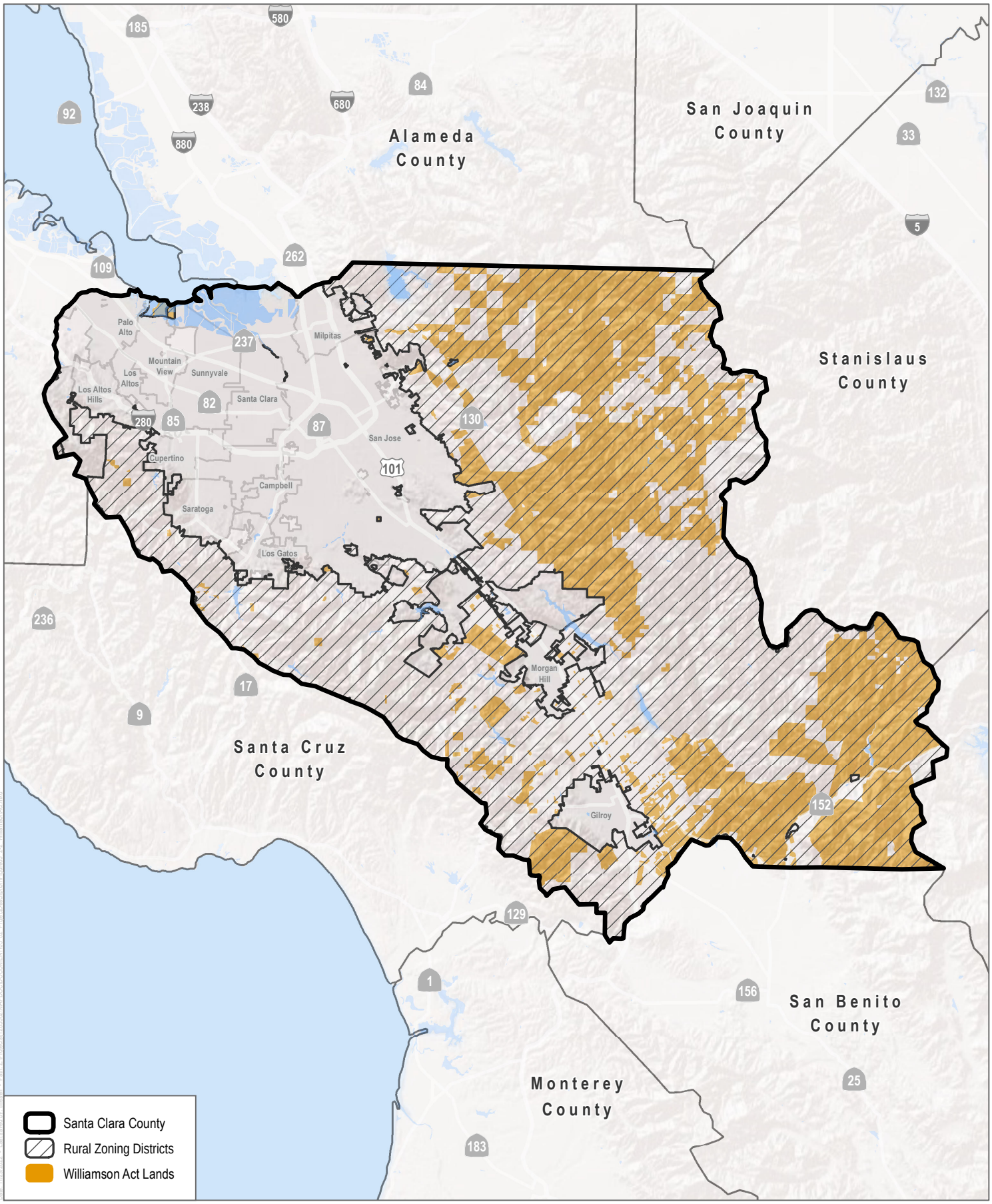
Farmland Mapping & Monitoring Program (FMMP)

Santa Clara County Rural Zoning Ordinance Amendments EIR

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SOURCE: ESRI 2022, CA Dept. of Conservation 2020

FIGURE 3.2-2

Williamson Act Contracts

Santa Clara County Rural Zoning Ordinance Amendments EIR

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3.3 Air Quality

This section of the Program Environmental Impact Report (PEIR) evaluates potential impacts related to air quality from implementation of the County of Santa Clara (County) Rural Zoning Amendments and Agricultural Impact Threshold (Project). This section includes a discussion of the existing air quality conditions to present the environmental baseline for the Project and an analysis of air quality impacts during Project construction and operation and compliance with state or local plans related to air quality.

3.3.1 Environmental Setting

The project area is located within the boundaries of the San Francisco Bay Area Air Basin (SFBAAB). The SFBAAB encompasses all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara Counties, and the southern portions of Solano and Sonoma Counties.

Air pollutants are emitted by a variety of sources, including mobile sources (vehicles), area sources (hearths, consumer product use, architectural coatings, and landscape maintenance equipment), energy sources (natural gas), and stationary sources (generators or other stationary equipment). Some air pollutants need to be examined at the local level, and others are predominately an issue at the regional level. For instance, ozone (O_3) is formed in the atmosphere in the presence of sunlight by a series of chemical reactions involving oxides of nitrogen (NO_x) and reactive organic gas (ROG) (also termed volatile organic compounds (VOCs)). Because these reactions are broad scale in effects, O_3 is typically analyzed at the regional level (i.e., in the SFBAAB) rather than the local level. On the other hand, air pollutants such as coarse particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), carbon monoxide (CO), and toxic air contaminants (TACs) are a potential concern in the immediate vicinity of the pollutant source because the pollutants are emitted directly by or are formed close to the source. Therefore, the study area for emissions of PM_{10}, $PM_{2.5}$, CO, and TACs is the local area near the source, such as in the vicinity of the project area, and the study area for regional pollutants such as NO_x and ROGs is the entire SFBAAB.

3.3.1.1 Meteorological and Topographical Conditions

Air quality is a function of the rate and location of pollutant emissions under the influence of meteorological conditions and topographic features that influence pollutant movement and dispersal. Atmospheric conditions such as wind speed, wind direction, atmospheric stability, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants, and consequently affect air quality.

The climate of the SFBAAB is determined largely by a high-pressure system that is usually present over the eastern Pacific Ocean off the west coast of North America. During winter, the Pacific high-pressure system shifts southward, allowing more storms to pass through the region. During summer and early fall, when few storms pass through the region, emissions generated within the Bay Area can combine with abundant sunshine under the restraining influences of topography and subsidence inversions to create conditions that are conducive to the formation of photochemical pollutants, such as O_3, and secondary particulates, such as nitrates and sulfates.

In the SFBAAB, temperature inversions can often occur during the summer and winter months. An inversion is a layer of warmer air over a layer of cooler air that traps and concentrates pollutants near the ground. As such, the highest air pollutant concentrations in the SFBAAB generally occur during inversions (Bay Area Air District [BAAD] 2017a).

The project area is located in the Santa Clara Valley climatological subregion. Specific conditions for the subregion are described in the BAAD's *California Environmental Quality Act Air Quality Guidelines* (BAAD 2017a) as follows:

The Santa Clara Valley is bounded by the Bay to the north and by mountains to the east, south and west. Temperatures are warm on summer days and cool on summer nights, and winter temperatures are fairly mild. At the northern end of the valley, mean maximum temperatures are in the low-80's during the summer and the high-50's during the winter, and mean minimum temperatures range from the high-50's in the summer to the low-40's in the winter. Further inland, where the moderating effect of the Bay is not as strong, temperature extremes are greater. For example, in San Martin, located 27 miles south of the San Jose Airport, temperatures can be more than 10 degrees warmer on summer afternoons and more than 10 degrees cooler on winter nights.

Winds in the valley are greatly influenced by the terrain, resulting in a prevailing flow that roughly parallels the valley's northwest-southeast axis. A north-northwesterly sea breeze flows through the valley during the afternoon and early evening, and a light south-southeasterly drainage flow occurs during the late evening and early morning. In the summer the southern end of the valley sometimes becomes a "convergence zone," when air flowing from the Monterey Bay gets channeled northward into the southern end of the valley and meets with the prevailing north-northwesterly winds. Wind speeds are greatest in the spring and summer and weakest in the fall and winter. Nighttime and early morning hours frequently have calm winds in all seasons, while summer afternoons and evenings are quite breezy. Strong winds are rare, associated mostly with the occasional winter storm.

The air pollution potential of the Santa Clara Valley is high. High summer temperatures, stable air and mountains surrounding the valley combine to promote ozone formation. In addition to the many local sources of pollution, ozone precursors from San Francisco, San Mateo and Alameda Counties are carried by prevailing winds to the Santa Clara Valley. The valley tends to channel pollutants to the southeast. In addition, on summer days with low level inversions, ozone can be recirculated by southerly drainage flows in the late evening and early morning and by the prevailing northwesterlies in the afternoon. A similar recirculation pattern occurs in the winter, affecting levels of carbon monoxide and particulate matter. This movement of the air up and down the valley increases the impact of the pollutants significantly.

Pollution sources are plentiful and complex in this subregion. The Santa Clara Valley has a high concentration of industry at the northern end, in the Silicon Valley. Some of these industries are sources of air toxics as well as criteria air pollutants. In addition, Santa Clara Valley's large population and many work-site destinations generate the highest mobile source emissions of any subregion in the SFBAAB.

3.3.1.2 Pollutants and Effects

Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The national and California standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include O_3, nitrogen dioxide (NO_2), CO, sulfur dioxide (SO_2), particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM_{10}), particulate matter with an aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$), and lead. In California, sulfates, vinyl chloride,

hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants. These pollutants, as well as TACs, are discussed in the following paragraphs.[1]

Ozone. O_3 is a strong-smelling, pale blue, reactive, toxic chemical gas consisting of three oxygen atoms. It is a secondary pollutant formed in the atmosphere by a photochemical process involving the sun's energy and O_3 precursors. These precursors are mainly NO_x and ROG. The maximum effects of precursor emissions on O_3 concentrations usually occur several hours after they are emitted and many miles from the source. Meteorology and terrain play major roles in O_3 formation, and ideal conditions occur during summer and early autumn on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. O_3 exists in the upper atmosphere O_3 layer (stratospheric O_3) and at the Earth's surface in the troposphere (ground-level O_3).[2] The O_3 that the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) regulate as a criteria air pollutant is produced close to the ground level, where people live, exercise, and breathe. Ground-level O_3 is a harmful air pollutant that causes numerous adverse health effects and is thus considered "bad" O_3. Stratospheric, or "good," O_3 occurs naturally in the upper atmosphere, where it reduces the amount of ultraviolet light (i.e., solar radiation) entering the Earth's atmosphere. Without the protection of the beneficial stratospheric O_3 layer, plant and animal life would be seriously harmed.

O_3 in the troposphere causes numerous adverse health effects; short-term exposures (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes (EPA 2013).

Inhalation of O_3 causes inflammation and irritation of the tissues lining human airways, causing and worsening a variety of symptoms. Exposure to O_3 can reduce the volume of air that the lungs breathe in, thereby causing shortness of breath. O_3 in sufficient doses increases the permeability of lung cells, rendering them more susceptible to toxins and microorganisms. The occurrence and severity of health effects from O_3 exposure vary widely among individuals, even when the dose and the duration of exposure are the same. Research shows adults and children who spend more time outdoors participating in vigorous physical activities are at greater risk from the harmful health effects of O_3 exposure. While there are relatively few studies on the effects of O_3 on children, the available studies show that children are no more or less likely to suffer harmful effects than adults. However, there are a number of reasons why children may be more susceptible to O_3 and other pollutants. Children and teens spend nearly twice as much time outdoors and engaged in vigorous activities as adults. Children breathe more rapidly than adults and inhale more pollution per pound of their body weight than adults. Also, children are less likely than adults to notice their own symptoms and avoid harmful exposures. Further research may be able to better distinguish between health effects in children and adults. Children, adolescents and adults who exercise or work outdoors, where O_3 concentrations are the highest, are at the greatest risk of harm from this pollutant (CARB 2025b).

Nitrogen Dioxide. NO_2 is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NO), which is a colorless, odorless gas. NO_x plays a major role, together with ROG, in the atmospheric reactions that produce O_3. NO_x is formed from fuel combustion under high temperature or pressure. In addition, NO_x is an

1 The descriptions of the criteria air pollutants and associated health effects are based on the U.S. Environmental Protection Agency's "Criteria Air Pollutants" (EPA 2020a), as well as the California Air Resources Board's "Glossary" (CARB 2025a) and CARB's "Common Air Pollutants" (CARB 2025g).

2 The troposphere is the layer of the Earth's atmosphere nearest to the surface of the Earth. The troposphere extends outward about 5 miles at the poles and about 10 miles at the equator.

important precursor to acid rain and may affect both terrestrial and aquatic ecosystems. The two major emissions sources are transportation and stationary fuel combustion sources such as electric utility and industrial boilers. NO_2 can irritate the lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections (EPA 2016).

A large body of health science literature indicates that exposure to NO_2 can induce adverse health effects. The strongest health evidence, and the health basis for the ambient air quality standards for NO_2, results from controlled human exposure studies that show that NO_2 exposure can intensify responses to allergens in allergic asthmatics. In addition, a number of epidemiological studies have demonstrated associations between NO_2 exposure and premature death, cardiopulmonary effects, decreased lung function growth in children, respiratory symptoms, emergency room visits for asthma, and intensified allergic responses. Infants and children are particularly at risk because they have disproportionately higher exposure to NO_2 than adults due to their greater breathing rate for their body weight and their typically greater outdoor exposure duration. Several studies have shown that long-term NO_2 exposure during childhood, the period of rapid lung growth, can lead to smaller lungs at maturity in children with higher levels of exposure compared to children with lower exposure levels. In addition, children with asthma have a greater degree of airway responsiveness compared with adult asthmatics. In adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease (CARB 2025c).

Carbon Monoxide. CO is a colorless, odorless gas formed by the incomplete combustion of hydrocarbon, or fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, such as the project area location, automobile exhaust accounts for the majority of CO emissions. CO is a nonreactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions—primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, which is a typical situation at dusk in urban areas from November to February. The highest levels of CO typically occur during the colder months of the year, when inversion conditions are more frequent.

CO is harmful because it binds to hemoglobin in the blood, reducing the ability of blood to carry oxygen. This interferes with oxygen delivery to the body's organs. The most common effects of CO exposure are fatigue, headaches, confusion and reduced mental alertness, light-headedness, and dizziness due to inadequate oxygen delivery to the brain. For people with cardiovascular disease, short-term CO exposure can further reduce their body's already compromised ability to respond to the increased oxygen demands of exercise, exertion, or stress. Inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance. Unborn babies whose mothers experience high levels of CO exposure during pregnancy are at risk of adverse developmental effects. Unborn babies, infants, elderly people, and people with anemia or with a history of heart or respiratory disease are most likely to experience health effects with exposure to elevated levels of CO (CARB 2025d).

Sulfur Dioxide. SO_2 is a colorless, pungent gas formed primarily from incomplete combustion of sulfur-containing fossil fuels. The main sources of SO_2 are coal and oil used in power plants and industries; as such, the highest levels of SO_2 are generally found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels.

Controlled human exposure and epidemiological studies show that children and adults with asthma are more likely to experience adverse responses with SO_2 exposure, compared with the non-asthmatic population. Effects at levels near the 1-hour standard are those of asthma exacerbation, including bronchoconstriction accompanied by symptoms of respiratory irritation such as wheezing, shortness of breath, and chest tightness, especially during exercise or physical activity. Also, exposure at elevated levels of SO_2 (above 1 parts per million [ppm]) results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality. Older people and people with cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) are most likely to experience these adverse effects (CARB 2025e).

SO_2 is of concern both because it is a direct respiratory irritant and because it contributes to the formation of sulfate and sulfuric acid in particulate matter (NRC 2005). People with asthma are of particular concern, both because they have increased baseline airflow resistance and because their SO_2-induced increase in airflow resistance is greater than in healthy people, and it increases with the severity of their asthma (NRC 2005). SO_2 is thought to induce airway constriction via neural reflexes involving irritant receptors in the airways (NRC 2005).

Particulate Matter. Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of particulate matter. PM_{10} consists of particulate matter that is 10 microns or less in diameter, which is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. $PM_{2.5}$ consists of particulate matter that is 2.5 microns or less in diameter, which is roughly 1/28 the diameter of a human hair. $PM_{2.5}$ results from fuel combustion (e.g., from motor vehicles and power generation and industrial facilities), residential fireplaces, and woodstoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as sulfur oxides (SO_x), NO_x, and ROG.

$PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as lead, sulfates, and nitrates can cause lung damage directly or be absorbed into the bloodstream, causing damage elsewhere in the body. Additionally, these substances can transport adsorbed gases such as chlorides or ammonium into the lungs, also causing injury. Whereas PM_{10} tends to collect in the upper portion of the respiratory system, $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissue. Suspended particulates also damage and discolor surfaces on which they settle and produce haze and reduce regional visibility.

A number of adverse health effects have been associated with exposure to both $PM_{2.5}$ and PM_{10}. For $PM_{2.5}$, short-term exposures (up to 24-hour duration) have been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days. These adverse health effects have been reported primarily in infants, children, and older adults with preexisting heart or lung diseases. In addition, of all of the common air pollutants, $PM_{2.5}$ is associated with the greatest proportion of adverse health effects related to air pollution, both in the United States and worldwide based on the World Health Organization's Global Burden of Disease Project. Short-term exposures to PM_{10} have been associated primarily with worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency department visits (CARB 2017).

Long-term exposure (months to years) to $PM_{2.5}$ has been linked to premature death, particularly in people who have chronic heart or lung diseases, and reduced lung function growth in children. The effects of long-term exposure to PM_{10} are less clear, although several studies suggest a link between long-term PM_{10} exposure and respiratory mortality. The International Agency for Research on Cancer published a review in 2015 that concluded that particulate matter in outdoor air pollution causes lung cancer (CARB 2017).

Lead. Lead in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturing of batteries, paints, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phaseout of leaded gasoline reduced the overall inventory of airborne lead by nearly 95%. With the phaseout of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emissions sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient (IQ) performance, psychomotor performance, reaction time, and growth. Children are highly susceptible to the effects of lead.

Sulfates. Sulfates are the fully oxidized form of sulfur, which typically occur in combination with metals or hydrogen ions. Sulfates are produced from reactions of SO_2 in the atmosphere and can result in respiratory impairment, as well as reduced visibility.

Vinyl Chloride. Vinyl chloride is a colorless gas with a mild, sweet odor, which has been detected near landfills, sewage plants, and hazardous waste sites, due to the microbial breakdown of chlorinated solvents. Short-term exposure to high levels of vinyl chloride in air can cause nervous system effects, such as dizziness, drowsiness, and headaches. Long-term exposure through inhalation can cause liver damage, including liver cancer.

Hydrogen Sulfide. Hydrogen sulfide is a colorless and flammable gas that has a characteristic odor of rotten eggs. Sources of hydrogen sulfide include geothermal power plants, petroleum refineries, sewers, and sewage treatment plants. Exposure to hydrogen sulfide can result in nuisance odors, as well as headaches and breathing difficulties at higher concentrations.

Visibility-Reducing Particles. Visibility-reducing particles are any particles in the air that obstruct the range of visibility. Effects of reduced visibility can include obscuring the viewshed of natural scenery, reducing airport safety, and discouraging tourism. Sources of visibility-reducing particles are the same as for $PM_{2.5}$.

Reactive Organic Gases. Hydrocarbons are organic gases that are formed from hydrogen and carbon and sometimes other elements. Hydrocarbons that contribute to formation of O_3 are referred to and regulated as ROG or VOCs. Combustion engine exhaust, oil refineries, and fossil-fueled power plants are the sources of hydrocarbons. Other sources of hydrocarbons include evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

The primary health effects of ROG result from the formation of O_3 and its related health effects. High levels of ROG in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through

displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered TACs. There are no separate ambient air quality standards for ROG as a group.

Non-Criteria Air Pollutants

A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic non-cancer health effects. A toxic substance released into the air is considered a TAC. TACs are identified by federal and state agencies based on a review of available scientific evidence. In the state of California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management and reduction was designed to protect residents from the health effects of toxic substances in the air. In addition, the California Air Toxics "Hot Spots" Information and Assessment Act, Assembly Bill (AB) 2588, was enacted by the legislature in 1987 to address public concern over the release of TACs into the atmosphere. The law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years.

Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and non-carcinogenic effects. Non-carcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC.

Diesel Particulate Matter. Diesel particulate matter (DPM) is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases, gas and particle, both of which contribute to health risks. More than 90% of DPM is less than 1 micrometer in diameter (about 1/70 the diameter of a human hair), and thus is a subset of $PM_{2.5}$ (CARB 2019f). DPM is typically composed of carbon particles ("soot," also called black carbon) and numerous organic compounds, including over 40 known cancer-causing organic substances. Examples of these chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene (CARB 2019f). The CARB classified "particulate emissions from diesel-fueled engines" (i.e., DPM) (17 CCR 93000) as a TAC in August 1998. DPM is emitted from a broad range of diesel engines: on-road diesel engines, including trucks, buses, and cars, and off-road diesel engines, including locomotives, marine vessels, and heavy-duty construction equipment, among others. Approximately 70% of all airborne cancer risk in California is associated with DPM (CARB 2000). To reduce the cancer risk associated with DPM, CARB adopted a diesel risk reduction plan in 2000 (CARB 2000). Because it is part of $PM_{2.5}$, DPM also contributes to the same non-cancer health effects as $PM_{2.5}$ exposure. These effects include premature death; hospitalizations and emergency department visits for exacerbated chronic heart and lung disease, including asthma; increased respiratory symptoms; and decreased lung function in children. Several studies suggest that exposure to DPM may also facilitate development of new allergies (CARB 2019f). Those most vulnerable to non-cancer health effects are children, whose lungs are still developing, and older people, who often have chronic health problems.

Odorous Compounds. Odors are generally regarded as an annoyance rather than a health hazard. Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The ability to detect odors varies considerably among the population and overall is quite subjective. People may have different reactions to the same

odor. An odor that is offensive to one person may be perfectly acceptable to another (e.g., coffee roaster). An unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. In a phenomenon known as odor fatigue, a person can become desensitized to almost any odor, and recognition may only occur with an alteration in the intensity. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors.

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Children, pregnant women, older adults, and people with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses where sensitive-receptor population groups are likely to be located at hospitals, medical clinics, schools, playgrounds, childcare centers, residences, and retirement homes (BAAD 2017a).

3.3.2 Relevant Plans, Policies, and Ordinances

3.3.2.1 Federal

Criteria Air Pollutants

The federal Clean Air Act, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. EPA is responsible for implementing most aspects of the Clean Air Act, including setting National Ambient Air Quality Standards (NAAQS) for major air pollutants; setting hazardous air pollutant (HAP) standards; approving state attainment plans; setting motor vehicle emission standards; issuing stationary source emission standards and permits; and establishing acid rain control measures, stratospheric O_3 protection measures, and enforcement provisions. Under the Clean Air Act, NAAQS are established for the following criteria pollutants: O_3, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for O_3, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for O_3, NO_2, SO_2, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over 1- to 3-year periods, depending on the pollutant. The Clean Air Act requires EPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a state implementation plan that demonstrates how those areas will attain the standards within mandated time frames.

Hazardous Air Pollutants

The 1977 federal Clean Air Act amendments required EPA to identify national emission standards for hazardous air pollutants to protect public health and welfare. HAPs include certain volatile organic chemicals, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. Under the 1990 federal Clean Air Act Amendments, which expanded the control program for HAPs, 189 substances and chemical families were identified as HAPs.

3.3.2.2 State

Criteria Air Pollutants

The federal Clean Air Act delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the federal Clean Air Act, and regulating emissions from motor vehicles and consumer products.

CARB has established California Ambient Air Quality Standards (CAAQS), which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered "in attainment" if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, PM_{10}, and $PM_{2.5}$ and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. The NAAQS and CAAQS are presented in Table 3.3-1.

Table 3.3-1. Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	Primary[c,d]	Secondary[c,e]
O_3	1 hour	0.09 ppm (180 µg/m³)	—	Same as primary standard[f]
	8 hours	0.070 ppm (137 µg/m³)	0.070 ppm (137 µg/m³)[f]	
NO_2[g]	1 hour	0.18 ppm (339 µg/m³)	0.100 ppm (188 µg/m³)	Same as primary standard
	Annual arithmetic mean	0.030 ppm (57 µg/m³)	0.053 ppm (100 µg/m³)	
CO	1 hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	None
	8 hours	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	
SO_2[h]	1 hour	0.25 ppm (655 µg/m³)	0.075 ppm (196 µg/m³)	—
	3 hours	—	—	0.5 ppm (1,300 µg/m³)
	24 hours	0.04 ppm (105 µg/m³)	0.14 ppm (for certain areas)[g]	—
	Annual	—	0.030 ppm (for certain areas)[g]	—
PM_{10}[i]	24 hours	50 µg/m³	150 µg/m³	Same as primary standard
	Annual arithmetic mean	20 µg/m³	—	
$PM_{2.5}$[i]	24 hours	—	35 µg/m³	Same as primary standard
	Annual arithmetic mean	12 µg/m³	12.0 µg/m³	15.0 µg/m³
Lead[j,k]	30-day average	1.5 µg/m³	—	—

Table 3.3-1. Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	Primary[c,d]	Secondary[c,e]
	Calendar quarter	—	1.5 µg/m³ (for certain areas)[k]	Same as primary standard
	Rolling 3-month average	—	0.15 µg/m³	
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m³)	—	—
Vinyl chloride[j]	24 hours	0.01 ppm (26 µg/m³)	—	—
Sulfates	24- hours	25 µg/m³	—	—
Visibility reducing particles	8 hour (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to the number of particles when the relative humidity is less than 70%	—	—

Source: CARB 2016.

Notes: O_3 = ozone; ppm = parts per million by volume; µg/m³ = micrograms per cubic meter; NO_2 = nitrogen dioxide; CO = carbon monoxide; mg/m³= milligrams per cubic meter; SO_2 = sulfur dioxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; PST = Pacific Standard Time.

[a] California standards for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, suspended particulate matter (PM_{10}, $PM_{2.5}$), and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[b] National standards (other than O_3, NO_2, SO_2, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once per year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than 1. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

[c] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[d] National primary standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

[e] National secondary standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[f] On October 1, 2015, the national 8-hour O_3 primary and secondary standards were lowered from 0.075 to 0.070 ppm.

[g] To attain the national 1-hour standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

[h] On June 2, 2010, a new 1-hour SO_2 standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the national 1-hour standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

[i] On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m³ were also retained. The form of the annual primary and secondary standards is the annual mean averaged over 3 years.

[j] CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[k] The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m^3 as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

Toxic Air Contaminants

The state Air Toxics Program was established in 1983 under AB 1807 (Tanner). The California TAC list identifies more than 200 pollutants, of which carcinogenic and noncarcinogenic toxicity criteria have been established for a subset of these pollutants pursuant to the California Health and Safety Code. In accordance with AB 2728, the state list includes the (federal) HAPs. In 1987, the Legislature enacted the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) to address public concern over the release of TACs into the atmosphere. AB 2588 law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over 5 years. TAC emissions from individual facilities are quantified and prioritized. "High-priority" facilities are required to perform a health risk assessment (HRA), and if specific thresholds are exceeded, the facility operator is required to communicate the results to the public in the form of notices and public meetings.

In 2000, CARB approved a comprehensive diesel risk reduction plan to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines (CARB 2000). The regulation is anticipated to result in an 80% decrease in statewide diesel health risk in 2020 compared with the diesel risk in 2000. Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, the On-Road Heavy Duty (New) Vehicle Program, the In-Use Off-Road Diesel Vehicle Regulation, and the New Off-Road Compression-Ignition (Diesel) Engines and Equipment program. These regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel-powered equipment. There are several Airborne Toxic Control Measures that reduce diesel emissions, including In-Use Off-Road Diesel-Fueled Fleets (13 CCR 2449 et seq.) and In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025).

California Health and Safety Code Section 41700

This section of the Health and Safety Code states that a person shall not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endanger the comfort, repose, health, or safety of any of those persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property. This section also applies to sources of objectionable odors.

3.3.2.3 Local

Bay Area Air District

The BAAD is the regional agency responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in the SFBAAB, where the project area is located. The clean air strategy of the BAAD includes the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, issuance of permits for stationary sources of air pollution, inspection of stationary sources of air pollution and response to citizen complaints, monitoring of ambient air quality

and meteorological conditions, and implementation of programs and regulations required by the federal and California Clean Air Acts.

On April 19, 2017, the BAAD adopted the *Spare the Air: Cool The Climate Final 2017 Clean Air Plan* (BAAD 2017b). The *2017 Clean Air Plan* provides a regional strategy to protect public health and protect the climate. To protect public health, the *2017 Clean Air Plan* includes all feasible measures to reduce emissions of O_3 precursors (ROG and NO_x) and reduce O_3 transport to neighboring air basins. In addition, the *2017 Clean Air Plan* builds on BAAD efforts to reduce $PM_{2.5}$ and TACs. To protect the climate, the *2017 Clean Air Plan* defines a vision for transitioning the region to a post-carbon economy needed to achieve ambitious GHG reduction targets for 2030 and 2050 and provides a regional climate protection strategy that will put the Bay Area on a pathway to achieve those GHG reduction targets.

BAAD establishes and administers a program of rules and regulations to attain and maintain state and national air quality standards and regulations related to TACs. The rules and regulations that may apply to the Project include, but would not be limited to, the following:

- **Regulation 2, Rule 1 – Permits.** This rule specifies the requirements for authorities to construct and permits.
- **Regulation 6, Rule 1 – General Requirements.** This rule limits the quantity of particulate matter in the atmosphere through the establishment of limitations on emission rates, concentration, visible emissions, and opacity.
- **Regulation 6, Rule 3 – Wood-Burning Devices.** This rule limits the emissions of particulate matter and visible emissions from wood-burning devices used for primary heat, supplemental heat or ambiance.
- **Regulation 6, Rule 6 – Prohibition of Trackout.** This rule addresses fugitive road dust emissions associated with trackout of solid materials onto paved public roads outside the boundaries of large bulk material sites, large construction sites and large disturbed surface sites (sites of 1-acre or more), and large disturbed surface sites.
- **Regulation 8, Rule 1 – General Provisions.** This rule limits the emission of organic compounds into the atmosphere.
- **Regulation 8, Rule 3 – Architectural Coatings.** This rule limits the quantity of VOCs in architectural coatings supplied, sold, offered for sale, applied, solicited for application, or manufactured for use within the BAAD.
- **Regulation 8, Rule 15 – Emulsified and Liquid Asphalts.** This rule limits the emissions of VOCs caused by the use of emulsified and liquid asphalt in paving materials and paving and maintenance operations.

County of Santa Clara General Plan

The Health Element of the General Plan provides the following goals and policies potentially relevant to the Project (County of Santa Clara. 1994-2010 *Santa Clara County General Plan*. *Book B, 1994)*:

HE-G.1. Air quality environmental review. Continue to utilize and comply with the Air District's project- and plan-level thresholds of significance for air pollutants and greenhouse gas emissions.

HE-G.2. Coordination with regional agencies. Coordinate with the Air District to promote and implement stationery and area source emission measures.

HE-G.3. Fleet upgrades. Promote Air District mobile source measures to reduce emissions by accelerating the replacement of older, dirtier vehicles and equipment, and by expanding the use of zero emission and plug-in vehicles.

HE-G.4. Off-road sources. Encourage mobile source emission reduction from off-road equipment such as construction, farming, lawn and garden, and recreational vehicles by retrofitting, retiring and replacing equipment and by using alternate fuel vehicles.

HE-G.5. GHG reduction. Support efforts to reduce GHG emissions from mobile sources, such as reducing vehicle trips, vehicle use, vehicle miles traveled (VMT), vehicle idling, and traffic congestion. These efforts may include improved transit service, better roadway system efficiency, state-of-the-art signal timing and Intelligent Transportation Systems (ITS), transportation demand management, parking and roadway pricing strategies, and growth management measures.

HE-G.6. Regional/local plans. Encourage and support regional and local land use planning that reduces automobile use and promotes active transportation.

HE-G.7. Sensitive receptor uses. Promote measures to protect sensitive receptor uses, such as residential areas, schools, day care centers, recreational playfields and trails, and medical facilities by locating uses away from major roadways and stationary area sources of pollution, where possible, or incorporating feasible, effective mitigation measures.

HE-G.8. CARE Communities focus. Promote awareness of geographic areas subject to persistently poorer air quality and assist the Air District in monitoring and reducing emissions from all sources in CARE communities

HE-G.9. Healthy infill development. Promote measures and mitigations for infill development to protect residents from air and noise pollution, such as more stringent building performance standards, proper siting criteria, development and environmental review processes, and enhanced air filtration.

HE-G.10. Conservation. Promote energy conservation and efficiency in homes, businesses, schools, and other infrastructure to reduce energy use and criteria pollutant and greenhouse gas emissions.

HE-G.11. Renewable energy. Encourage renewable energy, such as solar and wind turbines, on commercial, industrial, and residential buildings.

HE-G.12. Energy technologies. Support regional and local initiatives that promote integrated building systems, distributed generation, demand response programs, smart grid infrastructure, energy storage and backup, and electric transportation infrastructure.

HE-G.13. Fire prevention. Support state, federal, County, and other local efforts to prevent wildfires. Emphasize prevention cost-efficiency over that of ever-increasing expense of fighting and suppressing wildfires.

C-HS 2. The strategies for maintaining and improving air quality on a countywide basis, in addition to ongoing stationary source regulation, should include: a. augmented growth management, land use, and development policies that help achieve air quality standards; b. transit systems that provide feasible travel options; c. increased travel demand management and traffic congestion relief; and d. particulate and small-scale emission.

C-HS 3. Countywide or multi-jurisdictional planning by the cities and County should promote efforts to improve air quality and maximize the effective- ness of implementation efforts. Guidance and assistance from the BAAD shall be sought in the preparation of coordinated, multi-jurisdictional plans as well as in environmental review of projects that have potential for regionally significant air quality impacts.

C-HS 4. Future growth and development countywide should be managed and accommodated in such a way that it: a. minimizes the cumulative impacts on local, regional, and trans-regional air quality; and b. reduces the general population exposure to levels prescribed by state and/or federal law for urban areas designated as non-attainment areas.

C-HS 5. Countywide growth management strategies and urban development policies should promote the air quality improvement by minimizing the expansion of auto-dependent development and encouraging balanced urban development.

C-HS 6. Cities' land use plans and development policies should incorporate to the maximum extent possible concepts which contribute to improved air quality: a. compact development and infill policies; b. minimum densities along transit corridors; c. Transit-Oriented Design and mixed use development nodes near transit stations; d. employment area densities and design to facilitate transit service; e. mitigation requirements for "indirect" sources, such as arenas, major shopping centers, and other facilities which generate large trip volumes; f. redesignation of non-residential lands to improve supply and proximity of housing to employment; and g. buffer areas to adequately separate "sensitive populations" and residential development from major emissions sources.

C-HS 7. The local and sub-regional improvements in transit service and the highway system which promote transit use, reduce congestion, improve flows, and otherwise contribute to improved air quality should be considered for highest funding priorities.

C-HS 9. Employer-based ridesharing and TDM should be encouraged as mitigation for traffic generating impacts of new development.

C-HS 10. Congestion on major roadways due to traffic accidents, unregulated entry (on ramps), and other system-related causes should be reduced to improve traffic flow and air quality.

C-HS 11. During critical winter inversion periods, pollution from wood-burning stoves and fireplaces should be reduced by measures which restrict use according to meteorological conditions projected by the BAAD or require installation of emission controls such as catalytic converters in chimneys.

C-HS 12. Measures to reduce particulate matter pollution originating from quarrying, road and building construction, industrial processes, unpaved parking lots, and other sources should be encouraged.

C-HS 13. Emissions from small scale sources such as gasoline-powered lawn equipment, consumer products, barbeque grills, and other sources should be reduced through public education, product replacement, and regulation where appropriate.

3.3.3 Regional and Local Air Quality Conditions

3.3.3.1 San Francisco Bay Area Air Basin Attainment Designation

Pursuant to the 1990 federal Clean Air Act amendments, EPA classifies air basins (or portions thereof) as "attainment" or "nonattainment" for each criteria air pollutant, based on whether the NAAQS have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as "attainment" for that pollutant. If an area exceeds the standard, the area is classified as "nonattainment" for that pollutant. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as "unclassified" or "unclassifiable." The designation of "unclassifiable/attainment" means that the area meets the standard or is expected to meet the standard despite a lack of monitoring data. Areas that achieve the standards after a nonattainment designation are re-designated as maintenance areas and must have approved Maintenance Plans to ensure continued attainment of the standards. The California Clean Air Act, like its federal counterpart, called for the designation of areas as "attainment" or "nonattainment," but based on CAAQS rather than the NAAQS. Table 3.3-2 depicts the current attainment status of the SFBAAB with respect to the NAAQS and CAAQS.

Table 3.3-2. San Francisco Bay Area Air Basin Attainment Classification

Pollutant	Designation/Classification	
	National Standards	California Standards
Ozone (O_3), 1-hour	No national standard	**Nonattainment**
Ozone (O_3), 8-hour	**Nonattainment-Marginal**	**Nonattainment**
Nitrogen Dioxide (NO_2)	Unclassifiable/attainment	Attainment
Carbon Monoxide (CO)	Attainment/maintenance	Attainment
Sulfur Dioxide (SO_2)	Unclassifiable/attainment	Attainment
Coarse Particulate Matter (PM_{10})	Unclassifiable/attainment	**Nonattainment**
Fine Particulate Matter ($PM_{2.5}$)	**Nonattainment-Moderate**	**Nonattainment**
Lead	Unclassifiable/attainment	Attainment
Hydrogen Sulfide	No national standard	Unclassified
Sulfates	No national standard	Attainment
Visibility-Reducing Particles	No national standard	Unclassified
Vinyl Chloride	No national standard	No designation

Sources: EPA 2024a (national); CARB 2022 (California).
Notes: Bold text = not in attainment; attainment = meets the standards; attainment/maintenance = achieves the standards after a nonattainment designation; nonattainment = does not meet the standards; unclassified or unclassifiable = insufficient data to classify; unclassifiable/attainment = meets the standard or is expected to meet the standard despite a lack of monitoring data.

In summary, the SFBAAB is designated as a nonattainment area for federal and state O_3 and $PM_{2.5}$ standards. The SFBAAB is also designated as a nonattainment area for the state PM_{10} standards. The SFBAAB is designated as "unclassified" or "attainment" for all other criteria air pollutants.

3.3.3.2 Local Ambient Air Quality

CARB, air districts, and other agencies monitor ambient air quality at approximately 250 air quality monitoring stations across the state. BAAD monitors local ambient air quality within the project area. Air quality monitoring

stations usually measure pollutant concentrations 10 feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. The background ambient air quality data from 2020 to 2022 are presented in Table 3.3-3. The San Jose monitoring station, located at 158B Jackson Street, San Jose, California 95070, is the most centrally located air quality monitoring station within the project area. The data collected at these stations are considered generally representative of the air quality experienced in the Project vicinity. The number of days exceeding the ambient air quality standards is also shown in Table 3.3-3.

Table 3.3-3. Local Ambient Air Quality Data

Averaging Time	Unit	Agency/ Method	Ambient Air Quality Standard	Measured Concentration by Year			Exceedances by Year		
				2020	2021	2022	2020	2021	2022
Ozone (O_3) (San Jose monitoring station)									
Maximum 1-hour concentration	Ppm	California	0.12	0.106	0.098	0.090	1	3	0
Maximum 8-hour concentration	ppm	California	0.070	0.086	0.085	0.074	2	4	1
		National	0.070	0.085	0.084	0.074	2	4	1
Nitrogen Dioxide (NO_2) (San Jose monitoring station)									
Maximum 1-hour concentration	ppm	California	0.18	0.051	0.047	0.046	0	0	0
		National	0.100	0.0519	0.0478	0.0468	0	0	0
Annual concentration	ppm	California	0.030	0.012	0.0010	0.009	—	—	—
		National	0.053	0.010	0.009	0.009	—	—	—
Carbon Monoxide (CO) (San Jose monitoring station)									
Maximum 1-hour concentration	ppm	California	20	1.8	1.7	1.4	0	0	0
		National	35	1.8	1.7	1.4	0	0	0
Maximum 8-hour concentration	ppm	California	9.0	1.5	1.5	1.7	0	0	0
		National	9	1.5	1.5	1.7	0	0	0
Coarse Particulate Matter (PM_{10})[a] (San Jose monitoring station)									
Maximum 24-hour concentration	µg/m³	California	50	137.1	45.1	44.5	ND (10)	0.0 (0)	0.0 (0)
		National	150	134.9	42.8	41.1	ND (10)	0.0 (0)	0.0 (0)
Annual concentration	µg/m³	California	20	ND	20.1	21.3	—	—	—
Fine Particulate Matter ($PM_{2.5}$)[a] (San Jose monitoring station)									
Maximum 24-hour concentration	µg/m³	National	35	38.1	38.1	36.2	12.0 (12)	1.0 (1)	2.0 (2)
Annual concentration	µg/m³	California	12	12	12	10	—	—	—
		National	12.0	9.8	10.2	10.2	—	—	—

Sources: CARB 2024; EPA 2024b.

Notes: ppm = parts per million by volume; — = not available; μg/m³ = micrograms per cubic meter; ND = mean does not satisfy minimum data completeness criteria/insufficient data available to determine the value.
San Jose Monitoring Station is located at 158B Jackson Street, San Jose California 95070.
Data taken from CARB iADAM (CARB 2024) and EPA AirData (EPA 2024b) represent the highest concentrations experienced over a given year.
No SO_2 values are available for Santa Clara as SO_2 concentrations are historically low and not commonly monitored.
Exceedances of national and California standards are only shown for O_3 and particulate matter. Daily exceedances for particulate matter are estimated days because PM_{10} and $PM_{2.5}$ are not monitored daily. All other criteria pollutants did not exceed national or California standards during the years shown. There is no national standard for 1-hour O_3, annual PM_{10}, or 24-hour SO_2, nor is there a California 24-hour standard for $PM_{2.5}$.

[a] Measurements of PM_{10} and $PM_{2.5}$ are usually collected every 6 days and every 1 to 3 days, respectively. Number of days exceeding the standards is a mathematical estimate of the number of days concentrations would have been greater than the level of the standard had each day been monitored. The numbers in parentheses are the measured number of samples that exceeded the standard.

3.3.4 Thresholds of Significance

The significance criteria used to evaluate the Project impacts to air quality is based on the recommendations provided in Appendix G of the CEQA Guidelines. For the purposes of this air quality analysis, a significant impact would occur if the Project would (14 CCR 15000 et seq.):

AQ-1: Conflict with or obstruct implementation of the applicable air quality plan.

AQ-2: Result in a cumulatively considerable new increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard.

AQ-3: Expose sensitive receptors to substantial pollutant concentrations.

AQ-4: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) indicates that, where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to determine whether the project would have a significant impact on air quality.

Notably, in the *California Building Industry Association v. Bay Area Air Quality Management District* case decided in 2015, the California Supreme Court held that CEQA does not generally require lead agencies to consider how existing environmental conditions might impact a project's occupants, except where the project would significantly exacerbate an existing environmental condition. Accordingly, the significance criteria above related to exposure of sensitive receptors to substantial pollutant concentrations is relevant only to the extent that the project exacerbates existing air quality conditions.

While the BAAD has adopted new Thresholds for Evaluating the Significance of Climate Impacts from Land use Projects and Plans as of April 2022, the BAAD's air quality CEQA significance were not updated at the same time. Therefore, the BAAD *CEQA Air Quality Guidelines* (May 2017) remain as the applicable guidelines for the Project and include thresholds for criteria air pollutants, TACs, and GHG emissions (BAAD 2017a). BAAD significance thresholds are summarized in Table 3.3-4.

Table 3.3-4. Air Quality - Thresholds of Significance

Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (pounds/day)	Average Daily Emissions (pounds/day)	Maximum Annual Emissions (tons/year)
ROG	54	54	10
NO_x	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	10
PM_{10}/$PM_{2.5}$ (fugitive dust)	Best Management Practices	None	
Local CO	None	9.0 ppm (8-hour average, 20.0 ppm (1-hour average)	
Risks and Hazards (Individual Project)	Compliance with Qualified Community Risk Reduction Plan or Increased cancer risk of >10.0 in a million Increased noncancer risk of >1.0 Hazard Index (Chronic or Acute) Ambient $PM_{2.5}$ increase >0.3 µg/m^3 annual average Zone of Influence: 1,000-foot radius from property line of source or receptor		
Risks and Hazards (Cumulative)	Compliance with Qualified Community Risk Reduction Plan or Cancer risk of >100 in a million (from all local sources) Noncancer risk of >10.0 Hazard Index (chronic, from all local sources) Ambient $PM_{2.5}$ >0.8 µg/m^3 annual average (from all local sources) Zone of Influence: 1,000-foot radius from property line of source or receptor		
Accidental Release of Acutely Hazardous Air Pollutants	None	Storage or use of acutely hazardous material located near receptors or new receptors located near stored or used acutely hazardous materials considered significant	
Odors	None	Five confirmed complaints to BAAD per year averaged over 3 years	

Source: BAAD 2017a

Notes: pounds/day = pounds per day; tons/year = tons per year; ppm = parts per million; µg/m^3 = micrograms per cubic meter; ROG = reactive organic gases; NO_x = oxides of nitrogen; PM_{10} = particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; $PM_{2.5}$ = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; CO = carbon monoxide

The evaluation of whether the Project would conflict with or obstruct implementation of the applicable air quality plan (CEQA Guidelines, Appendix G, Threshold 1) is based on the BAAD *CEQA Air Quality Guidelines*, which identify a three-step methodology for determining a project's consistency with the current Clean Air Plan. These questions are:

1. Does the project support the goals of the Air Quality Plan?
2. Does the project include applicable control measures from the Clean Air Plan?
3. Does the project disrupt or hinder implementation of any control measures from the Clean Air Plan?

The BAAD-recommended measure to assess the first question is consistency with BAAD thresholds of significance, which is addressed in detail under Threshold AQ-2, The second criterion is whether the Project would incorporate all feasible air quality plan control measures from the Clean Air Plan, which is discussed under Threshold AQ-1 Regarding the third criterion, examples of how a project may cause the disruption or delay of control measures

include a project that precludes an extension of a transit line or bike path or proposes excessive parking beyond parking requirements. This is also discussed under Threshold AQ-1.

To evaluate the potential for the Project to 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 (CEQA Guidelines, Appendix G, Threshold 2), this analysis applies BAAD's construction criteria pollutants average daily thresholds, as shown in Table 3.3-4. The BAAD maintains that these thresholds are intended to maintain ambient air quality concentrations of these criteria air pollutants below state and federal standards and to prevent a cumulatively considerable contribution to regional nonattainment with ambient air quality standards. A project would potentially result in a cumulatively considerable net increase in O_3, which is a nonattainment pollutant, if the project's construction or operational emissions would exceed the BAAD ROG or NO_x thresholds shown in Table 3.3-4. These emissions-based thresholds for O_3 precursors are intended to serve as a surrogate for an "ozone significance threshold" (i.e., the potential for adverse O_3 impacts to occur). This approach is used because O_3 is not emitted directly, and the effects of an individual project's emissions of O_3 precursors (ROG and NO_x) on O_3 levels in ambient air cannot be determined reliably or meaningfully through air quality models or other quantitative methods.

The assessment of the Project potential to expose sensitive receptors to substantial pollutant concentrations (CEQA Guidelines, Appendix G, Threshold 3) includes an assessment of potential health risk impacts at existing off-site sensitive receptors associated with TACs generated by Project construction. Cancer risk, chronic risk, and $PM_{2.5}$ concentration impact determinations were based on the respective thresholds depicted in Table 3.3-4.

In addition, localized impacts associated with CO hotspots were also evaluated based on whether the concentration thresholds in Table 3.3-4 would be exceeded. According to the BAAD, a project would result in a less-than-significant impact to localized CO concentrations if the following screening criteria are met (BAAD 2017a):

1. Project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.
2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

Finally, the potential for the Project to result in other emissions, specifically an odor impact (CEQA Guidelines, Appendix G, Threshold 4), is based on the Project land-use types and anticipated construction activity, and the potential for the Project to create an odor nuisance.

3.3.5 Methodology

As described in Chapter 2, Project Description, the Project consists of amendments to the County Zoning Ordinance. The Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. Although the Project would not directly construct new development, it would allow and facilitate new agriculture-supportive uses

that could directly result in construction or operational impacts to the environment. Therefore, this PEIR does not assess the site-specific construction and operation details of each future development within the project area. Rather, it assesses the impacts associated with proposed land use changes and programs, and the associated overall effects of buildout of the Project, where reasonably foreseeable physical changes to the environment could occur. Analysis at a parcel or site-specific level was not conducted because, unless otherwise noted within this assessment, the actual locations of Project development (and its chronologic sequence or concurrence) that may be implemented in the future are speculative.

For the purpose of estimating emissions, a representative development project was developed based on the proposed Limited agricultural processing or sales projects that may be ministerially approved under the proposed Project. The representative project includes 2,500 square feet of storage or processing space and 2,500 square feet of retail or gathering space consistent with the amendments. The anticipated development for the representative project is categorized by land use type and square footage. However, since specifics for construction and operation of future development under the example project are not yet available, the California Emissions Estimator Model (CalEEMod) default values were assumed based on development land use type and size.

3.3.5.1 Construction

To determine if the Project would not exceed the BAAD mass daily thresholds, criteria air pollutant emissions were estimated based on a representative project which included 2,500 square feet of agriculture-supportive uses including storage and processing and 2,500 square feet of retail or other gathering space. The development scenario was modeled using CalEEMod Version 2020.4.0. Not all future development would require all of the construction phases assumed; however, the following six default CalEEMod construction phases were included to present the potential range of emissions and capture a potential maximum daily and annual scenario: demolition, site preparation, grading, building construction, paving, and architectural coating. For example, due to the developed nature of some County parcels, many projects may only require a demolition (existing buildings and asphalt pavement) phase and minor site preparation phase prior to building construction, while some projects may require renovation, which would be less intensive than reconstruction. In addition, some projects may not require any demolition, but would require site preparation and/or grading to prepare the site for development. Due to the speculative nature of the amount of asphalt paving associated with potential future residential development, VOC off-gassing from asphalt pavement application is not included in the emissions estimates; however, paving phase emissions associated with paving equipment and vehicle trips are captured.

Construction scenario assumptions, including phasing, equipment mix, and vehicle trips, were based on CalEEMod default values. Due to the speculative nature of construction activities from the potential development, CalEEMod default values were relied upon with minor exceptions (i.e., demolition, cubic yards of export during grading, and compliance with air district fugitive dust control rules). Some CalEEMod inputs require project-specific information to estimate non-zero values, including demolition and grading assumptions. As noted above, some parcel development may not require demolition or grading activities; however, in a good faith effort to include potential emissions associated with demolition and grading (rather than zero values), some basic assumptions were applied to the construction scenario. For example, a one-story building the size of the parcel was assumed to estimate demolition emissions, and cubic yards reflecting the parcel site acreage at 2 feet deep was assumed to be exported from the site to estimate grading (earthwork) emissions. All construction scenario assumptions are provided in Appendix B.

Any future construction resulting from implementation of the representative project would be required to comply with BAAD Regulation 6, Rule 6 to control dust emissions during any dust-generating activities. Regulation 6, Rule 6 requires implementation of various best available fugitive dust control measures for construction activity sources within its jurisdictional boundaries. Dust control measures include, but are not limited to, maintaining stability of soil through pre-watering of the site prior to clearing, grubbing, cut and fill, and earth-moving activities; stabilizing soil during and immediately after clearing, grubbing, cut and fill, and other earth-moving activities; stabilizing backfill during handling and at completion of activity; and pre-watering material prior to truck loading and ensuring that freeboard exceeds 6 inches. Compliance with Regulation 6, Rule 6 is represented in CalEEMod by assuming twice daily watering of active sites (55% reduction in PM_{10} and $PM_{2.5}$ [CAPCOA 2021]).

3.3.5.2 Operation

To determine if the Project would exceed the BAAD mass daily thresholds, a representative project was modeled using CalEEMod Version 2020.4.0. Operational year 2024 was assumed. While the exact type of development will vary, for emission estimation purposes, the development would be a mix of light industry and retail to provide a conservative estimate of emissions.[3]

Area

CalEEMod was used to estimate operational emissions from area sources, including emissions from hearths, consumer product use, architectural coatings, and landscape maintenance equipment.

Consumer products are chemically formulated products used by household and institutional consumers, including detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. Other paint products, furniture coatings, or architectural coatings are not considered consumer products (CAPCOA 2017). Consumer product VOC emissions are estimated in CalEEMod based on the floor area of residential buildings and on the default factor of pounds of VOC per building square foot per day.

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings such as in paints and primers using during building maintenance. CalEEMod calculates the VOC evaporative emissions from application of residential surface coatings based on the VOC emission factor, the building square footage, the assumed fraction of surface area, and the reapplication rate. The VOC emission factor is based on the VOC content of the surface coatings and CalEEMod default values. Ultimately, per the location of the parcel, BAAD's Regulation 8, Rule 3 Architectural Coatings would govern the VOC content for interior and exterior coatings. The model default reapplication rate of 10% of area per year is assumed.

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers. The emissions associated from landscape equipment use are estimated based on CalEEMod default values for emission factors (grams per residential dwelling unit per day) and number of summer days (when landscape maintenance would generally be performed) and winter days.

[3] Industrial and retail uses were assumed to represent activities such as agricultural processing and tasting/ retail/ gatherings, respectively.

Energy

As represented in CalEEMod, energy sources include emissions associated with building electricity. Electricity use would contribute indirectly to criteria air pollutant emissions; however, the emissions from electricity use are only quantified for greenhouse gases in CalEEMod, since criteria pollutant emissions occur at the site of the power plant, which is typically off site. Based on the County's Reach Code which prohibits natural gas infrastructure in new development, the representative project was assumed to not include natural gas emissions sources.

The current version of CalEEMod assumes compliance with the 2019 Title 24 Building Energy Efficiency Standards (CAPCOA 2021); however, all development would be required to comply with the 2022 Title 24 Standards at a minimum. In addition to Title 24 the representative project would comply with the County's Reach Code. Therefore, CalEEMod values were adjusted to account for the increase in electricity and decrease in natural gas consumption associated with compliance with County's Reach Codes.

Mobile Sources

Mobile sources for the development scenario would primarily be motor vehicles (automobiles and light-duty trucks) traveling to and from the parcels developed. Motor vehicles may be fueled with gasoline, diesel, or alternative fuels. The default vehicle mix provided in CalEEMod 2020.4.0, which is based on CARB's Mobile Source Emissions Inventory model (EMFAC) version 2017, was applied for the commercial and industrial land uses. Emission factors representing year 2024 were used to estimate emissions associated with of the first full year of implementation of the representative project. Applied trip generation rates for the development scenario are based on the CalEEMod defaults.

Potential Other Sources of Emissions

Due to the plan nature of the representative project, development could result in additional emission sources that are not captured in CalEEMod or for which specifics are not available to accurately estimate emissions using CalEEMod. However, based on the type of land uses that would be developed under the representative project, other sources of emissions are not anticipated to be common or substantial. Nonetheless, it is acknowledged that additional emission sources may occur that are not captured in this analysis. Note that all stationary sources of TACs resulting from implementation of the representative project would be required to comply with applicable BAAD rules and regulations and would be required to obtain a permit to operate from the BAAD.

3.3.6 Environmental Impacts

Impact AQ-1 Conflict with or obstruct implementation of the applicable air quality plan?

An area is designated as "in attainment" when it is in compliance with the federal and/or state standards. These standards are set by the EPA or CARB for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or public welfare with a margin of safety. The project area is located within the SFBAAB, which is designated non-attainment for the federal 8-hour O_3 and 24-hour $PM_{2.5}$ standards. The area is in attainment or unclassified for all other federal standards. The area is designated non-attainment for state standards for 1-hour and 8-hour O_3, 24-hour PM_{10}, annual PM_{10}, and annual $PM_{2.5}$.

As described in Section 3.3.4, Thresholds of Significance, the BAAD has identified a three-step methodology for determining a project's consistency with the current Clean Air Plan:

1. Does the project support the goals of the Air Quality Plan?
2. Does the project include applicable control measures from the Clean Air Plan?
3. Does the project disrupt or hinder implementation of any control measures from the Clean Air Plan?

The first question to be assessed in this methodology is "does the project support the goals of the Air Quality Plan"? The BAAD-recommended measure for determining project support for these goals is consistency with BAAD thresholds of significance. If a project would not result in significant and unavoidable air quality impacts, after the application of all feasible mitigation measures, the project would be consistent with the goals of the *2017 Clean Air Plan*. As indicated under Threshold AQ-2 below, the Project would result in a **less than significant** impact associated with criteria air pollutant emissions during construction and operations. Therefore, the Project would be considered to support the primary goals and be consistent with the BAAD current Clean Air Plan.

The second question to be assessed is "does the project include applicable control measures from the Clean Air Plan?" The *2017 Clean Air Plan* contains 85 control measures aimed at reducing air pollution in the Bay Area. Projects that incorporate all feasible air quality plan control measures are considered consistent with the Clean Air Plan. The control strategies of the *2017 Clean Air Plan* include measures in the categories of stationary sources, the transportation sector, the buildings sector, the energy sector, the agriculture sector, natural and working lands, the waste sector, the water sector, and super-GHG measures. Depending on the control measure, the tools for implementation include leveraging the BAAD rules and permitting authority, regional coordination and funding, working with local governments to facilitate best policies in building codes, outreach and education, and advocacy strategies. The Project would result in the development of uses and growth that are consistent with the County's General Plan and zoning designations. The Project consists of amendments to the County's Zoning Ordinance. The Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. Although the Project would not directly construct new development, it would allow and facilitate new agriculture-supportive uses that could directly result in construction impacts to the environment. However, the Project would not have the potential to conflict with local and regional plans, programs, and policies. Additionally, approval of the Project itself, would not change these local and regional plans, programs and policies and would not provide any goals, policies, or programs that would significantly impact the air quality within the County. Any impacts identified for a future individual project facilitated by the Project would be addressed through the project approval process, including Architectural and Site Approval (ASA), Design Review, environmental review, and mitigation measures specific to any identified impacts. Furthermore, since the Project would comply with all applicable BAAD rules and would meet or exceed state and federal standards and/or local building codes, the Project would not conflict with any applicable control measures from the *2017 Clean Air Plan*.

The third question to be assessed in this consistency methodology is "does the project disrupt or hinder implementation of any control measures from the Clean Air Plan?" Examples of how a project may cause the disruption or delay of control measures include a project that precludes an extension of a transit line

or bike path or proposes excessive parking beyond parking requirements. The Project would not create any barriers or impediments to planned or future improvements to transit or bicycle facilities in the area, nor would it include excessive parking. Therefore, the Project would not hinder implementation of *2017 Clean Air Plan* control measures.

Based on the preceding considerations, the Project would not conflict with or obstruct implementation of the applicable air quality plan and impacts would be **less than significant**.

Impact AQ-2 Would the project result in a cumulatively considerable new increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?

Past, present, and future development projects may contribute to the SFBAAB adverse air quality impacts on a cumulative basis. Per BAAD's *CEQA Air Quality Guidelines*, by its nature, air pollution is largely a cumulative impact; no single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. In developing thresholds of significance for air pollutants, BAAD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be considered cumulatively considerable, resulting in a significant adverse air quality impact to the region's existing air quality conditions. Therefore, if the project's emissions are below the BAAD thresholds or screening criteria, then the project would not result in a cumulatively considerable net increase of any criteria air pollutant.

Construction Emissions

As discussed previously, the Project consists of amendments to the County's Zoning Ordinance. Although the Project would not directly construct new development, it would allow and facilitate new agriculture-supportive uses that could directly result in construction emissions impacts. Therefore, a representative project has been based on the Development Standards established in Section 2, Project Description, and is shown here for informational purposes.

Proposed construction activities would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, soil disturbance, and ROG (VOC) off-gassing from architectural coatings and asphalt pavement application) and off-site sources (i.e., on-road haul trucks, delivery trucks, and worker vehicle trips). Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions. Therefore, such emissions levels can only be estimated, with a corresponding uncertainty in precise ambient air quality impacts.

As discussed in Section 3.3.5.1, Methodology, Construction Emissions, criteria air pollutant emissions associated with temporary construction activity were quantified using CalEEMod. Construction schedule assumptions, including phase type, duration, and sequencing, are intended to represent a reasonable scenario based on the best information available. Default values provided in CalEEMod were used where detailed representative project information was not available.

Implementation of the representative project would generate criteria air pollutant emissions from entrained dust, off-road equipment, vehicle emissions, architectural coatings, and asphalt pavement application. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and

movement of soil, resulting in PM_{10} and $PM_{2.5}$ emissions. Dust control strategies were quantified in CalEEMod, including watering of the active sites two times per day depending on weather conditions and limitation of vehicle travel to 15 miles per hour on unpaved roads; however, due to the developed nature of the side, no unpaved roads are anticipated. Internal combustion engines used by construction equipment, haul trucks, vendor trucks (i.e., delivery trucks), and worker vehicles would result in emissions of ROG, NO_x, PM_{10}, and $PM_{2.5}$. The application of architectural coatings, such as exterior application/interior paint and other finishes, and application of asphalt pavement would also produce ROG emissions; however, the contractor is required to procure architectural coatings from a supplier in compliance with the requirements of BAAD's Regulation 8, Rule 3 (Architectural Coatings).

Average daily emissions were computed by dividing the total construction emissions by the number of active construction days, which were then compared to the BAAD construction thresholds of significance. Table 3.3-5 shows average daily construction emissions of O_3 precursors (ROG and NOx), PM_{10} exhaust, and $PM_{2.5}$ exhaust during representative project construction.[4] Details of the emission calculations are provided in Appendix B.

Table 3.3-5. Average Daily Construction Criteria Air Pollutant Emissions

Year	ROG	NO_x	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
	Average Pounds per Day			
2023	1.1	6.3	3.1	0.3
BAAD Construction Thresholds	*54*	*54*	*82*	*54*
Exceed Threshold?	**No**	**No**	**No**	**No**

Notes: ROG = reactive organic gases; NO_x = oxides of nitrogen; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; BAAD = Bay Area Air Quality Management District
The values shown are average daily emissions based on total overall tons of construction emissions, converted to pounds, and divided by the estimated active workdays.
Totals may not sum due to rounding.
See Appendix B for complete results.

As shown in Table 3.3-5, construction of a representative land use development under the Project would not exceed BAAD significance thresholds. Therefore, impacts would be **less than significant**.

Operational Emissions

Operation of the representative project would generate criteria pollutant (including ROG, NO_x, PM_{10}, and $PM_{2.5}$) emissions from mobile sources (vehicular traffic), area sources (consumer products, architectural coatings, and landscaping equipment), and energy sources (natural gas consumption). CalEEMod was used to estimate daily emissions from representative project-related operational sources. Table 3.3-6 summarizes the operational emissions criteria pollutants that would be generated from the representative project. Operational emissions were then compared to the BAAD operational thresholds.

[4] Fuel combustion during construction and operations would also result in the generation of SO_2 and CO emissions. These values are included in Appendix B However, since the SFBAAB is in attainment of these pollutants, the BAAD has not established a quantitative mass-significance threshold for comparison and are not included in the project-generated emissions tables in this document. Notably, the BAAD does have screening criteria for operational localized CO, which are discussed in more detail below.

Table 3.3-6. Daily Operational Criteria Air Pollutant Emissions

Source	ROG	NOx	PM10	PM2.5
	Pounds per Day			
Area	0.12	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00
Mobile	0.48	0.35	0.67	0.18
Total	**0.54**	**0.40**	**0.67**	**0.18**
BAAD Operational Thresholds	*54*	*54*	*82*	*54*
Exceed Threshold?	**No**	**No**	**No**	**No**

Source: Appendix B.
Note: ROG = reactive organic gases; NO_x = oxides of nitrogen; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; BAAD = Bay Area Air Quality Management District; CalEEMod = California Emissions Estimator Model.
The values shown are the maximum summer or winter daily emissions results from CalEEMod. Totals may not sum due to rounding.

As indicated in Table 3.2-6, the operational emissions of ROG, NOx, PM10, and PM2.5 resulting from a representative development allowed under the Project would be minimal and would not exceed the BAAD significance thresholds. Therefore, the Project would have a **less-than-significant** impact in relation to regional operational emissions.

Health Effects of Criteria Air Pollutants

Construction and operation of the Project would not result in emissions that exceed the BAAD emission thresholds for any criteria air pollutant, including ROG, NO_x, PM_{10}, or $PM_{2.5}$.

ROG and NO_x are precursors to O_3, for which the SFBAAB is designated as nonattainment with respect to the NAAQS and CAAQS. Nonetheless, because ROG and NO_x emissions associated with a representative development allowed under the Project construction and/or operation would not exceed the BAAD daily thresholds, it is not anticipated the Project would contribute substantially to regional O_3 concentrations and the associated health effects.

Construction and operation of a representative land use development allowed under the Project would not contribute to exceedances of the NAAQS and CAAQS for NO_2. Any construction would be relatively short-term. In addition, existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards. Construction and operation of a representative land use development under the Project would result in a minimal increase in localized NO_x emissions. Therefore, the Project is not anticipated to result in substantial NO_2 emissions or the potential health effects associated with NO_2.

CO tends to be a localized impact associated with congested intersections. As described next under Impact 3.3.6.3, the Project would result in minimal new traffic trips and would not exceed the BAAD CO screening criteria resulting in the formation of potential CO hotspots. Thus, the Project's CO emissions would not contribute to significant health effects associated with this pollutant.

Construction and operation of a representative land use development allowed under the Project would also not exceed thresholds for PM_{10} or $PM_{2.5}$, and would not contribute to exceedances of the NAAQS and CAAQS for particulate matter or obstruct the SFBAAB from coming into attainment for these pollutants. Additionally, the project would implement dust control strategies and be required to comply with Regulation 6, Rule 6 –

Prohibition of Trackout and the BAAD fugitive dust best management practices, which limit the amount of fugitive dust generated during construction. Due to the minimal contribution of PM_{10} and $PM_{2.5}$ during construction and operation, it is not anticipated that the Project would result in potential health effects related to particulate matter.

In summary, because construction and/or operation of the representative land use development allowed under the Project would not exceed the BAAD significance thresholds for ROG, NO_x, PM_{10}, and $PM_{2.5}$, and because the BAAD thresholds are based on levels that the SFBAAB can accommodate without affecting the attainment date for the AAQS, which are established to protect public health and welfare, it is anticipated that the Project would result in less-than-significant health effects associated with criteria air pollutants. This is a **less-than-significant impact**.

Impact AQ-3 Would the project expose sensitive receptors to substantial pollutant concentrations?

Health Impacts of Toxic Air Contaminants

As previously described, the Project consists of amendments to the County's Zoning Ordinance that may result in increased development in the unincorporated areas of the County. In addition to impacts from criteria pollutants, impacts from implementation of the Project may include emissions of pollutants identified by the state and federal government as TACs or HAPs. State law has established the framework for California's TAC identification and control program, which is generally more stringent than the federal program and aimed at TACs that are a problem in California. The following measures are required by state law to reduce DPM emissions:

- Fleet owners of mobile construction equipment are subject to the CARB Regulation for In-use Off-road Diesel Vehicles (13 CCR 2449), the purpose of which is to reduce DPM and criteria pollutant emissions from in-use (existing) off-road diesel-fueled vehicles.
- All commercial diesel vehicles are subject to Title 13, Section 2485 of the California Code of Regulations, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to 5 minutes; electric auxiliary power units should be used whenever possible.

Health effects from carcinogenic air toxics are usually described in terms of cancer risk. The BAAD recommends an incremental cancer risk threshold of 10 in 1 million (BAAD 2017a). "Incremental cancer risk" is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 9-, 30-, and 70-year exposure period will contract cancer based on the use of standard Office of Environmental Health Hazard Assessment risk-assessment methodology.

The greatest potential for TAC emissions during construction would be DPM emissions from heavy equipment operations and heavy-duty trucks during construction activities of representative development allowed under Project implementation and the associated potential health impacts to sensitive receptors. DPM has established cancer risk factors and relative exposure values for long-term chronic health hazard impacts; however, no short-term, acute relative exposure level has been established for DPM.

Based on the nature of the Project, specifically the facilitation of potential future development, it is not anticipated that stationary sources of TAC emissions would be common. However, if a stationary source of

TAC emissions is proposed, the appropriate permits from the BAAD would be required, which would include preparation of a health risk assessment if applicable to ensure potential health risk impacts would not occur.

The potential for development on an individual parcel to result in a significant health risk at nearby sensitive receptors is dependent on many variables including, but not limited to, the total amount of DPM emissions generated during construction, the duration of construction and thereby exposure period, the proximity to nearby sensitive receptors, the predominant wind direction and other meteorological factors, and topography. Due to the speculative nature of development under the Project, including the levels of potential TAC emissions in relation to the location of sensitive receptors, the potential associated health risk levels (including cancer risk and chronic hazard index) are unknown at this time. However, the TACs thresholds are applicable to projects at the project-specific level and are not applicable to regional projects such as the Project. Future development facilitated by the Project as part of the Zoning Ordinance amendments would be subject to future discretionary permits and CEQA evaluation. Overall, although project-specific information is required to effectively quantify health risk, since the $PM_{2.5}$ exhaust (surrogate for DPM) associated with construction of a representative land use development allowed under the Project would be minimal (see Table 3.3-5) and short-term, the potential health risk of exposing off-site sensitive receptors to construction-generated TAC emissions is considered **less than significant**.

Health Effects of Carbon Monoxide

The BAAD thresholds of significance for local CO emissions is the 1-hour and 8-hour CAAQS of 20 ppm and 9 ppm, respectively. By definition, these represent levels that are protective of public health. According to the BAAD, a project would result in a less-than-significant impact to localized CO concentrations if the following screening criteria are met (BAAD 2017a):

1. Project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.
2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

While intersection volumes are not available for every intersection within the unincorporated County area, as discussed in Section 3.17, Transportation, of this PEIR, implementation the Project would not result in a regional increase in vehicle trips and VMT. Accordingly, it is not anticipated that the Project would result in a new congested intersection or substantially exacerbate conditions at congested intersections. Accordingly, Project-related traffic would not exceed CO standards and therefore, no further analysis was conducted for CO impacts. Thus, the CO emissions impact would be considered **less-than-significant** on a Project-level and cumulative basis.

Impact AQ-4 Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Based on available information, the Project is not anticipated to result in other emissions that have not been addressed under Impacts AQ-1 through A-3, above. As such, this analysis focuses on the potential for the Project to generate odors.

The occurrence and severity of potential odor impacts depends on numerous factors. The nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints.

Odors would be generated from vehicles and/or equipment exhaust emissions during construction of future development allowed under the Project. Odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment, architectural coatings, and asphalt pavement application. Such odors would disperse rapidly and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be considered **less than significant**.

Common sources of odors include manufacturing plants, rendering plants, coffee roasters, wastewater treatment plants, sanitary landfills, and solid waste transfer stations (BAAD 2017a). The Project does not include any of these sources. As amendments to the Zoning Ordinance, the Project would allow commercial land uses such as tasting rooms, retail, or events; however, these types of uses would not be expected to generate objectionable odors. Overall, the Project would have a less-than-significant odor impact because it would not create substantial objectionable odors affecting a substantial number of people. Therefore, Project operations would result in an odor impact that is **less than significant**.

3.3.7 Cumulative Impacts

Where a lead agency concludes that the cumulative effects of a project, taken together with the impacts of other closely related past, present, and reasonably foreseeable future projects are significant, the lead agency then must determine whether the project's incremental contribution to such significant cumulative impact is "cumulatively considerable" (and thus significant in and of itself). The cumulative study area used to assess potential cumulative air quality impacts include the SFBAAB. Specifically, the cumulative analysis considers the project area and the anticipated development covered under the BAAD's Clean Air Plan.

As discussed previously, air pollution by nature is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and BAAD develops and implements plans for future attainment of ambient air quality standards. The potential for the Project to result in a cumulatively considerable impact, specifically a cumulatively considerable new increase of any criteria pollutant for which the project region is nonattainment under an applicable NAAQS and/or CAAQS, is addressed in Threshold AQ-2.

3.3.8 Mitigation Measures

No mitigation is required.

3.3.9 Level of Significance After Mitigation

Impacts AQ-1 through AQ-4 would be less than significant without incorporation of mitigation. The level of significance therefore remains less than significant.

3.3.10 References

13 CCR 2025. Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles.

17 CCR 93000. Substances Identified as Toxic Air Contaminants. In Subchapter 7, Toxic Air Contaminants.

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CARB. 2019d. "Carbon Monoxide & Health." Accessed August 2022. https://ww2.arb.ca.gov/resources/carbon-monoxide-and-health.

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3.4 Biological Resources

This section of the Program Environmental Impact Report (PEIR) evaluates potential impacts related to biological resources from implementation of the County of Santa Clara (County) Rural Zoning Amendments and Agricultural Impact Threshold (Project). This section identifies associated regulatory requirements, evaluates the potentially adverse impacts to special-status species as identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS), resulting from implementation of the Project, and identifies mitigation measures related to implementation of the Project.

3.4.1 Environmental Setting

As described in Chapter 2, Project Description, the Project is evaluated at a programmatic level and the analysis is based on information available to the County where reasonably foreseeable, direct, and indirect physical changes in the environment could be considered. As a result, this section generally describes the biological resources present within the project area which is defined as the unincorporated lands of the County that are within rural base zoning districts (Exclusive Agriculture, Agricultural Ranchlands, Hillsides, and Rural Residential). These lands, which are mapped on Figure 3.4-1, may be subject to potentially significant environmental impacts based on direct, reasonably foreseeable, and indirect physical changes in the environment associated with the Project.

Overall, Santa Clara County possesses a varied topography which includes the Santa Clara Valley in the center of the County, the Diablo Range in the eastern portion of the County and the Santa Cruz Mountains along the western border. The San Francisco Bay is located to the north. As described in the General Plan, “steep slopes, active earthquake faults, and areas of geologic instability are prevalent in both of these mountain ranges” (County of Santa Clara 1994a). The Mediterranean climate of the region remains temperate year-round due to the area’s geography and its proximity to the Pacific Ocean. Warm and dry through most of late spring, summer, and early fall, the county’s precipitation ranges from an average of 12 inches per year in downtown San Jose to over 60 inches per year in parts of the Santa Cruz mountains” (County of Santa Clara 1994a). This wide variation in physical environments has produced the unique and diverse collection of biological resources found in Santa Clara County today.

Vegetation Communities

According to the Santa Clara County General Plan Draft Environmental Impact Report (EIR), the County’s geographic diversity supports a variety of vegetation, including Baylands, riparian vegetation, areas of grasslands, including native grasslands and savannas, as well as chaparral, mixed woodland and evergreen forests (County of Santa Clara 1994b). The Final Santa Clara Valley Habitat Plan documented the following seven natural communities within the Habitat Plan area: grassland, chaparral and coastal scrub, oak woodland, riparian forest and scrub, conifer woodland, wetland and open water. Two non-natural land cover types within the Habitat Plan area include irrigated agriculture and developed lands. Within those seven natural communities and two non-natural land covers, 37 land cover types were delineated.

Wildlife

Santa Clara County is a mosaic of open space areas, suburban and rural areas, and densely developed urban areas. The project area focuses on the rural areas and excludes the developed urban areas. The rural, undeveloped areas of the County are more likely to provide habitat for a variety of wildlife. The following is a representation of species

richness within the County, and thus portions of the project area, as described in the Final Santa Clara Valley Habitat Plan (Santa Clara Valley Habitat Agency 2012):

- Of the 195 known mammalian species within California, over 20% can be found within Santa Clara County.
- Of the 636 known bird species that either breed in or migrate through the state more than 45% can be found within Santa Clara County.
- The valley and mountain ranges of Santa Clara County support 10-30%, respectively, of the known reptiles and amphibians within the state.
- The rivers and creeks throughout the County support 17% of the known freshwater fish species of the state.

Sensitive Resources

The Santa Clara Valley Habitat Plan identified 147 special-status species that either occur, or have a potential to occur, within the Plan boundaries. Although the Santa Clara Valley Habitat Plan does not entirely overlap with the project area, it is probable that the same species identified in the Habitat Plan would also be present in the project area due to the similar habitat types. Figure 3.4-2, Sensitive Biological Resources, shows the locations of special-status plant and wildlife species occurrences relative to the project area. Figure 3.4-3, Designated Critical Habitats, shows the locations of critical habitat for federally listed plant and wildlife species occurrences relative to the project area. As shown in Figure 3.4-2, critical habitat and almost all of the federal critical habitat within the project area overlaps almost exclusively with the Hillside and Agricultural Ranchlands zoning districts.

Wildlife Movement Corridors

Wildlife corridors are areas of habitat, usually linear in nature, that connect two or more habitat patches that would otherwise be fragmented or isolated from one another (e.g., by rugged terrain, changes in vegetation, or human disturbance). Wildlife corridors are usually bounded by urban land areas or other areas unsuitable for wildlife. A wildlife corridor generally contains suitable cover, food, and/or water to support species and facilitate movement while in the corridor. Larger, landscape-level corridors (often referred to as “habitat or landscape linkages”) can provide both transitory and resident habitat for a variety of species. Wildlife corridors and landscape linkages are vital in promoting habitat connectivity, facilitating wildlife movement on a regional scale, and sustaining species and wildlife communities through the impacts of climate change.

The fragmentation of open space areas by urbanization creates isolated “islands” of wildlife habitat. Various studies have concluded that in the absence of habitat linkages that allow movement to adjoining open space areas, some wildlife species, especially the larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas because barriers of many kinds prohibit the infusion of new individuals and genetic material.

Corridors mitigate the effects of habitat fragmentation by (1) allowing animals to move between remaining habitats, which allows depleted populations to be replenished and promotes genetic diversity; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fires or disease) will result in population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs. Wildlife movement activities usually fall into one of three movement categories (though often the motivating needs are a combination of these): (1) dispersal (e.g., juvenile animals from natal areas, individuals extending range distributions), (2) seasonal migration, and (3) movements related to home range activities (foraging for food or water, defending territories, or searching for mates, breeding areas, or cover). Although the nature of each of these types of

movement is species specific, large open spaces will generally support a diverse wildlife community and will provide for all types of movement. Each type of movement may also be represented at a variety of scales in space and time, from generational time scales for immobile plants and small animals with limited home ranges to home ranges of many square miles for large mammals and raptorial birds.

The project area supports the following Essential Connectivity Areas (ESC) as identified in the California Essential Habitat Connectivity project: Bonny Doon - Castle Rock, Mt Allison - Briones Hills, Santa Cruz Mountains - Diablo Range, Santa Cruz Mountains/ Pescadero Creek - Pigeon Point, Santa Cruz Mountains/ Pescadero Creek - Santa Cruz Mountains and Sugarloaf Mountain - Montara Mountain (Caltrans and CDFG 2010) (Figure 4-4.4). These ESC represent large scale areas important to wildlife movement within an ecoregion and are thus meant to inform large scale preservation.

Jurisdictional Waters and Wetlands

The project area supports a number of major water bodies (e.g., Calaveras Reservoir, Coyote Lake, Los Gatos and Arroyo Hondo), as well as smaller streams and tributaries throughout the region (Figure 4.4-5). These water bodies support riverine and riparian habitat that provide important resources to the County.

Three key agencies regulate activities within streams, wetlands, and riparian areas in California. The U.S. Army Corps of Engineers (USACE) Regulatory Program regulates activities pursuant to Section 404 of the federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act of 1899, the CDFW regulates activities under the Fish and Game Code Sections 1600–1616, and the Regional Water Quality Control Board (RWQCB) regulates activities under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act (Porter-Cologne Act).

USACE jurisdictional waters are referred to as waters of the United States, the limits of which are generally defined by the ordinary high-water mark. Although RWQCB jurisdictional resources are considered waters of the state, the extent of RWQCB jurisdiction generally defaults to USACE jurisdictional guidelines, as no formal guidelines for RWQCB jurisdictional determinations currently exist. Isolated drainage features that have been evaluated by the USACE and determined not to support federal waters of the United States may still be subject to RWQCB and CDFW jurisdiction pursuant to the Porter-Cologne Water Quality Act and the California Fish and Game Code, respectively. The limits of CDFW jurisdictional streambed and associated riparian habitat are generally defined to the top-of-bank of a streambed and extend to include any associated native riparian habitat.

3.4.2 Relevant Plans, Policies, and Ordinances

A number of local plans and ordinances regulate biological resources within the project area are summarized below.

Federal

The following federal regulations pertaining to biological resources would apply to the Project:

Federal Endangered Species Act

The federal Endangered Species Act of 1973 (FESA) defines an “endangered” species as “any species which is in danger of extinction throughout all or a significant portion of its range.” A “threatened” species is defined as “any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” Under provisions of Section 9(a)(1)(B) of the FESA it is unlawful to “take” any listed species.

"Take" is defined in Section 3(18) of FESA as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Furthermore, USFWS, through regulation, has interpreted the terms "harm" and "harass" to include certain types of habitat modification as forms of take. These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case where a property owner seeks permission from a federal agency for an action that could affect a federally listed plant or animal species, the property owner and agency are required to consult with USFWS pursuant to Section 7 of the FESA if there is a federal nexus, or pursuant to Section 10 of the FESA. Section 9(a)(2)(b) of the FESA addresses the protections afforded to listed plants. "Critical habitat" is defined in Section 3(5A) of the FESA as "the specific areas within the geographic area, occupied by the species at the time it was listed, which contain the physical or biological features that are essential to the conservation of endangered and threatened species and that may need special management or protection. Critical habitat may also include areas that were not occupied by the species at the time of listing but are essential to its conservation." Critical habitat designations affect only federal agency actions or federally funded or permitted activities. Critical habitat designations do not affect activities by private landowners if there is no federal "nexus"—that is, no federal funding or authorization.

The status of federally listed species is assigned by USFWS as one of the following:

- Federally Endangered (FE)
- Federally Threatened (FT)
- Federally Proposed as Endangered (FPE)
- Federally Proposed as Threatened (FPT)
- Federally Proposed for Delisting (FPD)
- Federal Candidate for a Proposed Species (FC)

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) prohibits the intentional take of any migratory bird or any part, nest, or eggs of any migratory bird. Under the MBTA, "take" is defined as pursuing, hunting, shooting, capturing, collecting, or killing, or attempting to do so (16 USC 703 et seq.). Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, requires that any project with federal involvement address impacts of federal actions on migratory birds, with the purpose of promoting conservation of migratory bird populations (66 FR 3853–3856). The executive order requires federal agencies to work with USFWS to develop a memorandum of understanding. USFWS reviews actions that might affect these species.

Federal Clean Water Act, Section 404

Section 404 of the CWA regulates the discharge of dredged or fill material into waters of the United States and authorizes the Secretary of the Army, through the Chief of Engineers, to issue permits for such actions. Implementing regulations for the CWA define waters of the United States as "rivers, creeks, streams, and lakes extending to their headwaters and any associated wetlands." The term "wetlands" (a subset of waters of the United States) is defined in Title 33 of the Code of Federal Regulations Section 328.3(c)(16) as "areas that are inundated or saturated by surface water 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. Wetlands generally include swamps, marshes, bogs, and similar areas." In the absence of wetlands, the limits of USACE jurisdiction in non-tidal waters, such as intermittent streams, extend to the ordinary high water mark, which is defined in Title 33 of the Code of Federal Regulations Section 328.3(c)(7) as "that line on the shore established by the fluctuations of water and

indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas."

Federal Clean Water Act, Section 401

The mission of the RWQCB is to develop and enforce water quality objectives and implement plans that will best protect the beneficial uses of the state's waters, recognizing local differences in climate, topography, geology, and hydrology. The RWQCB is also responsible for implementing compliance not only with state codes such as the California Water Code, but also some federal acts such as Section 401 of the CWA. Section 401 of the CWA requires that any applicant for a federal permit for activities that involve a discharge to waters of the state shall provide the federal permitting agency with a certification from the state in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the federal CWA. As such, before the USACE will issue a CWA Section 404 permit, applicants must apply for and receive a Section 401 water quality certification (WQC) from the RWQCB.

The RWQCB regulates "discharging waste, or proposing to discharge waste, within any region that could affect waters of the state" (California Water Code Section 13260[a]), pursuant to provisions of the Porter-Cologne Act, which defines RWQCB jurisdictional "waters of the state" as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code Section 13050[e]). In 2019, the State Water Resources Control Board issued the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (SWRCB 2019). These procedures define wetlands that encompass "the full range of wetland types commonly recognized in California, including some features not protected under federal law, and reflects current scientific understanding of the formation and functioning of wetlands." The SWRCB defines wetlands as "An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation" (SWRCB 2019). These wetlands are further defined in the document.

With the exception of isolated waters and wetlands, most discharges of fill to waters of the state are also subject to a CWA Section 404 permit. If a CWA Section 404 permit is not required for a project, the RWQCB may still require issuance of Waste Discharge Requirements under the Porter-Cologne Act. The RWQCB may regulate isolated waters that are not under jurisdiction of the USACE through issuance of Waste Discharge Requirements. However, projects that obtain a Section 401 WQC are simultaneously enrolled in statewide general Waste Discharge Requirements. Processing of a Section 401 WQC generally requires submittal of (1) a construction stormwater pollution prevention plan, (2) a final water quality technical report that demonstrates that post-construction stormwater best management practices comply with the local design standards for municipal storm drain permits implemented by the State Water Resources Control Board effective January 1, 2011, and (3) a conceptual Habitat Mitigation and Monitoring Plan to compensate for permanent impacts to RWQCB waters, if any. In addition to submittal of a draft California Environmental Quality Act (CEQA) document, a WQC application typically requires a discussion of avoidance and minimization of impacts to RWQCB jurisdictional resources, and efforts to protect beneficial uses as defined by the local RWQCB basin plan for the project. The RWQCB cannot issue a Section 401 WQC until the project CEQA document is certified by the lead agency.

State

The following state regulations pertaining to biological resources would apply to the Project.

California Endangered Species Act

The California Endangered Species Act (CESA) defines an endangered species as:

> a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.

The state defines a threatened species as:

> a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species.

Candidate species are defined as:

> a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list.

Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the California Fish and Game Commission. Unlike the FESA, the CESA does not include listing provisions for invertebrate species.

Article 3, Sections 2080 through 2085, of the CESA addresses the taking of threatened or endangered species by stating:

> no person shall import into this State, export out of this State, or take, possess, purchase, or sell within this State, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided.

Under the CESA, "take" is defined as, "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

Additionally, some sensitive mammals and birds are protected by the state as Fully Protected Mammals or Fully Protected Birds, as described in California Fish and Game Code Sections 4700 and 3511, respectively.

California Species of Special Concern are species designated as vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats. Informally listed species are not protected per se but warrant

consideration in the preparation of biological assessments. For some species, the California Natural Diversity Database (CNDDB), a resource maintained by CDFW of recorded locations where sensitive species have been documented, is only concerned with specific portions of the life history, such as roosts, rookeries, or nest areas.

State of California Fish and Game Code, Sections 3503, 3503.5, and 3513

Section 3503 of the California Fish and Game Code states that "it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto." Section 3503.5 of the California Fish and Game Code states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Activities that result in the abandonment of an active bird of prey nest may also be considered in violation of this code. In addition, California Fish and Game Code Section 3511 prohibits the taking of any bird listed as fully protected, and California Fish and Game Code Section 3513 states that is it unlawful to take any nongame migratory bird protected under the Migratory Bird Treaty Act.

State of California Fish and Game Code, Section 4150

Section 4150 of the California Fish and Game Code states that "All mammals occurring naturally in California which are not game mammals, fully protected mammals, or fur-bearing mammals, are nongame mammals. Nongame mammals or parts thereof may not be taken or possessed except as provided in this code or in accordance with regulations adopted by the commission."

State of California Code of Regulations, Sections 250 and 251

Section 250 of the California Fish and Game Code states that "Except as otherwise authorized in these regulations or in the Fish and Game Code, resident game birds, game mammals and furbearing mammals may not be taken at any time." Section 251.1 of the California Fish and Game Code states that "Except as otherwise authorized in these regulations or in the Fish and Game Code, no person shall harass, herd or drive any game or nongame bird or mammal or furbearing mammal. For the purposes of this section, harass is defined as an intentional act which disrupts an animal's normal behavior patterns, which includes, but is not limited to, breeding, feeding or sheltering. This section does not apply to a landowner or tenant who drives or herds birds or mammals for the purpose of preventing damage to private or public property, including aquaculture and agriculture crops." Activities that result in the take or harassment of a nongame mammal may also be considered in violation of this code.

California Native Plant Society Inventory

The California Native Plant Society (CNPS) is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in California. The California Native Plant Society has compiled an inventory comprised of information focusing on geographic distribution and qualitative characterization of rare, threatened, and endangered vascular plant species of California. The list has served as a potential candidate list for listing as Threatened and Endangered by CDFW. The California Native Plant Society has developed five categories of rarity, referred to as California Rare Plant Ranks (CRPRs), of which CRPRs 1A, 1B, 2A, and 2B are considered particularly sensitive:

- **CRPR 1A:** Presumed extirpated in California and either rare or extinct elsewhere.
- **CRPR 1B:** Rare, threatened, or endangered in California and elsewhere.

- **CRPR 2A:** Presumed extirpated in California, but more common elsewhere.
- **CRPR 2B:** Rare, threatened, or endangered in California, but more common elsewhere.
- **CRPR 3:** Plants about which we need more information – a review list.
- **CRPR 4:** Plants of limited distribution – a watch list.

The California Native Plant Society appends CRPR categorizations with "threat ranks" that parallel the ranks used by the CNDDB and are added as a decimal code after the CRPR (e.g., CRPR 1B.1). The threat codes are as follows:

1. Seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)
2. Fairly endangered in California (20%–80% occurrences threatened)
3. Not very endangered in California (less than 20% of occurrences threatened or no current threats known)

State of California Fish and Game Code, Section 1602

Section 1602 of the California Fish and Game Code requires any entity (e.g., person, state or local government agency, or public utility) who proposes a project that will substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake to notify CDFW of the project. In the course of this notification process, CDFW will review the project as it affects streambed habitats within the project area. CDFW may then place conditions in the Section 1602 Streambed Alteration Agreement to avoid, minimize, and mitigate any potentially significant adverse impacts within CDFW jurisdictional limits.

State of California Porter-Cologne Water Quality Control Act

The Porter-Cologne Act protects water quality and the beneficial uses of water. It applies to surface water and groundwater. Under this law, the State Water Resources Control Board develops statewide water quality plans and the individual RWQCB develop regional basin plans that identify beneficial uses, water quality objectives, and implementation plans. The RWQCBs have the primary responsibility to implement the provisions of statewide plans and basin plans. Waters regulated under the Porter–Cologne Act include isolated waters that are not regulated by USACE. Developments with impacts on jurisdictional waters must demonstrate compliance with the goals of the Porter-Cologne Act by developing stormwater pollution prevention plans, standard urban stormwater mitigation plans, and other measures to obtain a CWA Section 401 certification.

Local

The following local/regional regulations pertaining to biological resources would apply to the Project.

Santa Clara County General Plan, 1995-2010

The Resource Conservation section of the Santa Clara County General Plan, 1995-2010 (General Plan) outlines several strategies to address rural unincorporated area issues and policies related to six key subjects: (1) Water Supply, Quality, & Watershed Management; (2) Habitat & Biodiversity; (3) Agriculture & Agricultural Resources; (4)

Mineral Resources; (5) Heritage Resources; and (6) Scenic Resources. The following Habitat & Biodiversity policies are potentially relevant to the Project (County of Santa Clara 1994a):

R-RC 19. Habitat types and biodiversity within Santa Clara County and the region should be maintained and enhanced for their ecological, functional, aesthetic, educational, medicinal, and recreational importance.

R-RC 20. Strategies and policies for maintaining and enhancing habitat and biodiversity should include the following: 1. Improve current knowledge and awareness of habitats and natural areas. 2. Protect the biological integrity of critical habitat areas. 3. Encourage habitat restoration wherever possible. 4. Evaluate the effectiveness of project mitigations as required under CEQA.

R-RC 21. Critical habitat areas should be excluded from cities' Urban Service Areas unless retained in non-urban uses, and rural unincorporated development should be designed to avoid or mitigate impacts upon habitat and natural areas.

R-RC 22. Recreational uses of public lands proposed within areas of natural habitat should be limited to those kinds and intensities of activities that are compatible with preserving natural vegetation and wildlife and which very minimally disturb overall habitat value: 1. Examples of low intensity activities that may be allowed include limited hiking, horseback riding, picnicking, camping, and interpretative study. 2. For critical habitat areas, uses and activities should not be allowed to create a significant impact; if necessary, facilities for such activities should be limited to those of a very primitive, non-disruptive nature only or precluded from such areas. 3. Nesting and breeding areas potentially affected by such activities should be seasonally closed to recreational use.

Strategy #1: Improve Current Knowledge and Awareness of Habitats and Natural Areas

R-RC 23. Knowledge and mapping of habitat resources within the rural unincorporated areas should be improved to provide an accurate basis for: a. reviewing proposed projects that require discretionary approvals or permits; b. assessing environmental impacts for projects subject to CEQA; c. identifying critical habitat resources; and d. cooperative conservation planning efforts.

R-RC 24. Areas of habitat richest in diversity, of particularly fragile ecological nature, or necessary for preserving threatened or endangered species should receive special consideration for preservation as open space and protection from development impacts. Examples include baylands and riparian areas, serpentine geology, and other critical habitat areas identified by local legislative bodies.

Strategy #2: Protect the Biological Integrity of Critical Habitat Areas

R-RC 25. Wetlands habitats of San Francisco Bay shall be preserved and enhanced.

R-RC 26. Within wetlands areas, allowable uses shall be limited to those which cause little or no adverse impacts, possibly including: a. natural ecological functions, such as bay waters, sloughs, marshes and flats, preserved in open space; b. salt ponds; c. small piers, walkways, and wildlife observation areas; d. trail-related uses, such as walking, bicycling, and, horseback riding as compatible with resource preservation; e. fishing, boating, swimming, and limited hunting; f. aquaculture; g.

marinas; and h. nature centers or other facilities for the study and appreciation of natural resources.

R-RC 27. There shall be no filling or alteration of wetlands areas except for such alterations which enhance habitat resources. Construction of small levees, piers, or walkways for public use and education may be allowed. If construction of any type will result in significant loss of habitat or alteration of wetlands hydrology, mitigations shall be required.

R-RC 28. New marina locations in wetland areas should be considered only after upland alternatives have been determined infeasible. If new marinas are proposed, they shall not be allowed to create a net loss of habitat, through mitigation that requires creation or restoration of wetlands as compensation for losses incurred. Discontinued marinas shall be a priority for wetlands restoration and other uses compatible with habitat preservation.

R-RC 29. No new or expanded landfill sites shall be approved which would adversely affect wetlands habitat. Closed landfills should be used as parks or open space compatible with habitat preservation goals.

R-RC 30. Land uses in areas adjacent to the Baylands should have no adverse impact upon wetlands habitats or scenic qualities of the Baylands. Uses adjacent to the National Wildlife Refuge should be compatible with the Refuge.

R-RC 31. Natural streams, riparian areas, and freshwater marshes shall be left in their natural state providing for percolation and water quality, fisheries, wildlife habitat, aesthetic relief, and educational or recreational uses that are environmentally compatible. Streams which may still provide spawning areas for anadromous fish species should be protected from pollution and development impacts which would degrade the quality of the stream environment.

R-RC 32. Riparian and freshwater habitats shall be protected through the following general means: a. setback of development from the top of the bank; b. regulation of tree and vegetation removal; c. reducing or eliminating use of herbicides, pesticides, and fertilizers by public agencies; d. control and design of grading, road construction, and bridges to minimize environmental impacts and avoid alteration of the streambed and stream banks (freespan bridges and arch culverts, for example); and e. protection of endemic, native vegetation.

R-RC 33. Public projects shall be designed to avoid damage to freshwater and stream environments.

R-RC 34. In flood plains which are not already developed, land uses shall be restricted to avoid the need for major flood control projects which would alter stream flows and vegetation.

R-RC 35. Flood control modifications to be made in streams that have substantial existing natural areas should employ flood control designs which enhance riparian resources and avoid to the maximum extent possible significant alteration of the stream, its hydrology, and its environs.

R-RC 36. In cluster residential developments or other projects where open space dedication is required, the stream, riparian areas, and freshwater marshes should be included within the restricted open

space area of the project or protected by other enforceable mechanisms, such as deed restrictions or conservation easements.

R-RC 37. Lands near creeks, streams, and freshwater marshes shall be considered to be in a protected buffer area, consisting of the following: 1. 150 feet from the top bank on both sides where the creek or stream is predominantly in its natural state; 2. 100 feet from the top bank on both sides of the waterway where the creek or stream has had major alterations; and 3. In the case that neither (1) nor (2) are applicable, an area sufficient to protect the stream environment from adverse impacts of adjacent development, including impacts upon habitat, from sedimentation, biochemical, thermal and aesthetic impacts.

R-RC 38. Within the aforementioned buffer areas, the following restrictions and requirements shall apply to public projects, residential subdivisions, and other private non-residential development: a. No building, structure or parking lots are allowed, exceptions being those minor structures required as part of flood control projects. b. No despoiling or polluting actions shall be allowed, including grubbing, clearing, unrestricted grazing, tree cutting, grading, or debris or organic waste disposal, except for actions such as those necessary for fire suppression, maintenance of flood control channels, or removal of dead or diseased vegetation, so long as it will not adversely impact habitat value. c. Endangered plant and animal species shall be protected within the area.

R-RC 39. Within areas immediately adjacent to the stream buffer area, new development should minimize environmental impacts on the protected buffer area, and screening of obtrusive or unsightly aspects of a project should be considered as a means of preserving the scenic value of riparian areas.

R-RC 40. Where new roads, clustered residential development, or subdivisions are proposed in proximity of streams and riparian areas, they should be designed so that: a. riparian vegetation is retained; b. creeks and streams remain open and unfenced; and c. there is adequate separation of new roads and building sites from the stream environment.

R-RC 41. Where trails and other recreational uses are proposed by adopted plans to be located in the vicinity of streams and riparian areas or reservoirs, trail alignments and other facilities should be placed on the fringe of the riparian buffer area or at an appropriate distance to avoid disturbance of the stream or vegetation. 1. Environmental impacts from development or use of the facility shall be effectively mitigated. 2. Fencing should not restrict access by wildlife to the stream environment.

R-RC 42. County government shall through its regulations and the design of public projects achieve soil conservation and minimize erosion.

R-RC 43. Large scale grading and clearing of land should not be allowed if it will significantly degrade valuable habitat or impair surface water quality.

R-RC 44. Healthy, mature specimen trees should be protected from cutting.

R-RC 45. Use of off-road vehicles in areas of fragile soil and during the rainy season shall be discouraged.

R-RC 46. Best forestry practices as defined under the Forest Practice Rules shall be employed for control of commercial timber harvesting, including: a. selective harvesting and maintenance of tree canopy; b. enforcement of erosion controls and minimizing other forms of land instability; c. protection of wildlife habitat and scenic values; d. maintenance of the existing mix of tree species in mixed forests; and e. mitigation of off-site impacts upon neighboring properties, such as noise, traffic safety, visual impact, and other factors.

R-RC 47. Impacts from new development on woodland habitats should be minimized by encouraging: a. clustering of development to avoid critical habitat areas, where clustering is permitted; b. inclusion of important habitat within open space areas for project requiring open space dedication; c. siting and design of roads, utility corridors and other infrastructure to avoid fragmentation of habitat; and d. acquisition or avoidance of critical habitat areas.

R-RC 48. Limited firewood collecting for personal use and private sale not requiring use of heavy equipment shall be encouraged for beneficial removal of dead or downed trees. Landowners should consider retaining some portion of dead or downed trees that are of habitat value and that pose no safety risks.

R-RC 49. Retention and planting of native plant species shall be encouraged, especially for landscape uses.

R-RC 50. Preservation of old growth trees, especially redwoods, shall be encouraged through improved public awareness and commemoration, where appropriate.

R-RC 51. Preservation of habitat linkages and migration corridors should be encouraged where needed to allow for species migration, prevent species isolation, and otherwise compensate for the effects of habitat fragmentation.

R-RC 52. For rural area development proposals subject to open space dedication requirements and adjacent to other open space lands, the County shall encourage project design which maximizes the contiguity of undeveloped, open space areas, reducing fragmentation of habitat.

Strategy #3: Encourage Habitat Restoration Wherever Possible

R-RC 53. Restoration of habitats should be encouraged and utilized wherever feasible, especially in cases where habitat preservation and flood control, water quality, or other objectives can be successfully combined.

R-RC 54. Restoration of stream channels and riparian areas should be encouraged wherever feasible. Multiple uses, such as for recreational trails, should be considered so long as habitat and other ecological values are preserved.

R-RC 55. Studies should be made to determine the need for reforestation of areas previously subjected to clear-cutting.

Strategy #4: Evaluate the Effectiveness of Project Mitigations as Required Under CEQA

R-RC 56. Specific mitigations required for new development for conserving habitat should be monitored as required by state law to assess their effectiveness and the need for improved mitigations for future projects.

Santa Clara Valley Habitat Plan

The Santa Clara Valley Habitat Plan (Habitat Plan) is a combined habitat conservation plan and natural community conservation plan (HCP/NCCP) that was adopted by participating local agencies and approved by USFWS and CDFW in 2013. It is a 50-year regional conservation plan intended to protect threatened and endangered species and natural resources while allowing for future development in the Santa Clara Valley. If successfully implemented, the outcome of the Habitat Plan will be the conservation of 18 covered species (9 wildlife and 9 plants) and the natural communities on which these species rely for habitat. The following local agencies developed the Habitat Plan between 2005 and 2012:

- County of Santa Clara
- Santa Clara Valley Water District (SCVWD)
- Santa Clara Valley Transportation Authority (VTA)
- City of Gilroy
- City of Morgan Hill
- City of San José

The Habitat Plan is administered by the Santa Clara Valley Habitat Agency (Habitat Agency), a joint powers authority (JPA) composed of the Cities of Gilroy, Morgan Hill, San José, and the County. The Habitat Agency is responsible for executing the requirements of the Habitat Plan; the FESA and CESA; take permits issued by the USFWS and CDFW, respectively; and the Implementing Agreement (the legal document between the USFWS/CDFW and co-permittees). The County and three cities are responsible for Habitat Plan compliance with respect to private development projects in their jurisdictions, and each co-Permittee is responsible for ensuring its own public projects are carried out in conformance with the Habitat Plan.

The Habitat Plan's *permit area* covers approximately 510,000 acres from the Santa Clara/Alameda County border south to the Santa Clara/San Benito County border and from the western edge of San José east to the eastern edge of the Coyote Creek watershed or the County boundary. Select projects (i.e., well-defined actions at a specific location) and activities (i.e., actions that occur repeatedly in one or more locations, such as vegetation management) within the permit area comprise the *covered activities* for which the FESA and CESA take permits were issued by USFWS and CDFW. Covered activities include all types of private development and public projects so long as certain criteria are met. All covered activities must incorporate the relevant conditions on covered activities described in Chapter 6 of the Habitat Plan to avoid or minimize impacts on covered species and natural communities.

Protected Trees

The Project is subject to the County of Santa Clara Tree Preservation and Removal Ordinance which serves to protect trees meeting specified conditions (County of Santa Clara 2022). The ordinance applies to any persons proposing to remove a protected tree shall file for an administrative permit no less than 10 days prior to removal, or for

heritage trees, 90 days prior to removal. A protected tree on property owned or leased by the County is any tree that measures over 37.7 inches in circumference (12 inches or more in diameter) measured at 4.5 feet above the ground, or which exceeds 20 feet in height. A heritage tree is any tree which, because of its history, girth, height, species, or other unique quality, has been recommended for inclusion on the heritage resource inventory by the Historical Heritage Commission and found by the Board of Supervisors to have special significance to the community, and which has therefore been included in the heritage resource inventory adopted by resolution of the Board of Supervisors.

Per the County's Tree Preservation and Removal Ordinance, replacement trees shall be planted for all protected trees removed. Replacement trees shall be of a like kind and species of the protected tree removed, if native and feasible, or of a kind and species to be determined by the County Planning Department. Replacement tree planting shall utilize at least five-gallon size stock. The ratio of protected trees to be removed to new trees planted shall be determined by the County Planning Department. Replacement tree planting shall utilize at least five-gallon size stock. The ratio of protected trees to be removed to new trees planted would be in accordance with the Santa Clara Guidelines for Tree Protection and Preservation for Land Use Applications.

3.4.3 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment with respect to biological resources if development of the project would:

BIO-1: 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?

BIO-2: 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 Game or US Fish and Wildlife Service?

BIO-3: 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?

BIO-4: 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?

BIO-5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

BIO-6: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

3.4.4 Methodology

The potential effects of the Project are evaluated at a programmatic level based on information available to the County where reasonably foreseeable, direct, and indirect physical changes in the environment could be considered. While the Project would not directly result in development, it would change how development is regulated in rural zoning districts. The Project consists of amendments to the Zoning Ordinance of the County of Santa Clara. The Project would

clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. A complete project description is provided in Chapter 2. The types of land uses allowed in the rural zoning districts would substantially remain the same. The approval of small, agriculture-supportive uses would be streamlined. Uses with greater potential to impact the environment, either due to their size or type, would remain conditional – requiring further environmental review. Development standards would be standardized and quantified under the amendments, which would generally benefit the environment by restricting the developable area within the rural districts.

Dudek reviewed the following geographic information system data in conjunction with the project area to determine if any parts of the project area overlap with known occurrences of special-status plant and wildlife species, critical habitat for any federally listed species, areas of potential habitat for species, or other areas of biological importance:

- California Natural Diversity Database (CDFW 2022)
- USFWS critical habitat and occurrence data (USFWS 2022a)
- USFWS National Wetland Inventory (USFWS 2022b)
- National Hydrography Dataset (USGS 2022)
- National Wetlands Inventory data (USFWS 2022)

3.4.5 Environmental Impacts

Impact BIO-1 Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as 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?

The Project consists of amendments to the County's Zoning Ordinance. The proposed amendments would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. Although the Project would not directly construct new development, it would allow and facilitate new development that could affect sensitive biological resources. At the same time, the Project would introduce objective development standards that would be protective of agricultural land and natural resources.

A portion of the project area includes Rural Residential and Exclusive Agricultural zoning districts. Since these areas are either developed or are disturbed by agricultural use, these areas are unlikely to currently support special-status species. Therefore, it is unlikely that the Project within these districts would result in the loss of sensitive plant and/or sensitive wildlife. The two other zoning districts within the project area include those designated as Hillside and Agricultural Ranchlands. The purpose of the Hillside zoning district is to preserve mountainous lands unsuited for urban development primarily in open space and to promote uses which support and enhance rural character, protection of natural resources, and avoidance of risks imposed by natural hazards and, therefore, development in this zoning district is already limited. This district includes several County parks which would not be affected by the Project. However, some areas of

the project area overlap with sensitive plant and wildlife biological resources as defined and mapped by CNDDB (Figure 3.4-2). These species may persist in these areas.

The Project would potentially allow new development, under a certain size, to be approved ministerially. At the same time, the Project would implement development standards limiting the building size and the overall area of disturbance within the rural zoning districts. A study conducted for the Project indicates that the Project would not induce growth by streamlining certain uses (which are already allowed under the existing Zoning Ordinance), and therefore the overall amount of development is not expected to change (although individual projects may be less intense, due to the proposed development standards). While individual development projects have the potential to affect special status species, the overall impact to biological resources would not significantly change under the Project.

Any future development facilitated by the Project would be required to comply with existing policies in the County General Plan that encourage protection of sensitive biological resources. Policy R-RC 21 states that rural unincorporated development should be designed to avoid or mitigate impacts upon habitat and natural areas (County of Santa Clara 1994s). The Project would align with this policy by encouraging less intense development within rural areas. In addition, County tree protection and grading policies would continue to apply to these future development projects as well as policies in the Habitat Plan that address impacts to covered species and habitat on a landscape scale, in large areas of the County. Furthermore, impacts to individual protected species are regulated by FESA, the MBTA, and CESA. Thus, future development projects that may be ministerial under the Project, would continue to comply with these regulations, and when necessary, would consult with and obtain permits from regulatory agencies prior to taking actions that could impact the resource. Any future development facilitated by the Project above a certain size would be subject to future discretionary permits and CEQA evaluation that would assess if the future development would affect sensitive biological resources. Overall, the Project would not substantially increase effects to special status species and would not have a significant impact on the environment. Project impacts would be **less than significant.**

Impact BIO-2 Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Almost all of the federal critical habitat within the project area overlaps almost exclusively with the Hillside and Agricultural Ranchlands zoning districts (Figure 3.4-3). Almost half of the critical habitat within the project area also overlaps with County parkland, Henry Coe State Park and Canada de los Osos Ecological Reserve, and thus are currently provided protection from development. Development within areas outside of these protected areas could result in the loss of critical habitat for federally listed species. In addition, these zoning districts likely contain the natural communities as discussed in Section 3.4.1.

As discussed in Impact BIO-1, the overall level of development would not increase, and intensity of development may decrease. Although the Project would not directly construct new development, it would allow and facilitate new agriculture-supportive uses that could affect riparian habitat or sensitive natural communities. Individual future development projects under the Project would be subject to County General Plan Policies, including R-RC-26, R-RC-27, R-RC-31, R-RC-32, R-RC-37, and R-RC-38. The County Grading Ordinance regulates all ground disturbing activities which may alter, divert, or impair the flow of water in the watercourse, and would apply to any future development facilitated by the Project. In addition, future development must adhere to all federal, state, and local polices related to the protection of these resources

including Section 401 of the CWA and Streambed Alteration Agreement requirements per Section 1602 of the California Fish and Game Code (see Section 3.4.2). In addition, future development projects which fall within the boundaries of the Habitat Plan would be required to implement any specific measures identified in the Habitat Plan. Therefore, with adherence to these existing regulatory requirements, the Project would have a **less-than-significant** impact to riparian habitat or other sensitive natural communities.

Impact BIO-3 Would the project 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?

The project area supports a number of major water bodies (e.g., Calaveras Reservoir, Coyote Lake, Los Gatos and Arroyo Hondo), as well as smaller streams and tributaries throughout the region. The Project, which includes amendments to the Zoning Ordinance, would not directly result in impacts to these resources. Although the Project would not directly construct new development, it would allow and facilitate new agriculture-supportive uses that could directly result in impacts to protected wetlands. However, any future development facilitated by the Project would require permitting by the Regulatory Agencies (USACE, RWQCB, and CDFW). Additionally, future development projects under the Project would be required to determine if protected wetlands occur within the project area and avoid those resources to the extent feasible in accordance with federal, state, and local guidelines (see Section 3.4.2). Therefore, with adherence to these existing regulatory requirements, the Project would have a **less than significant** impact to protected wetlands.

Impact BIO-4 Would the project 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?

The project area supports the following Essential Connectivity Areas (ESC) as identified in the California Essential Habitat Connectivity project: Bonny Doon - Castle Rock, Mt Allison - Briones Hills, Santa Cruz Mountains - Diablo Range, Santa Cruz Mountains/ Pescadero Creek - Pigeon Point, Santa Cruz Mountains/ Pescadero Creek - Santa Cruz Mountains and Sugarloaf Mountain - Montara Mountain (Caltrans and CDFG 2010) (Figure 3.4.4). These ESC represent large scale areas important to wildlife movement within an ecoregion and are thus meant to inform large scale preservation. Similar to other biological resources, the Project, which includes amendments to the Zoning Ordinance, would not directly result in impacts or overlap with wildlife movement corridors. Although the Project would not directly construct new development, it would allow and facilitate new agriculture-supportive uses that could directly interference with the ESC. Future development may have an impact on wildlife movement: however, any future development facilitated by the Project would be required to adhere to federal, state, and local guidelines regarding migratory species and wildlife movement corridors. Therefore, with adherence to these existing regulatory requirements, the Project would have a **less than significant** impact to migratory species and wildlife movement corridors.

Impact BIO-5 Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The Project would consist of amendments to the County's Zoning Ordinance. Although the Project would not directly construct new development, it would allow and facilitate new agriculture-supportive uses. The Project would not have the potential to conflict with local policies or ordinances protecting biological

resources. Additionally, approval of the Project itself, would not change these local policies or ordinances and would not provide any policies or ordinance that would significantly impact biological resources. Further, any future development projects facilitated by the Project would be evaluated to ensure consistency with the County's Tree Preservation and Removal Ordinance as described in Section 3.4.2. Additionally, the County's General Plan contains goals and policies that support the preservation of natural habitat and biodiversity that future development projects would have to comply with. Compliance with applicable regulations and implementation of the existing County General Plan goals and policies would ensure that impacts regarding conflict with any local policies or ordinances protecting biological resources would be **less than significant**.

Threshold BIO-6 Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

As discussed above in Section 3.4.2, Relevant Plans, Policies, and Ordinances, there is a habitat conservation plan that that covers lands within the County: The Santa Clara Valley Habitat Plan (Santa Clara Valley Habitat Agency 2012). This plan is intended to provide for the conservation of endangered and threatened species and covers approximately 510,000 acres throughout incorporated and unincorporated lands within the County. Future development projects that overlap with areas covered by the Habitat Plan would be required to incorporate the relevant conditions on covered activities described in Chapter 6 of the Habitat Plan to avoid or minimize impacts on covered species and natural communities. Furthermore, any future development facilitated by the Project would be subject to future discretionary permits and CEQA evaluation that would assess if the future development would conflict with the Habitat Plan. For these reasons, impacts regarding conflict with any applicable habitat conservation plan or natural community conservation plan and would be **less than significant**.

3.4.6 Cumulative Impacts

Cumulative impacts are defined as the direct and indirect effects of a Project which, when considered alone, would not be deemed a substantial impact, but when considered in addition to the impacts of related projects in the area, would be considered significant. "Related projects" refers to past, present, and reasonably foreseeable probable future projects, which would have similar impacts to the Project. CEQA deems a cumulative impact analysis to be adequate if a list of "related projects" is included in the EIR or the Project is consistent with an adopted general, specific, master, or comparable programmatic plan (Section 15130[b][1][B]). CEQA also states that no further cumulative impact analysis is necessary for impacts of a project consistent with an adopted general, specific, master, or comparable programmatic plan (Section 15130[d]).

Direct impacts to special-status species, wildlife corridors and the loss of sensitive habitats would not occur as a result of the Project. The Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts under CEQA. Although the Project would not directly construct new development nor would it change zoning such that more development would occur in areas with sensitive biological resources, future development in the project area could affect sensitive biological resources. The Project would still require future development projects above a certain size, or deemed to have a greater potential to impact the environment, to undergo discretionary approval. Such projects would be subject to

permits and mitigation that may be required by applicable regulatory agencies. This includes future development projects that fall within the boundaries of the Habitat Plan, which would be required to implement any specific measures identified in the Habitat Plan. Cumulative projects include the Santa Clara County Housing Element Update, Agricultural Employee Housing Zoning Ordinance Amendments, and Senate Bill 9 (refer to Section 3.0.1 of this EIR (Cumulative Analysis) for detailed descriptions of these projects). These projects would accommodate project demand for housing. Planned housing would generally be directed to unincorporated communities with residential or commercial zoning designations, rather than the rural zoning districts. Agricultural housing would continue to be located within the rural zoning districts, including the Exclusive Agriculture zoning district, but would be subject to County General Plan policies related to resource conservation, the Habitat Plan, and state and federal regulations such as the FESA, MBTA, and CESA. Thus, the interaction of the Project and cumulative projects would not result in cumulatively considerable impacts to special status species or habitats.

Similarly, the cumulative projects would not result in a cumulatively considerable impact to local resource protection ordinances or the Santa Clara Valley Habitat Plan. Rather, future development enabled by these cumulative projects must continue to comply with these regulations and plans. The cumulative impact to biological resources would be **less than significant.**

3.4.7 Mitigation Measures

No mitigation is required.

3.4.8 Level of Significance After Mitigation

No impacts related to biological resources have been identified.

3.4.9 References

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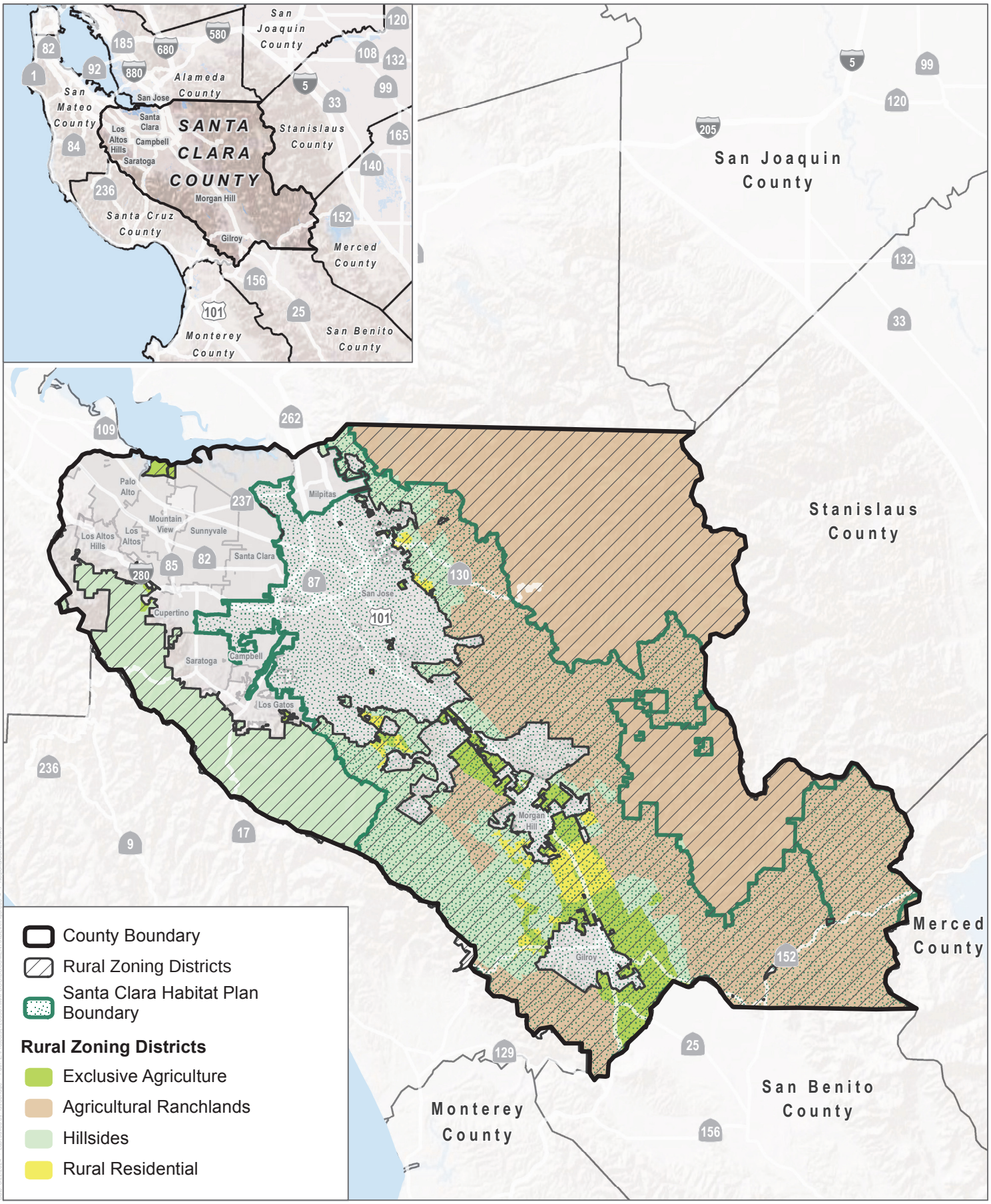
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SOURCE: ESRI 2022, Santa Clara County 2022

DUDEK

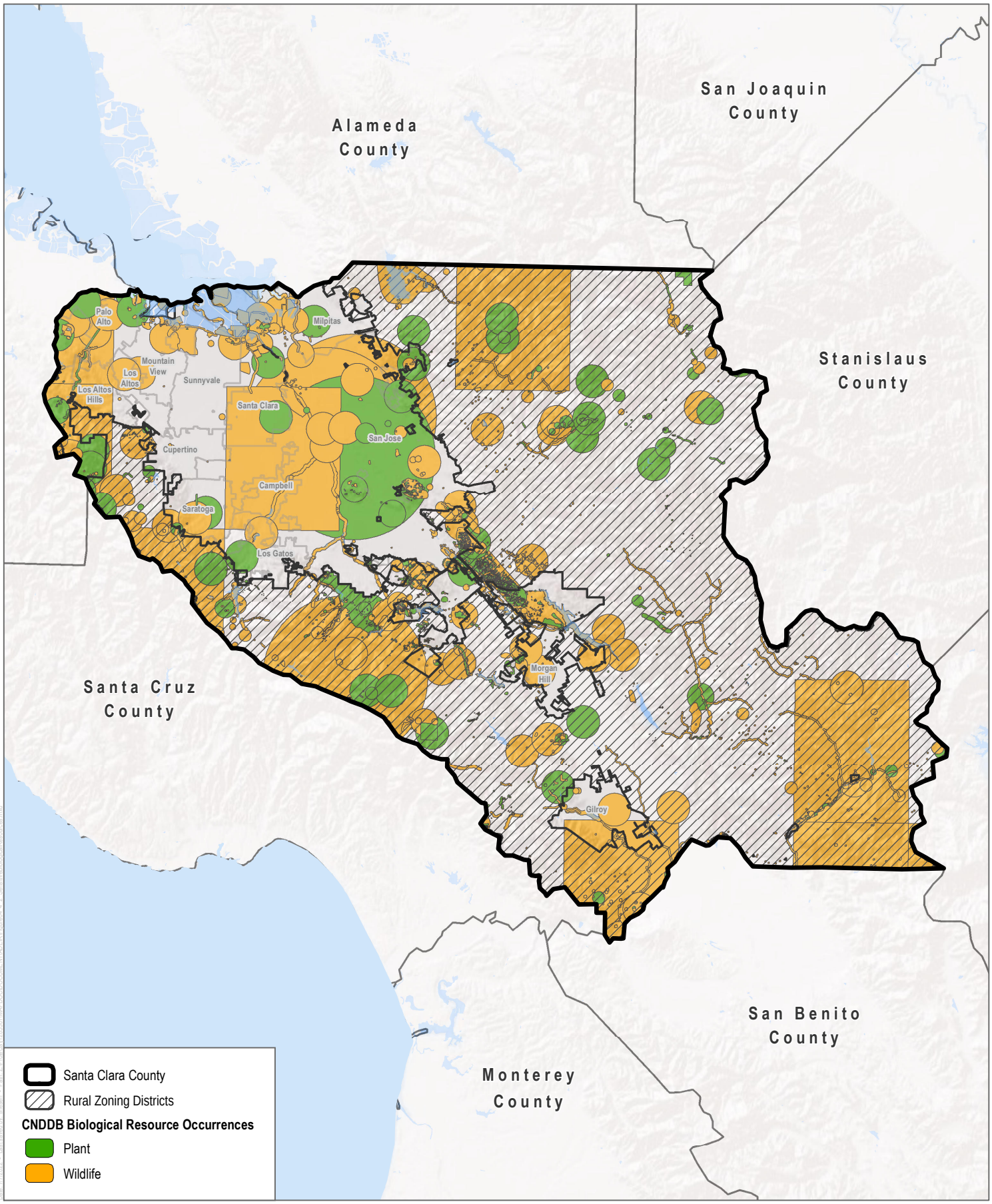
0 4 8 Miles

FIGURE 3.4-1

Regional Context - Rural Zoning Districts

Santa Clara County Rural Zoning Ordinance Amendments EIR

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SOURCE: ESRI 2022; Santa Clara County 2022,CDFW 2021

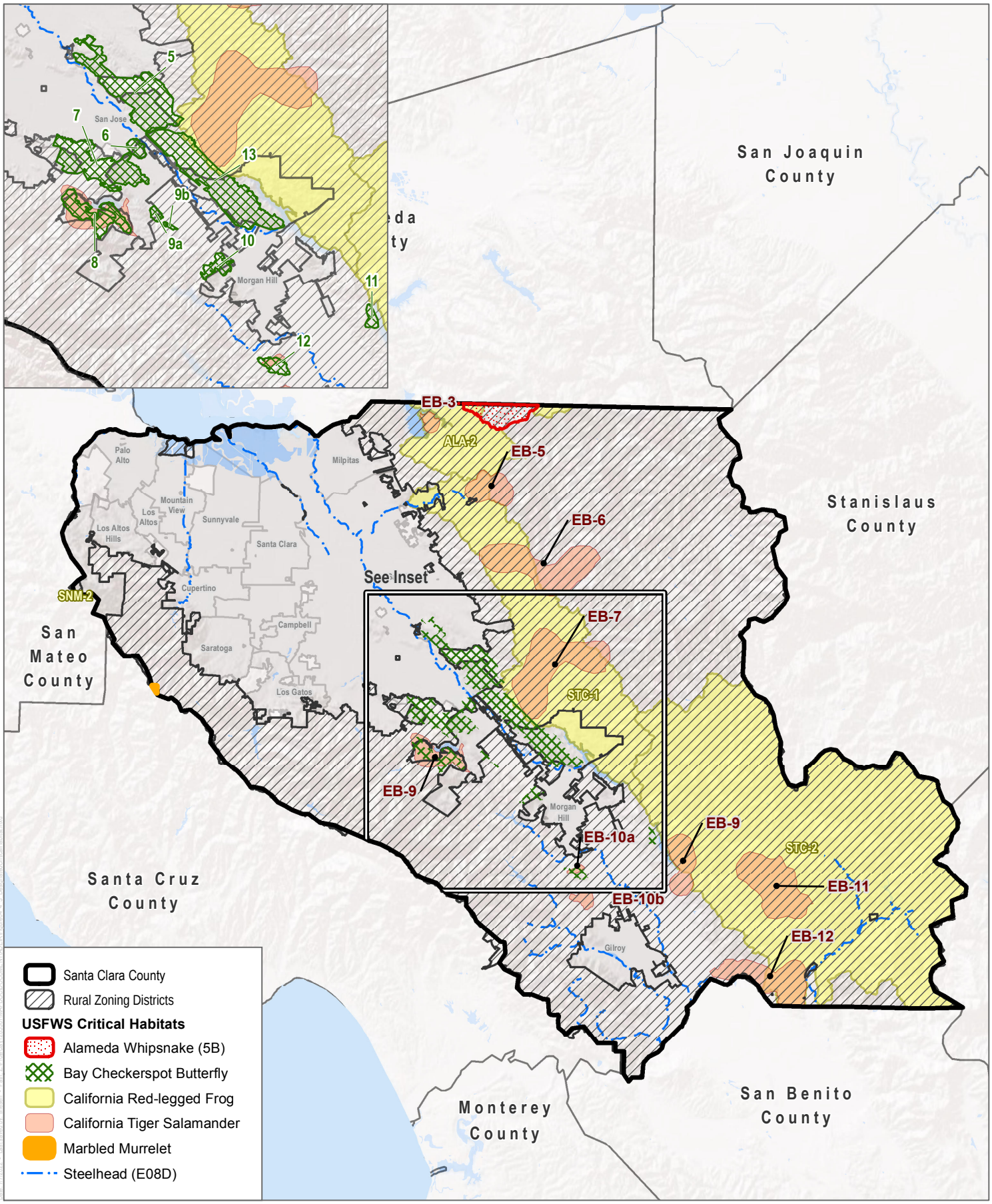
DUDEK

FIGURE 3.4-2

Sensitive Biological Resources

Santa Clara County Rural Zoning Ordinance Amendments EIR

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SOURCE: ESRI 2022; Santa Clara County 2022,CDFW 2021

DUDEK

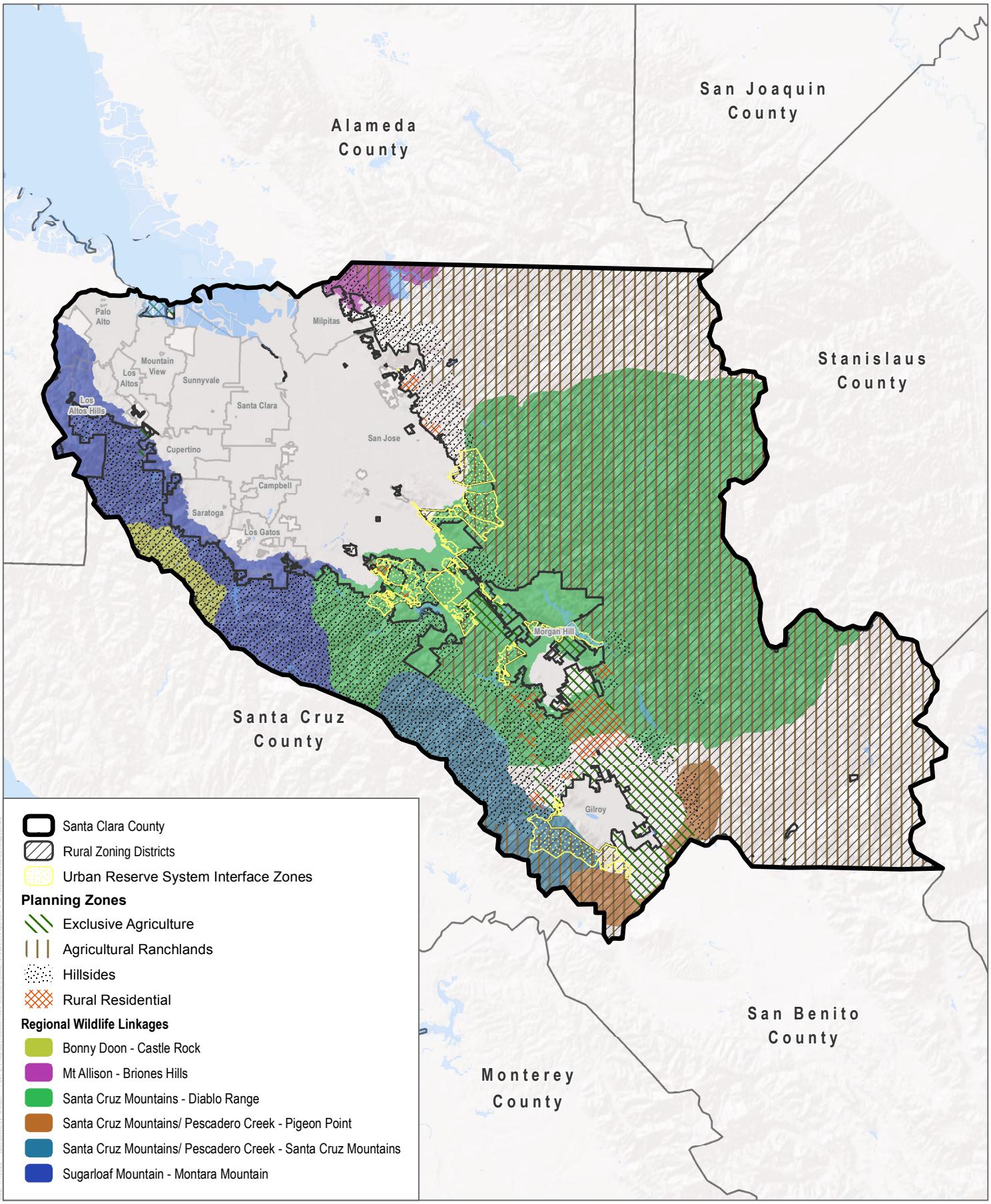
0 5 10 Miles

FIGURE 3.4-3

Designated Critical Habitat

Santa Clara County Rural Zoning Ordinance Amendments EIR

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SOURCE: ESRI 2022; Santa Clara County 2022,CDFW 2021

DUDEK

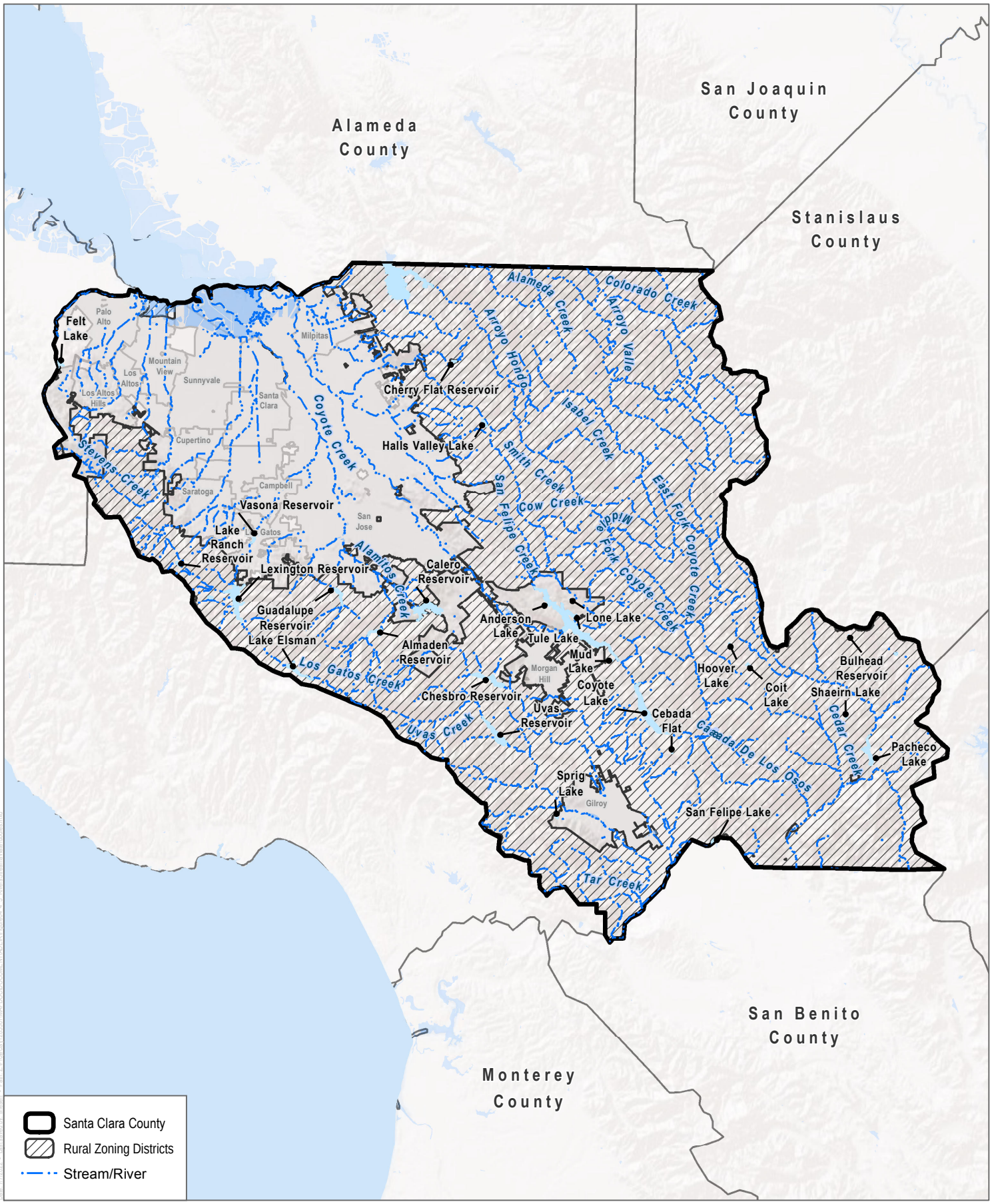
0 5 10 Miles

FIGURE 3.4-4

Regional Wildlife Linkages

Santa Clara County Rural Zoning Ordinance Amendments EIR

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SOURCE: ESRI 2022; Santa Clara County 2022; USGS 2022

DUDEK

FIGURE 3.4-5

Rivers, Streams and Waterbodies

Santa Clara County Rural Zoning Ordinance Amendments EIR

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3.5 Cultural Resources and Tribal Cultural Resources

This section of the Program Environmental Impact Report (PEIR) evaluates the historical, archaeological, and tribal cultural resources impacts from implementation of the County of Santa Clara (County) Rural Zoning Amendments and Agricultural Impact Threshold (Project). This analysis has been conducted at the program-level, as no project-level specific ground disturbance work is directly proposed. Therefore, there has been no records search conducted through the California Historical Resources Information System and no historic or archaeological resources survey. This section identifies the applicable regulatory framework; reviews potential impacts associated with historical, archaeological, and tribal cultural resources that may result from the Project; recommends procedures for future project-level California Environmental Quality Act (CEQA) review in conformance with this PEIR, identifies mitigation measures, if necessary, to reduce the level of impact associated with implementation of the Project; and identifies the level of significance after any mitigation. For the purposes of historical, archaeological, and tribal cultural analysis, the project area is the extent of the Project boundary, including all unincorporated areas of Santa Clara County that are within rural base zoning districts.

3.5.1 Environmental Setting

Historical resources are physical features, both natural and constructed, that reflect past human existence and are of historical, archaeological, scientific, educational, cultural, architectural, aesthetic, or traditional significance. These resources may include such physical objects and features as archaeological sites and artifacts, buildings, groups of buildings, structures, districts, street furniture, signs, cultural properties, and landscapes. Cultural resources in the Santa Clara County region span a timeframe of at least the last 10,000 years and include both the prehistoric and historic periods. For purposes of this PEIR, historical resources consist of archaeological sites and built-environment resources determined to be significant under CEQA.

Archaeological resources include prehistoric and historic locations or sites where human actions have resulted in detectable changes to the area. This can include changes in the soil and the presence of physical cultural remains. Archaeological resources can have a surface component, a subsurface component, or both. Historic archaeological resources are those originating after European contact. These resources may include subsurface features such as wells, cisterns, or privies. Other historic archaeological remains include artifact concentrations, building foundations, or remnants of structures.

A tribal cultural resource is defined as a site, feature, place, cultural landscape, sacred place, or object that is of cultural value to a Native American tribe and is either on or eligible for listing on the national, state or a local historic register, or that the lead agency, at its discretion, chooses to identify as a tribal cultural resource.

Cultural Setting

Evidence for continuous human occupation in the San Francisco Bay region spans the last 10,000 years. Various attempts to parse out variability in archaeological assemblages over this broad time frame have led to the development of several cultural chronologies; some of these are based on geologic time, most are based on temporal trends in archaeological assemblages, and others are interpretive reconstructions. The tribal cultural context spans all of the archaeologically based chronologies further described below.

Prehistoric Setting

The level of attention that has been dedicated through previous archaeological technical studies of the Bay Area is considerably higher than many other regions throughout California. These studies have yielded a large body of data that has served to inform our knowledge of archaeological patterns. The vast majority of previously recorded sites date from the Late Holocene, or the last 4,000 calendar years before present (cal BP). The relative abundance of sites dating to this period is largely because earlier populations were smaller, producing less archaeological material, and the landscape has substantially changed during the more than 10,000 years since people first began to inhabit the region.

The Bay Area region's cultural sequence was synthesized by Beardsley (1948) from a number of previous findings to form the Central California Taxonomic System (CCTS). This describes three primary horizons (Early, Middle, and Late) based on analyses of artifact variation (particularly grave goods). Other archaeologists, notably Fredrickson (1973), have described the temporal sequence of the Bay Area region using the Archaic-Emergent structure that was derived through grouping periods by trends in economic and social adaptation. Table 3.5-1 below includes both of these chronologies, in addition to a summary of geologic sediment deposition over time.

Table 3.5-1. Summary of Chronologic Sequences

Cal Years	Epoch	Archaic-Emergent	CCTS*	Sediment Deposition**
< 200 BP	Historic-era	Historic-era	Historic-era	Erosion and Development Related Fill
4,000 – 200 BP	Late Holocene	Emergent (1,000 - Historic era)	Late Horizon Phase II (500 - Historic era)	Landform Stability (< 2,800 BP)
			Late Horizon Phase I (1500 - 500 BP)	
		Upper Archaic (2,500 - 1,000 BP)	Middle Horizon (3000 - 1000 BP); also Berkeley Pattern	Alluvial Deposition
		Terminal Middle Archaic Period (4,500-2,500 BP)	Early Horizon (8000 - 2500 BP); also Windmiller Pattern (4,500-2500 BP)	
7,000-4,000 BP	Middle Holocene	Initial Middle Archaic (6000 - 4,500)		Landform Stability (6,500 - 4,000 BP)
				Alluvial Deposition
10,000 -7,000 BP	Early Holocene	Lower Archaic (10,000 - 6,000)	PaleoIndian (Pre-8000 BP)	Landform Stability (10,500 - 7000 BP)
10,000 >	Latest Pleistocene	PaleoIndian		Alluvial Deposition

Notes:
* Adjusted CCTS to include Banks and Orlins 1979 dates
** Based on Meyer 2011

Early discoveries of note within the County include Agua Fria and Lorenzo Creeks that date 5,300-550 years cal BP (ALA-60, -566, 576, and -586); the "Sunnyvale Man" in Sunnyvale dating 5000-5100 years cal BP; and the Blood Alley Site (CA-SCL-178), dated between 11,000 and 9,500 years old (Erlandson et. al. 2007; Meyer 2011). Jack Meyer has identified 353 radiocarbon dates calibrated to calendar years before present throughout the Bay Area (2011). This study indicates that 78.9% of dates are less than 4000 cal BP (Late Holocene); with a 1,714 years cal BP mean age of samples from surface to 133 centimeters below the surface (cmbs), and a 4,679 years cal BP mean age of samples 133-444 cmbs (mean depth 283 cmbs; Meyer 2011).

Early Horizon (Lower – Terminal Archaic)

Very few sites have been identified in association with the Lower Archaic Period. Early artifact assemblages include handstones, millingslabs and cobble-core tools, with burials found covered with stone cairns (Clay and Waechter 2009). These populations are indicated to have been highly mobile based on the variety of invertebrate shell observed from multiple coastal, bay, and estuary environments. Middle Archaic sites are also rare, and this interval has largely been established as a separate period in the Archaic-Emergence sequence based on climatic conditions associated with drought (also referred to as the Altithermal).

The Terminal Middle Archaic period, generally ending with the introduction of the large shell mound sites, overlaps Middle Horizon (Berkeley Pattern). It represents the first indication of sedentary or semi-sedentary settlement, and includes flexed burials with powdered red ochre, Olivella spire-lopped and rectangular (L-series) bead, geometric shell ornaments, side-notched and leaf-shaped projectile points, cobble-core tools, notched net weights, portable groundstone, bone whistles, scapula saws, and tule elk antler wedges (Clay and Waechter 2009; Meyer 2011). Obsidian from Sierran obsidian sources were commonly associated grave goods, with less Napa obsidian compared to later periods. Abalone and Olivella beads and ornaments were increasingly used as trade goods. Common foods included bay mussel and Pacific oyster, bay-environment fish, and high proportions of tule elk, deer, and canids.

It has been suggested that the Early Middle Horizon (Windmiller) assemblage is related to a migration of peoples with adaptations to river-wetland environments (Martorana 2008). Sites associated with this period have been consistently documented to be found in riverine, marshland, and valley floors. Common mortuary practices include west-facing ventrally extended inhumations, with commonly associated artifacts that include fishing net weights, spear points, and bone hooks; large projectile points; and mammal remains.

Middle Horizon (Upper Archaic)

The Middle Horizon (Berkeley Pattern) and Upper Archaic sequences are generally the same. This period overlaps late Windmiller attributes, and related sites are regionally more represented within the archaeological record than previous periods. Berkeley Pattern sites in particular are much more common and well documented than previous Windmiller sites. Sites contain deep and well-developed midden deposits with groundstone and smaller projectile points. Assemblages include increased frequencies of bone tools and ornaments, saucer and saddle-shaped Olivella beads, abalone ornaments and pendants, and mortars and pestles. Projectile points are smaller than in previous periods, and include lanceolate forms, side-notched and contracting stemmed types. Artifacts such as steatite beads, slate pendants, stone tubes, and ear ornaments emerge during this period (Martorana 2008). Burials are flexed, and have less associated goods. Obsidian artifacts increase in frequency, with Sierra and the Napa sources both well represented (Clay and Waechter 2009). Banks (1977) notes many large mound sites within Alameda County originated in this period, including CA-ALA-000012, CA-ALA-000013, CA-ALA-000328, and CA-ALA-000329.

Late Horizon (Emergent Period)

Banks and Orlins (1979) describe the Late Horizon to have initiated 1,500 years BP, whereas Fredrickson has defined this period as beginning 1,000 BP (calling it the Augustine Pattern). All cultural sequences (including the Archaic-Emergent system) terminate during the historic-era. The pattern included intensive hunting, fishing, and gathering, with a focus on acorn processing. Early Late Horizon sites showed population increases, additional trade, and the practice of both cremation and flexed burials. Common artifacts include bone pipes and awls for basketry, small notched and serrated projectile points consistent with the introduction of bow and arrow technology, and some pottery (Clay and Waechter 2009). Other artifacts of note include charmstones, stone mortars, rectangular and disc-shaped Olivella beads, tubular steatite pipes, banjo-shaped Haliotis ornaments, small, prismatic obsidian tinklers, and unfired clay effigies (Banks and Orlins 1979).

Banks and Orlins (1979) suggest that the end of the Middle Horizon is marked by the appearance of *Macoma nasut* (Bent-nosed Clam) in large quantities. This is interpreted to be a result of changes in the estuarine environment that resulted in the expansion of marshland and increased salinity. The reduced frequency of California Oyster was noted to decline, likely due to reduction in the presence of gravely sediments and deeper waters that characterize its habitat (Banks and Orlins 1979). There was a noted reduction large mammals such as tule elk in favor of smaller animals for food. Smaller species of fish remains were observed to be more prevalent, as noted by analysis of materials recovered from the nearby Emeryville Shellmound vertebrate assemblage (Broughton 1999), and small seeded plant foods were increasingly consumed (Clay and Waechter 2009). Lightfoot and Luby (2002) suggest that many mounds were abandoned during the Late Horizon, possibly as a result of revised habitation strategies resulting from environmental shifts.

Ethnohistoric Period

The history of Native American communities prior to the mid-1700s has largely been reconstructed through later mission-period and early ethnographic accounts. The first records of the Native American inhabitants of the region come predominantly from European merchants, missionaries, military personnel, and explorers. These brief, and generally peripheral, accounts were prepared with the intent of furthering respective colonial and economic aims and were combined with observations of the landscape. They were not intended to be unbiased accounts regarding the cultural structures and community practices of the newly encountered cultural groups. The establishment of the missions in the region brought more extensive documentation of Native American communities, though these groups did not become the focus of formal and in-depth ethnographic study until the early twentieth century. The principal intent of these researchers was to record the pre-contact, culturally specific practices, ideologies, and languages that had survived the destabilizing effects of missionization and colonialism. This research, often understood as “salvage ethnography,” was driven by the understanding that traditional knowledge was being lost due to the impacts of modernization and cultural assimilation. Alfred Kroeber applied his “memory culture” approach (Lightfoot 2005: 32) by recording languages and oral histories within the region.

Based on ethnographic information, it is believed that at least 88 different languages were spoken from Baja California Sur to the southern Oregon state border at the time of Spanish contact (Johnson and Lorenz 2006). The distribution of recorded Native American languages has been dispersed as a geographic mosaic across California through six primary language families (Golla 2007).

Early documentation of tribal language within this area was performed through interviews with individuals from Mission Dolores (1821), and well as by Curtis, Kroeber, Merriam, Mason, and Harrington with members of Mission San Jose in the early twentieth century (Golla 2011: 164). As an alternative to the term ”Costanoan”, which was

popularized though use by Kroeber (1925), other researchers such as Merriam use "Ohlone" because it was the self-identifying term used by inhabitants of the region during interviews. Throughout this section "Costanoan" is used to reference the language community, while "Ohlone" is used to describe the people.

Victor Golla has contended that one can interpret the amount of variability within specific language groups as being associated with the relative "time depth" of the speaking populations (Golla 2007). A large amount of variation within the language of a group represents a greater time depth then a group's language with less internal diversity. One method that he has employed is by drawing comparisons with historically documented changes in Germanic and Romantic language groups. Golla has observed that the "absolute chronology of the internal diversification within a language family" can be correlated with archaeological dates (2007). This type of interpretation is modeled on concepts of genetic drift and gene flows that are associated with migration and population isolation in the biological sciences. Costanoan is a subgroup of the Pinutian linguistic group spoken by populations that moved south from Oregon, displacing Hokan speaking groups (Golla 2011). Miwok, Yokut, and Costanoan represent three subfamilies of this initial Pinutian linguistic flow; of which Costanoan and Miwok are a distinct subbranch ("Utian") from Yokut (Golla 2007). The Golla has interpreted the split between Miwok and Costanoan populations based on archaeological evidence and the amount of internal diversity within these language-speaking communities to reflect a time depth of approximately 4,500-4,000 years (Golla 2007). This is considered consistent with the archaeologically documented emergence of the Early Middle Horizon Windmiller Pattern (Moratto 1984) within the Bay Area, which generally dates 4,500 to 2,500 BP. This information suggests a migration of Utian populations into the Bay Area from the Sacramento–San Joaquin River Delta (Delta) region during this period, displacing Hokan speaking populations. This is further substantiated by the documented presence of the Karkin Costanoan dialect along the Carquinez Strait, which Golla has suggested is the likely oldest variant in the region (Golla 2011).

Due the effects of missionization, relatively little is known about the Ohlone ethnographically. The material culture of these people has largely been reconstructed from the archaeological record. Ohlone communities were generally organized into autonomous tribelets, with one or more permanent habitation areas near the coast or major drainages and a limited number of more peripheral semi-permanent villages situated near other important resources. As previously noted, these groups spoke different dialects of a broader mutually intelligible language. It has also been contended that the majority of Costanoan populations in the Bay Area had shifted primarily to hunter-gatherer subsistence strategies by the time of European contact (Lightfoot and Luby 2002; Clay and Waechter 2009). The population within each tribelet generally numbered 200 to 400 people, and was overseen by a headman and council of elders (Levy 1978). Permanent villages were established near the coast and river drainages, while temporary camps were located in prime resource collecting areas. Kroeber estimated the indigenous population of the San Francisco Bay Area and the coast range valleys to be approximately 7,000 individuals, with approximately 1,000 people per dialect group (Kroeber 1925). The most common burial practice at the time of European contact was cremation.

The diet of tribes in the area included a large proportion of marine resources. These most notably important of these was California Oyster, found in large amounts in prehistoric sites along the Bay Shore (Banks 1977). Terrestrial vegetal food sources included acorn, nuts, seeds, greens and bulbs. Game included canids, deer, pronghorn, tule elk, small mammals, sea mammals and waterfowl. Ohlone people managed the seasonal seed production through controlled annual burning (Levy 1978:491). The house structure is poorly documented due to the influences of missionization, however has been described by Kroeber as a pole structure with a roof of brush or tule matting (Kroeber 1925: 468). Additional structures included sweathouses (which was visited daily), dance houses, and assembly houses. Lithic tools produced through imported obsidian and local cherts were manufactured. As acorn from coast live oak (*Quercus agrifolia*) and valley oak (*Quercus lobata*) was an important

staple, groundstone handstones, pestles, portable mortars, and milling slabs were common. Bedrock milling was also common where bedrock was of sufficient quality. The Ohlone traded shell ornaments, animal furs, salt, shellfish, and other items with neighboring Miwok, Yokut and Patwin for bows and arrows, basketry materials, pigments, and feather blankets (Clay and Waechter 2009). Olivella and abalone shell beads was also used as currency.

Historical Period Overview

Post-contact history for the State of California is generally divided into three periods: the Spanish Period (1769-1821), Mexican Period (1821–1846), and American Period (1846–present). The following context provides a high-level overview of Santa Clara County's history.

Early Euroamerican exploration and settlement in the County of Santa Clara began in 1769 with an expedition led by Gaspar de Portola. Spanish expeditions to the area continued and, in 1769, Spain initiated the distribution of large land grants to promote the Hispanic occupation and agricultural development of Alta California. Mexico, after gaining independence from Spain in 1821, immediately expanded the land grant system and, in total, conferred forty-three ranchos to native or naturalized Mexican citizens in the County of Santa Clara (Archives and Architecture 2004: 33-35). Despite Mexico's attempt to prevent Euroamerican migration, settlers arrived steadily throughout the 1830s and 1840s. Americans were well established in the Santa Clara County when the United States acquired the California Territory in 1848 (Dill Design Group 2003: 11). Santa Clara County was established as one of the original twenty-seven counties of the new state of California.

For the first two decades of California's statehood, California's government brought litigation against Rancho owners to break apart the large properties to promote American settlement. Although the American court system claimed to recognize the ownership of Mexican-era land grants lands in the County, expensive and lengthy court proceedings caused many owners to forfeit or sell their land holdings to American settlers (Hoover et al. 2002: 301; CSAC 2014). In 1869, the Transcontinental Railroad was completed and removed transportation barriers between the American east and west coasts (Dill Design Group 2003: 15). By 1870, the County of Santa Clara's population had swelled from just 11,912 residents in 1860 to 26,246 people (World Population Review 2020).

San Jose, in north Santa Clara County, was the original location for California's capital (1850-1854), commerce center, and embarkation and disembarkation for travelers and trade goods. San Jose was connected to the County's grain farmers, cattle, and dairy farmers by the regional Santa Clara and Pajaro Railroad, which was purchased and expanded by the Southern Pacific Railroad Company in 1870. In 1890, as viticulture and citriculture began to dominate the County's agricultural landscape, large grain-growing ranches were subdivided into specialized farms, and railroads developed new shipping technologies to preserve the crops during transportation (Dill Design Group 2003: 15-16). Automobiles and the commercial development of the trucking industry in the 1910s furthered commercial connectivity throughout the region (Dill Design Group 2003: 19).

By the early twentieth century, fruit production had surpassed the importance of grain, beef, and dairy in the County. Fruit production peaked in the 1920s as the subdivision of large agricultural properties continued. In 1930, the majority of the County's small-scale farmers grew prunes while large-scale farmers, in addition to prunes, also cultivated orchards, vineyards, hay and grain fields, tobacco, and livestock (Dill Design Group 2003: 17-18). In 1950, water for rural communities and agriculture was secured by the creation of the Santa Clara Valley Water District (Dill Design Group 2003: 20-21). While the Santa Clara Valley continued to be an agricultural haven, magnesite deposits were discovered and mined in the county's foothills to be used in the manufacturing of building and insulation materials, oxychloride cement, metal, insecticides, cosmetics, and pharmaceuticals was a boon for

the region's industrial industries (Dill Design Group 2003: 18). The Watsonville Oil Company also contributed to the county's industrial field from 1900 to 1948 by producing a total of 780,000 barrels, the largest amount by any oil field in the San Francisco Bay Area (Dill Design Group 2003: 19-20).

Although the population of the County had grown to approximately 1,064,700 residents by 1970, the county's rural communities, comprised of West Santa Clara, Lexington Hills, Llagas-Uvas, and South Santa Clara Valley, continued to retain their historically agrarian landscape (World Population Review 2020). The population growth was largely located in the county's urban neighborhoods. In 1971, the area between San Jose and Palo Alto was nicknamed "Silicon Valley," for the mounting number of silicon-based technology companies headquartered there. Silicon Valley was an epicenter for radical technological growth and, in the late 1990s and early 20th century, corporations including Apple, Alphabet's Google, Chevron, Meta (formerly Facebook), Microsoft, and Visa were founded in the valley (Segal 2022). Major transportation routes, including the development of the South Valley Freeway (now U.S. Business 101) and the extension of the City of San Jose's public Urban Service Line, facilitated the industrial and residential growth in the county's urban centers (Dill Design Group 2003: 19-20). By 2017, the county's growth peaked at approximately 1,932,500 residents, many of whom were attracted to Silicon Valley, which had grown to include San Jose, Palo Alto, Santa Clara, Redwood City, Mountain View, and Menlo Park, Cupertino, and Sunnyvale (World Population Review 2020; Cedar Lake Ventures 2022).

Cultural Resources

Prehistoric and Historic Archaeological Resources

The Northwest Information Center houses historic maps, site records, and previously conducted inventories for Santa Clara County. The Northwest Information Center contains records of archaeological resources within the County's jurisdiction and the project area. Although no records search has been conducted for the Project at this time, the following is a general summary of resources expected to occur within the project area. Prehistoric resources include artifact scatters and deposits, hearth features, bedrock milling stations, shell middens, pictographs, petroglyphs, tool stone quarries, temporary camps, and village sites. Historic resources within the project area include structure foundations, refuse scatters and deposits, water conveyance structures, wells, railroad features, cemeteries, and others. Some sites within the project area have been listed on the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), or the Santa Clara County Heritage Resource Inventory. Other sites have been evaluated and found to be insignificant individual projects facilitated by the Project. However, many sites have not been evaluated for.

Historic Built Environment Resources

Built environment historic resources often include water management structures (levees, canals, dams, and ditches), buildings (residential, agricultural, industrial, and commercial), and other linear resources (railroad alignments, roads, and bridges). Architectural building styles from the County's historic periods include, but are not limited to, Spanish Colonial Revival, Pre-Railroad New England, National Vernacular, Victorian Italianate, Stick, Queen Anne, Colonial Revival, Neoclassical, Shingle, Folk Victorian, Mission, Craftsman, Prairie, French Eclectic, Italian Renaissance, Spanish Eclectic, Egyptian Revival, Tudor Revival, Modernistic, and International.

The County has numerous previously identified CEQA historical resources. There are many individual properties and historic districts that are eligible or listed in the NRHP or CRHR, or considered significant at the local level. Any

property that has been identified or listed in one or more of the above stated lists is considered a historical resource under CEQA. There are also a number of buildings that are over the age of 50and have not been evaluated.[1]

3.5.2 Regulatory Setting

Federal

National Register of Historic Places

The NRHP is the nation's master inventory of known historic resources and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level. As described in National Register Bulletin 15, How to Apply the National Register Criteria for Evaluation, a property must have both historical significance and integrity to be eligible for listing in the NRHP.

The NRHP identifies four criteria for evaluating historical significance. A property must be significant under at least one of these criteria at the national, state, or local level:

- The property is associated with events that have made a significant contribution to the broad patterns of our history.
- The property is associated with the lives of persons significant to our past.
- The property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possess high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- The property has yielded, or is likely to yield, information important to prehistory or history.

In addition to meeting at least one of these four criteria, listed properties must also retain sufficient physical integrity of those features necessary to convey historic significance. The register has identified the following seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association.

Properties are nominated to the NRHP by the State Historic Preservation Officer of the state in which the property is located, by the Federal Historic Preservation Officer for properties under federal ownership or control, or by the Tribal Historic Preservation Officer if on tribal lands. Listing in the NRHP provides formal recognition of a property's historic, architectural, or archaeological significance based on national standards used by every state. Once a property is listed in the NRHP, it becomes searchable in the NRHP database. Documentation of a property's historic significance helps encourage preservation of the resource.

[1] While 50 years is the common threshold used for evaluating a resource for potential historical significance, 45 is typically used for planning purposes given the potential for delay in the project development process.

State

California Environmental Quality Act

As described further below, the following CEQA statutes and CEQA Guidelines are relevant to the analysis of archaeological and historic resources:

- California Public Resources Code (PRC) Section 21083.2(g): Defines "unique archaeological resource."
- PRC Section 21084.1, and CEQA Guidelines, Section 15064.5(a): Defines cultural resources. In addition, CEQA Guidelines, Section 15064.5(b), defines the phrase "substantial adverse change" in the significance of a cultural resource. It also defines the circumstances when a project would materially impair the significance of a cultural resource.
- PRC Section 21074(a): defines "Tribal cultural resources" and Section 21074(b): defines a "cultural landscape."
- PRC Section 5097.98, and CEQA Guidelines, Section 15064.5(e): These statutes set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
- PRC Sections 21083.2(b)–21083.2(c), and CEQA Guidelines, Section 15126.4: These statutes and regulations provide information regarding the mitigation framework for archaeological and historic resources, including options of preservation-in-place mitigation measures; identifies preservation-in-place as the preferred manner of mitigating impacts to significant archaeological sites.

Under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an [sic] cultural resource" (PRC Section 21084.1; 14 CCR 15064.5[b]). A "cultural resource" is any site listed or eligible for listing in the CRHR. The CRHR listing criteria are intended to examine whether the resource in question: (a) is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage; (b) is associated with the lives of persons important in our past; (c) 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; or (d) has yielded, or may be likely to yield, information important in pre-history or history.

The term "cultural resource" also includes any site described in a local register of historic resources, or identified as significant in a cultural resources survey (meeting the requirements of PRC Section 5024.1[q]).

CEQA also applies to "unique archaeological resources." PRC Section 21083.2(g) defines a "unique archaeological resource" as any archaeological 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 meets any of the following criteria (PRC Section 21083.2[g]):

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

In 2014, CEQA was amended through AB 52 to apply to tribal cultural resources as well. Specifically, PRC Section 21074, provides guidance for defining tribal cultural resources as either of the following (PRC Section 21074):

> Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following: (A) Included or determined to be eligible for inclusion in the California Register of Cultural Resources. (B) Included in a local register of cultural resources as defined in subdivision (k) of §5020.1.
>
> 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 §5024.1. In applying the criteria set forth in subdivision (c) of §5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe. (b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

All cultural resources and unique archaeological resources—as defined by statute—are presumed to be historically or culturally significant for purposes of CEQA (PRC Section 21084.1; 14 CCR 15064.5[a]). The lead agency is not precluded from determining that a resource is a cultural resource even if it does not fall within this presumption (PRC Section 21084.1; 14 CCR 15064.5[a]). A site or resource that does not meet the definition of "cultural resource" or "unique archaeological resource" is not considered significant under CEQA and need not be analyzed further (PRC Section 21083.2[a]; 14 CCR 15064.5[c][4]).

Under CEQA a significant cultural impact results from a "substantial adverse change in the significance of an [sic] cultural resource," including a unique archaeological resource, due to the "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a cultural resource would be materially impaired" (14 CCR 15064.5[b][1]; PRC Section 5020.1[q]).

In turn, the significance of a cultural resource is materially impaired when a project (14 CCR 15064.5[b][2]):

- Demolishes or materially alters in an adverse manner those physical characteristics of a cultural resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or
- Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of cultural resources pursuant to Section 5020.1(k) of the Public Resources Code or its identification in an cultural resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- Demolishes or materially alters in an adverse manner those physical characteristics of a cultural resource that convey its historical significance and that justify its eligibility for inclusion in the California Register as determined by a lead agency for purposes of CEQA.

When a project significantly affects a unique archaeological resource, CEQA imposes special mitigation requirements. Specifically (PRC Sections 21083.2[b][1]–21083.2[b][4]):

> If it can be demonstrated that a project will cause damage to a unique archeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to

> be preserved in place or left in an undisturbed state. Examples of that treatment, in no order of preference, may include, but are not limited to, any of the following:
>
> 1. Planning construction to avoid archeological sites.
> 2. Deeding archeological sites into permanent conservation easements.
> 3. Capping or covering archeological sites with a layer of soil before building on the sites.
> 4. Planning parks, greenspace, or other open space to incorporate archeological sites.

If these "preservation in place" options are not feasible, mitigation may be accomplished through data recovery (PRC Section 21083.2[d]; 14 CCR 15126.4[b][3][C]). PRC Section 21083.2(d) states the following:

> excavation as mitigation shall be restricted to those parts of the unique archeological resource that would be damaged or destroyed by the project. Excavation as mitigation shall not be required for a unique archeological resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the resource, if this determination is documented in the environmental impact report.

These same requirements are set forth in slightly greater detail in CEQA Guidelines, Section 15126.4(b)(3), as follows (14 CCR 15126.4[b][3]):

1. Preservation in place is the preferred manner of mitigating impacts to archeological sites. Preservation in place maintains the relationship between artifacts and the archeological context. Preservation may also avoid conflict with religious or cultural values of groups associated with the site.
2. Preservation in place may be accomplished by, but is not limited to, the following:
   a. Planning construction to avoid archeological sites;
   b. Incorporation of sites within parks, greenspace, or other open space;
   c. Covering the archeological sites with a layer of chemically stable soil before building tennis courts, parking lots, or similar facilities on the site; and
   d. Deeding the site into a permanent conservation easement.
3. When data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the cultural resource, shall be prepared and adopted prior to any excavation being undertaken.

When conducting data recovery, "if an artifact must be removed during project excavation or testing, curation may be an appropriate mitigation" (14 CCR 15126.4[b][3]). However, "data recovery shall not be required for a cultural resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the archeological or historic resource, provided that determination is documented in the EIR and that the studies are deposited with the California Cultural Resources Regional Information Center" (14 CCR 15126.4[b][3][D]).

Finally, CEQA Guidelines, Section 15064.5, assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are set forth in PRC Section 5097.98.

Native American Historic Cultural Sites

The Native American Historic Resources Protection Act (PRC Section 5097 et seq.) addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the Native American Heritage Commission (NAHC) to resolve disputes regarding the disposition of such remains. In addition, the Native American Historic Resources Protection Act makes it a misdemeanor punishable by up to one year in jail to deface or destroy an Indian historic or cultural site that is listed or may be eligible for listing in the CRHR.

California Native American Graves Protection and Repatriation Act

The California Native American Graves Protection and Repatriation Act, enacted in 2001, requires all state agencies and museums that receive state funding and that have possession or control over collections of human remains or cultural items, as defined, to complete an inventory and summary of these remains and items on or before January 1, 2003, with certain exceptions. The act also provides a process for the identification and repatriation of these items to the appropriate tribes.

Assembly Bill 52

The Native American Historic Resource Protection Act (AB 52), which went into effect July 1, 2015, establishes that Tribal Cultural Resources must be considered under CEQA and defines a lead agency's requirements for notification and consultation with California Native American tribes.

Under AB 52, lead agencies must notify all California Native American tribes that are traditionally and culturally affiliated with the project area and that have requested formal notification. The notification requirement extends to tribes that are not federally recognized, and notification must occur at the onset of a project, which, for a private development, is after the project application is deemed complete, but no later than the public release of a draft CEQA document. After notification, tribes may request to engage in consultation with the Lead Agency. If it is determined that a substantial adverse change to a tribal cultural resource would result from a project, the tribal consultation can include development of Mitigation Measures and/or project alternatives that could reduce or avoid those impacts.

Santa Clara County provided notice of the Project during the EIR scoping process, and did not receive any tribal requests for consultation.

California Health and Safety Code Section 7050.5

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. California Health and Safety Code Section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the County coroner has examined the remains (California Health and Safety Code, Section 7050.5b). If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the NAHC within 24 hours (California Health and Safety Code, Section 7050.5c). The NAHC will notify the most likely descendant. With the permission of the landowner, the most likely descendant may inspect the site of discovery. The inspection must be completed within 24 hours of notification of the most likely

descendant by the NAHC. The most likely descendant may recommend means of treating or disposing of, with appropriate dignity, the human remains and items associated with Native Americans.

California Register of Historical Resources

In California, the term "cultural resource" includes "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (PRC Section 5020.1[j]). In 1992, the California legislature established the CRHR "to be used by state and local agencies, private groups, and citizens to identify the state's cultural resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1[a]). A resource is eligible for listing in the CRHR if the State Cultural Resources Commission determines that it is a significant resource and that it meets any of the following NRHP criteria (PRC Section 5024.1[c]):

1. Associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. 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.

Resources less than 50 years old generally are not considered for listing in the CRHR, but may be considered if it can be demonstrated that sufficient time has passed to understand the historical importance of the resource (14 CCR 4852[d][2]).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing on the NRHP are automatically listed on the CRHR, as are state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local cultural resource surveys. The State Historic Preservation Officer maintains the CRHR.

Local

Santa Clara County, California - Code of Ordinances

The Historic Preservation Chapter of the Construction, Development and Land Use Code (Title C, Division 17) (County of Santa Clara 2022) states the following:

> The Historical Preservation Ordinance is adopted for the preservation, protection, enhancement, and perpetuation of resources of architectural, historical, and cultural merit within Santa Clara County and to benefit the social and cultural enrichment, and general welfare of the people.

The County outlines the purpose of the ordinance as follows:

A. Identify, protect, preserve, and enhance historic resources (as defined in Section C17-3(J) below) representing distinctive elements of the cultural, social, economic, political, and architectural history of Santa Clara County;

B. Provide a mechanism to compile, update and maintain the heritage resource inventory;
C. Enhance the visual identity of Santa Clara County by maintaining the scale and character of historic resources and their settings, and integrating the preservation of historic resources into public and private development;
D. Encourage, through public and private action and collaboration with other organizations, the maintenance and rehabilitation of historic resources;
E. Promote public knowledge, participation, understanding, and appreciation of Santa Clara County's rich history and sense of place;
F. Foster civic pride and a sense of identity based upon the recognition and use of Santa Clara County's historic resources;
G. Protect and enhance Santa Clara County's attraction to tourists and visitors thereby stimulating business and industry;
H. Promote awareness of the economic, social and cultural benefits of historic preservation in collaboration with other organizations;
I. Provide for consistency with state and federal preservation standards, criteria, and practices; and
J. Make available incentive opportunities to preserve Santa Clara County's historic resources as provided in Article V.

Article I of the County's Historical Preservation Ordinance observes the following definitions pertaining to historical, archeological, and tribal cultural resources:

> *Historic resource* means any evaluated building, structure, object, or site that potentially meets the designation criteria outlined in Article II of this chapter, Chapter 3.50 of the Zoning Ordinance or Division C16 of the County Code, or that is listed in a federal or state register.
>
> *Landmark* means a historic resource designated as a landmark by the County of Santa Clara pursuant to the provisions of Article III of this chapter.
>
> *Site* (as applied in the context of this chapter) means the location of a significant event, a prehistoric or historic occupation or activity, building or structure, whether standing, ruined or vanished, where the location itself maintains historical or archaeological value regardless of the value of any existing buildings, structures or objects. Examples of a site are a battlefield, designed landscape, trail, or camp site.

Article II of the County's Historical Preservation Ordinance provides the designation criteria as a County landmark as follows:

> For the purposes of this Chapter, the Board of Supervisors may designate those historic resources as "landmarks" which meet the following designation criteria:
>
> A. *Fifty years or older.* If less than 50 years old, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the historic resource and/or the historic resource is a distinctive or important example of its type or style; and

B. *Retains* historic *integrity.* If a historic resource was moved to prevent demolition at its former location, it may still be considered eligible if the new location is compatible with the original character of the property; and

C. *Meets one or more of the following criteria of significance:*

   a. Associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;

   b. Associated with the lives of persons important to local, California or national history;

   c. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or

   d. Yielded or has the potential to yield information important to the pre-history or history of the local area, California, or the nation.

The Tree Preservation and Removal Chapter of the Construction, Development and Land Use Code (Title C, Division 16) (County of Santa Clara 2022) states the following:

> The Board of Supervisors finds that it is necessary to enact this ordinance to promote the public health, safety, general welfare and prosperity of the County, while recognizing and respecting individual rights to develop, maintain and enjoy private property to the fullest possible extent, consistent with the public interest, convenience and necessity. The County recognizes the substantial economic, environmental and aesthetic importance of its tree population. The County finds that the preservation of all trees in private and public property is necessary for the best interests of the County and its citizens in order to:
>
> A. Establish and maintain the optimum amount of tree cover on public and private lands in the County;
>
> B. Protect property values;
>
> C. Preserve and protect aesthetic and scenic beauty;
>
> D. Prevent erosion of topsoil add protect against flood hazards and the risk of landslides;
>
> E. Counteract the pollutants in the air;
>
> F. Protect against high winds;
>
> G. Maintain the climatic balance and provide shade;
>
> H. Provide habitat to a variety of wildlife species; and
>
> I. Protect valuable historical and community assets.
>
> The Board of Supervisors further finds that it is necessary and desirable to protect and preserve those trees which, because of their history, girth, height, species, or other unique quality, have a special significance to the community.

The Tree Preservation and Removal Chapter observes the following definition (Title C, Division 16) (County of Santa Clara 2022):

> *Heritage tree* shall include any tree which, because of its history, girth, height, species, or other unique quality, has been recommended for inclusion on the heritage resource inventory by the Historical Heritage Commission and found by the Board of Supervisors to have special

> significance to the community, and which has therefore been included in the heritage resource inventory adopted by resolution of the Board of Supervisors.

The County's Zoning Ordinance, Appendix I of the Construction, Development and Land Use Code (Title C, Appendix I) observes the following definitions pertaining to historical, archeological, and tribal cultural resources (County of Santa Clara 2022):

> *Open land historic*: The unimproved or undeveloped portion of the land on which the historic buildings or structures exist and which is essential to the integrity of the historical site or place.
>
> *Registered historic cultural resource*: A registered historic cultural resource is any building, site, structure, object, or district which is registered in the National Register of Historic Places, California Historical Landmarks Program, California Register of Historical Resources, California Points of Historical Interest Program, or formally designated as such by a resolution of the Santa Clara County Board of Supervisors.

County of Santa Clara Historical Heritage Commission

The Historical Heritage Commission (HHC) Chapter of the General and Administration Code (Title A, Division 6, Chapter V) outlines the responsibilities of the HHC in its role as an advisory board to the Board of Supervisors as follows:

A. Provide to the Board of Supervisors recommendations regarding the acquisition, preservation, public display, and disposition of sites, buildings, documents and artifacts pertaining to the historical and cultural heritage of Santa Clara County.
B. Support, initiate or collaborate with other organizations to promote and enhance knowledge of the history and cultural heritage of Santa Clara County.
C. Conduct studies and surveys of historic properties in unincorporated areas of Santa Clara County.
D. Recommend to the Board of Supervisors additions to and deletions from the Heritage Resource Inventory.
E. Compile, maintain, and update information in the Heritage Resource Inventory.
F. Recommend to the Board of Supervisors approval of Landmark designations.
G. Review and make recommendations on applications for Landmark Alteration Permits.
H. Review and make recommendations on land development applications for properties located within -h Historic Preservation Combining Districts as provided for in Chapter 3.50 of the Zoning Ordinance.
I. Recommend to the Board of Supervisors approval of Mills Act contracts.
J. Recommend to the Planning Commission and Board of Supervisors amendments to the heritage resources element of the Santa Clara County General Plan.
K. Advise Department of Planning and Development staff or the Board of Supervisors regarding review called for under the California Environmental Quality Act, National Environmental Protection Act, and National Historic Preservation Act on actions affecting historic properties in Santa Clara County.

L. Advise Department of Planning and Development staff or the Board of Supervisors regarding recommendations to the State Office of Historic Preservation on nominations of property located within Santa Clara County to the National Register of Historic Places. (Santa Clara County 2022.)

Santa Clara County 1994 General Plan Environmental Impact Report

The Santa Clara County 1994 General Plan Environmental Impact Report states the following (PAD Inc. 1994:5P-5):

> Plan policies are designed to protect heritage resources both natural and man-made. They may include historical sites, structures, or areas, archeological and paleontological sites and artifacts and additionally historical specimen trees. The County's Historical Heritage Inventory will be maintained and used for review and decision making for projects.
>
> The policies serve to protect resources and prevent their destruction unless they are seen by the Historic Heritage Commission as insignificant or there are overriding public benefits involved. If Preservation is compromised, mitigations may be imposed by the County. Additional policies address the demolition of resources, encouragement of historic districts and the protection of heritage or old growth trees.

Santa Clara County 1994 General Plan

The Resource Conservation section of the Santa Clara County General Plan, 1995-2010 (General Plan) outlines several strategies to address rural unincorporated area issues and policies related to six key subjects: (1) Water Supply, Quality, & Watershed Management; (2) Habitat & Biodiversity; (3) Agriculture & Agricultural Resources; (4) Mineral Resources; (5) Heritage Resources; and (6) Scenic Resources. The relevant strategies and policies of the Resource Conservation Element pertaining to "Heritage Resources" are as follows (Santa Clara County 1994:):

R-RC 81. Heritage resources within the rural unincorporated areas of Santa Clara County shall be preserved, restored wherever possible, and commemorated as appropriate for their scientific, cultural, historic and place values.

R-RC 82. The following strategies should provide overall direction to efforts to preserve heritage resources:

- Inventory and evaluate heritage resources.
- Prevent, or minimize, adverse impacts on heritage resources.
- Restore, enhance, and commemorate resources as appropriate.

Strategy #1: Inventory and Evaluate Heritage Resources

R-RC 83. The County's Heritage Resources data base shall be maintained and used to review private development projects and guide the design of public projects.

Strategy #2: Prevent or Minimize Adverse Impacts on Heritage Resources

R-RC 85. No heritage resource shall knowingly be allowed to be destroyed or lost through a discretionary action (zoning, subdivision site approval, grading permit, building permit, etc.) of the County of Santa Clara unless:

- the site or resource has been reviewed by experts and the County Historic Heritage Commission and has been found to be of insignificant value; or
- there is an overriding public benefit from the project and compensating mitigation to offset the loss is made part of the project.

R-RC 86. Projects in areas found to have heritage resources shall be conditioned and designed to avoid loss or degradation of the resources. Where conflict with the resource is unavoidable, mitigation measures that offset the impact may be imposed.

R-RC 88. For projects receiving environmental assessment, expert opinions and field reconnaissance may be required if needed at the applicant's expense to determine the presence, extent, and condition of suspected heritage resources and the likely impact of the project upon the resources.

R-RC 90. Heritage and old growth trees, particularly redwoods, should not be cut, except in instances where public safety is jeopardized.

Strategy #3: Restore, Enhance and Commemorate Resources

R-RC 93. Heritage resources should be restored, enhanced and commemorated as appropriate to the value and significance of the resource. All historic rehabilitation activities should comply with the Secretary of Interior's Standards for Rehabilitation.

In general, the County's Historical Resources Regulations build on federal and state cultural resources laws and guidelines in an attempt to streamline the process of considering impacts to cultural resources within the County's jurisdiction, while maintaining that some resources not significant under federal or state law may be considered historical under the County's guidelines. To apply the criteria and determine the significance of potential impacts to a cultural resource, the Area of Potential Effect (APE) or the boundary of a project must be defined for both direct impacts and indirect impacts. Indirect impacts can include increased public access to an archaeological site or visual impairment of a historically significant viewshed related to a historic building or structure.

3.5.3 Thresholds of Significance

Consistent with Appendix G of the California Environmental Quality Act (CEQA) Guidelines, a significant impact would occur if development of the Project would do any of the following:

CUL-1: Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

CUL-2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

CUL-3: Disturb any human remains, including those interred outside of dedicated cemeteries?

CUL-4: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §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?

3.5.4 Methodology

As described in Chapter 2, Project Description, the Project consists of amendments to the County's Zoning Ordinance that would impact rural zoning districts within unincorporated parts of the County. The Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. Although the Project would not directly construct new development, it would allow and facilitate new agriculture-supportive uses that could directly result in construction or operational impacts to the environment. The amendments outlined as part of the Project are proposed at the program level and do not require ground disturbance that could have the potential to impact cultural resources. The Project's potential impact on cultural resources and tribal cultural resources would occur during future individual projects resulting from facilitation of the Project. The potential of the Project to have an impact on cultural resources and tribal cultural resources is contingent on the pre-construction conditions of future individual projects, the cultural resource sensitivity of the future individual project areas, and anticipated encroachment into previously undisturbed soils or within the boundaries of historic properties.

3.5.5 Environmental Impacts

Impact CUL-1 Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

The Project consists of amendments to the County's Zoning Ordinance. Although the Project would not directly construct new development, it would allow and facilitate new agriculture-supportive uses that could directly impact historical resources. Implementation of the Project has the potential to have an impact on historical resources when known cultural resources or previously unidentified cultural deposits occur within the Area of Potential Effect for a future development allowed under the proposed zoning amendments.

Cultural resources have been previously recorded throughout the County prior to development and archaeological deposits have been identified during subsequent ground disturbance associated with new development. Ground disturbing activities within or adjacent to previously identified resources have a moderate to high potential of impacting cultural resources. Other future individual projects may be located in areas that do not have defined cultural resource boundaries, but are known to be areas with documented ethnohistoric villages.[2] Previously undeveloped land has the greatest likelihood of possessing surface or buried cultural resources. Ground disturbance associated with the development of a future individual projects facilitated by the Project has the potential to affect archaeological resources when it takes place in undisturbed soils in culturally sensitive areas.

[2] Ethnohistoric villages are human habitation sites that were occupied at European contact, knowledge of which is ascertained through historic documents, oral history, and material culture.

If ground-disturbing activities are conducted in previously disturbed soils, such as artificial fill or engineered soils from the past 50 years, the likelihood of impacting cultural resources is minimal. Similarly, if future individual projects facilitated by the Project are constructed in areas that have been previously developed, it is unlikely that intact cultural deposits still exist. This is particularly true of existing developments on hilly terrain that required extensive grading and leveling. Prior extensive earth-moving is likely to have displaced any cultural resources and native soils that may have been previously present. In summary, future individual projects that propose construction within previously developed areas would have a low potential to impact subsurface cultural resources.

A study conducted for the Project indicates that the Project would not induce growth by streamlining certain uses (which are already allowed under the existing Zoning Ordinance), and, therefore, the overall amount of development is not expected to change (although future individual projects may be less intense, due to the proposed development standards). While future individual development projects facilitated by the Project have the potential to affect cultural resources, the overall impact to cultural resources would not significantly change under the Project. It is anticipated that ground disturbance would be minimal, and the construction of agriculture-supportive uses would typically be located on previously disturbed land. Each future individual project would be required to avoid disturbance of cultural resources to the extent feasible in accordance with federal, state, and local guidelines (see Section 3.5.2). Additionally, existing policies in the County General Plan encourage protection of cultural resources. Policy R-RC 81 states that the general approach to heritage resources preservation should include inventorying and evaluating heritage resources, preventing or minimizing adverse impacts, and restoring, enhancing, and commemorating resources as appropriate. Policy R-RC-85 would address future development projects allowed under the proposed zoning amendments. Section 3.50.070 of the County Code also states that no permit for the demolition or removal of a building or other structure which is a formally designated or registered cultural heritage resource shall be issued until an approval is granted by the Board of Supervisors. Overall, the Project would not cause a substantial adverse change in the significance of cultural resources and impacts would be **less than significant.**

Impact CUL-2 Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

The Project would have **a less-than-significant** impact on archaeological resources. Please see the impact analysis under Impact CUL-1, above, regarding cultural resources.

Impact CUL-3: Would the project result in the disturbance of any human remains, including those interred outside of dedicated cemeteries?

Archaeological deposits containing human remains have the potential to occur in various locations within the project area. Impacts to human remains may be unavoidable in certain circumstances if previously unidentified resources are discovered during construction. Despite previous disturbance, construction of future individual projects facilitated by the Project could have the potential to impact human remains. However, future individual projects would be required to follow applicable laws including California Health and Safety Code Section 7050.5, which requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the County coroner has examined the remains. If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the NAHC within 24 hours. As previously discussed, the Project would not result in the overall level

of ground disturbance to substantially increase compared to existing conditions. Future individual projects would be required to comply with California Health and Safety Code Section 7050.5 regarding human remains. Therefore, with adherence to California Health and Safety Code Section 7050.5, potential impacts related to disturbance of human remains would be **less than significant.**

Impact CUL-4: Would the project result in 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?

See the impact analysis under Impact CUL-1, above. As previously discussed, the overall impact to cultural resources (including tribal cultural resources) would not significantly change under the Project. It is anticipated that ground disturbance would be minimal and the construction of agriculture-supportive uses facilitated by the Project would typically be located on previously disturbed land. Future individual projects facilitated by the Project would be required to avoid disturbance of cultural resources to the extent feasible in accordance with federal, state, and local guidelines, including County General Plan policies. Future discretionary projects (which are subject to CEQA review) would be required to notify and consult with California Native American tribes, per AB 52, with the intent of avoiding impacts to tribal cultural resources. Overall, the Project would not result in a substantial adverse change in the significance of tribal cultural resources and impacts would be **less than significant.**

3.5.6 Cumulative Impacts

Cumulative impacts are defined as the direct and indirect effects of a project which, when considered alone, would not be deemed a substantial impact, but when considered in addition to the impacts of related projects in the area, would be considered significant. “Related projects” refers to past, present, and reasonably foreseeable probable future projects, which would have similar impacts to the Project. CEQA deems a cumulative impact analysis to be adequate if a list of “related projects” is included in the EIR or the Project is consistent with an adopted general, specific, master, or comparable programmatic plan (Section 15130[b][1][B]). CEQA also states that no further cumulative impact analysis is necessary for impacts of a project consistent with an adopted general, specific, master, or comparable programmatic plan (Section 15130[d]).

Cumulative projects include the Santa Clara County Housing Element Update, Agricultural Employee Housing Zoning Ordinance Amendments, and Senate Bill 9 (refer to Section 3.0.2 of this PEIR, Cumulative Analysis, for detailed descriptions of these projects). Future development within the County may affect historical, archaeological, or tribal cultural resources, or human remains. Future projects associated with the increase of housing inventory along with the Project’s potential for new agriculture-supportive uses would require ground-disturbing activities, which may damage or disturb these resources. Cultural resources have been previously recorded throughout the County and archaeological deposits have been identified during new development. If ground-disturbing activities were to happen within or adjacent to previously identified resources, there would be a moderate to high potential of impacting cultural resources. As such, there is an existing significant cumulative impact.

The analysis of cumulative impacts in an EIR requires a determination of whether a project’s incremental contribution to the impact would be cumulatively considerable. As determined in the impact analyses above, the Project would have less-than-significant project-level impacts. The overall impact to cultural resources and tribal

cultural resources would not significantly change under the Project; it is anticipated that ground disturbance would be minimal, and the construction of agriculture-supportive uses would typically be located on previously disturbed land. Additionally, future development resulting from the Project would be required to comply with all applicable federal, state, and local regulations, such as California Health and Safety Code Section 7050.5 regarding human remains. With consideration of the above, it is not anticipated that the Project would cause substantial adverse changes to the significance of cultural resources, tribal cultural resources, or human remains. Therefore, the Project's impacts would be **less than cumulatively considerable.**

3.5.7 Mitigation Measures

No mitigation is required.

3.5.8 Level of Significance After Mitigation

No impacts related to cultural resources and tribal cultural resources have been identified.

3.5.9 References

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3.6 Energy

This section of the Program Environmental Impact Report (PEIR) evaluates potential impacts related to energy from implementation of the County of Santa Clara (County) Rural Zoning Amendments and Agricultural Impact Threshold (Project). This section includes a discussion of the existing energy conditions to present the environmental baseline for the Project and an analysis of potentially wasteful, inefficient, or unnecessary consumption of energy resources during construction and operation and compliance with state or local plans for renewable energy or energy efficiency.

3.6.1 Environmental Setting

3.6.1.1 Electricity

The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into electrical energy. The delivery of electricity involves a number of system components, including power generation facilities, transmission and distribution lines, substations and transformers that lower transmission line power (voltage) to a level appropriate for on-site distribution and use. The electricity generated is distributed through a network of transmission and distribution lines commonly called a power grid. Production of electricity and its conveyance through the power grid occur in response to market demand.

Energy capacity, or electrical power, is generally measured in watts while energy use is measured in watt-hours (Wh). For example, if a light bulb has a capacity rating of 100 watts, the energy required to keep the bulb on for 1 hour would be 100 Wh. If 10 100-watt 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, which is 1 million watts, while energy usage is measured in megawatt-hours (1 million watt-hours) or gigawatt-hours (1 billion watt-hours).

Residences and businesses within the County, including the Project, receive electricity from the Pacific Gas and Electric Company (PG&E) and/or Silicon Valley Clean Energy (SVCE), a Community Choice Aggregation, which residents can opt into to ensure that electricity usage would come from renewable resources (e.g., water, wind, and solar) and carbon-free sources (e.g., hydroelectric and geothermal). PG&E provides electric services to 5.5 million customers via 106,681 circuit miles of electric distribution lines and 18,466 circuit miles of interconnected transmission lines over a 70,000-square-mile service area that includes Northern California and Central California (PG&E 2024). According to PG&E, its customers consumed 77,887 million kWh of electricity in 2022 (Table 3.6-1) (CEC 2023a).

Table 3.6-1. Pacific Gas and Electric Company 2022 Electricity Consumption

Sector	Total Electricity (in Millions of kWh)
Agricultural and Water Pump	7,506
Commercial Buildings	26,928
Commercial Other	4,056
Industry	10,092
Mining and Construction	1,814
Residential	27,210

Table 3.6-1. Pacific Gas and Electric Company 2022 Electricity Consumption

Sector	Total Electricity (in Millions of kWh)
Streetlight	281
Total Consumption	**77,887**

Source: CEC 2023a.
Notes: kWh = kilowatt-hour.
Total may not sum precisely due to rounding.

PG&E receives electric power from a variety of sources. According to PG&E's 2022 Power Content Label, 38.3% of PG&E's power came from eligible renewable energy sources in 2019, including biomass/waste, geothermal, small hydroelectric, solar, and wind sources (PG&E 2023). In 2022 a total of 17,102 million kWh of electricity was consumed in Santa Clara County, with 12,852 million kWh being used by non-residential customers and 4,250 million kWh being used by residential customers (CEC 2023b).

SVCE is a load–serving entity supporting a 717-megawatt (MW) and 173 MW of energy storage. SVCE provides electricity service and innovative programs to more than 270,000 residential and business customer accounts in 13 communities across Santa Clara County (SVCE 2022a). Customers have two electricity options to choose from, GreenStart which is 50% renewable energy, GreenPrime which is 100% renewable energy (SVCE 2022b).

Based on recent energy supply and demand projections in California, statewide annual peak electricity demand is projected to grow an average of 1,087 megawatts per year for the next decade, or 1.5% annually, and consumption per capita is expected to remain relatively constant at 7.6 to 8.0 megawatt-hours per person (CEC 2018).

According to the U.S. Energy Information Administration, California used approximately 251,869 gigawatt hours of electricity in 2022 (EIA 2023a). Electricity usage in California for different land uses varies substantially by the types of uses in a building, type of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building. Due to the state's energy efficiency building standards and efficiency and conservation programs, California's electricity use per capita in the residential sector is lower than any other state except Hawaii (EIA 2023b).

3.6.1.2 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, mainly located outside the State, and delivered through high-pressure transmission pipelines. The natural gas transportation system is a nationwide network, and therefore, resource availability is typically not an issue. Natural gas provides almost one-third of the state's total energy requirements and is used in electricity generation, space heating, cooking, water heating, industrial processes, and as a transportation fuel. Natural gas is measured in terms of cubic feet.

The California Public Utilities Commission (CPUC) regulates natural gas utility service for approximately 10.8 million customers who receive natural gas from PG&E, Southern California Gas, San Diego Gas and Electric Company, Southwest Gas, and several smaller natural gas utilities. PG&E provides natural gas service to most of Northern California, including Santa Clara County. As provided in Table 3.6-2, PG&E customers consumed approximately 4,422 million therms of natural gas in 2022 (CEC 2023c).

Table 3.6-2. Pacific Gas and Electric Company 2022Natural Gas Consumption

Sector	Total Natural Gas (in Millions of Therms)
Agricultural and Water Pump	47
Commercial Buildings	871
Commercial Other	49
Industry	1,371
Mining and Construction	227
Residential	1,856
Total Consumption	**4,422**

Source: CEC 2023c.
Note: Total may not sum precisely due to rounding.

In 2020, PG&E delivered 424 million therms of natural gas to Santa Clara County, with 234 million therms going to residential uses and 190 million therms going to non-residential uses (CEC 2023d).

According to the U.S. Energy Information Administration, California used approximately 2,056,267 million cubic feet of natural gas in 2022 (EIA 2024). The majority of California's natural gas customers are residential and small commercial customers (core customers). These customers account for approximately 35% of the natural gas delivered by California utilities (CPUC 2022). Large consumers, such as electric generators and industrial customers (noncore customers), account for approximately 65% of the natural gas delivered by California utilities (CPUC 2022). CPUC regulates California natural gas rates and natural gas services, including in-state transportation over transmission and distribution pipeline systems, storage, procurement, metering, and billing. Most of the natural gas used in California comes from out-of-state natural gas basins. California gas utilities may soon also begin receiving biogas into their pipeline systems (CPUC 2022).

3.6.1.3 Petroleum

There are more than 36 million registered vehicles in California, and those vehicles consume an estimated 16 billion gallons of fuel each year (CEC 2020; DMV 2021). Petroleum currently accounts for approximately 92% of California's transportation energy consumption (CEC 2020). However, technological advances, market trends, consumer behavior, and government policies could result in significant changes in fuel consumption by type and in total. At the federal and state levels, various policies, rules, and regulations have been enacted to improve vehicle fuel efficiency, promote the development and use of alternative fuels, reduce transportation-source air pollutants and greenhouse gas (GHG) emissions, and reduce vehicle miles traveled (VMT). Section 3.6.2, Relevant Plans, Policies, and Ordinances, discusses in more detail both federal and state regulations that would help increase fuel efficiency of motor vehicles and reduce GHG emissions. Market forces have driven the price of petroleum products steadily upward over time, and technological advances have made use of other energy resources or alternative transportation modes increasingly feasible.

Largely as a result of and in response to these multiple factors, gasoline consumption within the state has declined in recent years, and availability of other alternative fuels/energy sources has increased. The quantity, availability, and reliability of transportation energy resources have increased in recent years, and this trend will likely continue and accelerate. Increasingly available and diversified transportation energy resources act to promote continuing reliable and affordable means to support vehicular transportation within the state. According to the California Air Resources Board's (CARB's) Emission Factor (EMFAC) Web Database, Santa Clara County on-road transportation

sources were projected to consume 35.8 million gallons of gasoline and 5.2 million gallons of diesel fuel in 2024 (CARB 2021c).

3.6.2 Relevant Plans, Policies, and Ordinances

3.6.2.1 Federal

Federal Energy Policy and Conservation Act and CAFE Standards

In 1975, Congress enacted the Federal Energy Policy and Conservation Act, which established the first fuel economy standards, known as the Corporate Average Fuel Economy standards, for on-road motor vehicles in the United States. Pursuant to the act, the National Highway Traffic Safety Administration (NHTSA) is responsible for establishing additional vehicle standards. In 2012, new Corporate Average Fuel Economy (CAFE) standards for passenger cars and light trucks were approved for model years 2017 through 2021 (77 FR 62624–63200). In 2020, NHTSA and the EPA finalized amendments to the CAFE standards for model years 2021 through 2026 under the Safer Affordable Fuel-Efficient Vehicles Rule. Those amendments reduced the requirement for annual increases in efficiency from approximately 5% (as established in 2012) to approximately 1.5%. The Safer Affordable Fuel-Efficient Vehicles Rule also revoked California's authority to set its own GHG emissions standards and set zero-emission vehicle mandates for the state. However, in December 2021, NHTSA and EPA again revised the CAFE standards and GHG emissions standards for passenger cars and light trucks for model years 2023–2026, and reinstated California's authority to set its own standards. The final standards will achieve significant reductions in energy consumption and GHG emissions within the transportation sector (NHTSA 2021).

Energy Policy Act of 1992 and 2005

The Energy Policy Act of 1992 was passed to reduce the country's dependence on foreign petroleum and improve air quality. The act includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. The act requires certain federal, state, and local government and private fleets to purchase a percentage of light-duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are also included in the Act. Federal tax deductions are allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by the Act to consider a variety of incentive programs to help promote AFVs. The Energy Policy Act of 2005 provides 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.

Energy Independence and Security Act of 2007

On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA) was signed into law. In addition to setting increased Corporate Average Fuel Economy standards for motor vehicles, the EISA facilitates the reduction of national GHG emissions by requiring the following:

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) that requires fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for

consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

- Requiring approximately 25% greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200% greater efficiency for light bulbs, or similar energy savings, by 2020.
- While superseded by the U.S. Environmental Protection Agency (EPA) and NHTSA actions described previously, establishing miles per gallon targets for cars and light trucks and directing the NHTSA to establish a fuel economy program for medium-and heavy-duty trucks and create a separate fuel economy standard for trucks.

This federal legislation requires ever-increasing levels of renewable fuels (the RFS) to replace petroleum (EPA 2017). The EPA is responsible for developing and implementing regulations to ensure that transportation fuel sold in the United States contains at least a minimum volume of renewable fuel. The RFS program regulations were developed in collaboration with refiners, renewable fuel producers, and many other stakeholders.

The RFS program was created under the Energy Policy Act of 2005 and established the first renewable fuel volume mandate in the U.S. As required under the act, the original RFS program required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the EISA, the RFS program was expanded in several ways that lay the foundation for achieving significant reductions in GHG emissions from the use of renewable fuels, reducing imported petroleum, and encouraging the development and expansion of the renewable fuels sector in the United States. The updated program is referred to as "RFS2" and includes the following:

- EISA expanded the RFS program to include diesel, in addition to gasoline.
- EISA increased the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022.
- EISA established new categories of renewable fuel and set separate volume requirements for each one.
- EISA required the EPA to apply lifecycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces.

Additional provisions of the EISA address energy savings in government and public institutions, research for alternative energy, additional research in carbon capture, international energy programs, and the creation of "green" jobs.

Intermodal Surface Transportation Efficiency Act of 1991

The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 promoted the development of intermodal transportation systems to maximize mobility and address national and local interests in air quality and energy. ISTEA contained factors for metropolitan planning organizations to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, metropolitan planning organizations adopted policies defining the social, economic, energy, and environmental values guiding transportation decisions.

Transportation Equity Act for the 21st Century

The Transportation Equity Act for the 21st Century was signed into law in 1998 and builds on the initiatives established in the ISTEA legislation (previously discussed). The act authorizes highway, highway safety, transit, and other efficient surface transportation programs. The act continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of transportation decisions. The act also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of intelligent transportation systems to help improve operations and management of transportation systems and vehicle safety.

The Inflation Reduction Act of 2022

The Inflation Reduction Act was signed into law by President Biden in August 2022. The bill includes specific investment in energy and climate reform and is projected to reduce GHG emissions within the U.S. by 40% as compared to 2005 levels by 2030. The bill allocates funds to boost renewable energy infrastructure (e.g., solar panels and wind turbines), includes tax credits for the purchase of electric vehicles, and includes measures that will make homes more energy efficient.

3.6.2.2 State

Warren-Alquist Act

The California legislature passed the Warren-Alquist Act in 1974. The Warren-Alquist Act created the California Energy Commission (CEC). The legislation also incorporated the following three key provisions designed to address the demand side of the energy equation:

- It directed the CEC to formulate and adopt the nation's first energy conservation standards for buildings constructed and appliances sold in California.
- It removed the responsibility of electricity demand forecasting from the utilities, which had a financial interest in high-demand projections, and transferred it to a more impartial CEC.
- The CEC was directed to embark on an ambitious research and development program, with a particular focus on fostering what were characterized as non-conventional energy sources.

State of California Energy Action Plan

The CEC and the CPUC approved the first State of California Energy Action Plan in 2003. The plan established shared goals and specific actions to ensure that adequate, reliable, and reasonably priced electrical power and natural gas supplies are provided, and identified policies, strategies, and actions that are cost-effective and environmentally sound for California's consumers and taxpayers. In 2005, a second Energy Action Plan was adopted by the CEC and CPUC to reflect various policy changes and actions of the prior 2 years.

At the beginning of 2008, the CEC and CPUC determined that it was not necessary or productive to prepare a new energy action plan. This determination was based, in part, on a finding that the state's energy policies have been significantly influenced by the passage of Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006 (discussed below). Rather than produce a new energy action plan, the CEC and CPUC prepared an update that examines the state's ongoing actions in the context of global climate change.

Senate Bills 1078, 107, X1-2, 350, 100, and 1020

Senate Bill (SB) 1078 (2002) established the California Renewables Portfolio Standard (RPS) Program and required that a retail seller of electricity purchase a specified minimum percentage of electricity generated by eligible renewable energy resources as defined in any given year, culminating in a 20% standard by December 31, 2017. These retail sellers include electrical corporations, community choice aggregators, and electric service providers. The bill relatedly required the CEC to certify eligible renewable energy resources, design and implement an accounting system to verify compliance with the RPS by retail sellers, and allocate and award supplemental energy payments to cover above-market costs of renewable energy.

SB 107 (2006) accelerated the RPS established by SB 1078 by requiring that 20% of electricity retail sales be served by renewable energy resources by 2010 (not 2017). Additionally, SB X1-2 (2011) required all California utilities to generate 33% of their electricity from eligible renewable energy resources by 2020. Specifically, SB X1-2 set a three-stage compliance period: by December 31, 2013, 20% of electricity had to come from renewables; by December 31, 2016, 25% of electricity had to come from renewables; and by December 31, 2020, 33% was required to come from renewables.

SB 350 (2015) expanded the RPS by requiring retail seller and publicly owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030, with interim goals of 40% by 2024 and 45% by 2027.

SB 100 (2018) accelerated and expanded the standards set forth in SB 350 by establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024; 52% by December 31, 2027; and 60% by December 31, 2030, be secured from qualifying renewable energy sources. SB 100 also states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California. This bill requires that the achievement of 100% zero-carbon electricity does not increase carbon emissions elsewhere in the western grid. Additionally, 100% zero-carbon electricity cannot be achieved through resource shuffling.

SB 1020 (2022) revises the standards from SB 100, requiring the following percentage of retail sales of electricity to California end-use customers come from eligible renewable energy resources and zero-carbon resources: 90% by December 31, 2035, 95% by December 31, 2040, and 100% by December 31, 2045.

Consequently, utility energy generation from non-renewable resources is expected to be reduced based on implementation of the RPS requirements described above.

Assembly Bill 1007

AB 1007 (2005) required the CEC to prepare a statewide plan to increase the use of alternative fuels in California (State Alternative Fuels Plan). The CEC prepared the plan in partnership with the California Air Resources Board (CARB) and in consultation with other state agencies, plus federal and local agencies. The State Alternative Fuels Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Assembly Bill 32 and Senate Bill 32

In 2006, the state legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020. In 2016, the legislature enacted SB 32, which extended the horizon year of the state's codified GHG reduction planning targets from 2020 to 2030, requiring California to reduce its GHG emissions to 40% below 1990 levels by 2030. In accordance with AB 32 and SB 32, CARB prepares scoping plans to guide the development of statewide policies and regulations for the reduction of GHG emissions. Many of the policy and regulatory concepts identified in the scoping plans focused on increasing energy efficiencies, using renewable resources, and reducing the consumption of petroleum-based fuels (such as gasoline and diesel). As such, the state's GHG emissions reduction planning framework creates co-benefits for energy-related resources. Additional information on AB 32 and SB 32 is provided in Section 3.8 Greenhouse Gas, of this PEIR.

California Building Standards

The California Building Standards Code was established in 1978 and serves to enhance and regulate California's building standards (California Code of Regulations, Title 24). Part 6 establishes energy efficiency standards for residential and non-residential buildings constructed in California to reduce energy demand and consumption. Part 6 is updated periodically (every 3 years) to incorporate and consider new energy efficiency technologies and methodologies.

The 2019 Title 24 standards were approved and adopted by the California Building Standards Commission in December 2018. The 2019 standards became effective January 1, 2020. The standards require that all low-rise residential buildings have a photovoltaic system meeting the minimum qualification requirements such that annual electrical output equal to or greater than the dwelling's annual electrical usage. Notably, net energy metering rules limit residential rooftop solar generation to produce no more electricity than the home is expected to consume on an annual basis. Single-family homes built with the 2019 standards will use approximately 7% less energy due to energy efficiency measures versus those built under the 2016 standards, while new non-residential buildings will use approximately 30% less energy.

Beyond the 2019 standards, the most important energy characteristic for a building will be that it produces and consumes energy at times that are appropriate and responds to the needs of the grid, which reduces the building's emissions.

In furtherance of that characteristic, the 2019 standards require that new single-family homes include solar photovoltaic to meet the home's expected annual electric needs and also encourage demand responsive technologies, including battery storage, heat pump water heaters, and improving the building's thermal envelope through high performance attics, walls, and windows. These smarter homes perform better and affect the grid less, which reduces the building's GHG emissions.

The 2022 standards improve upon the 2019 standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The CEC adopted the 2022 Title 24 Energy Code in August 2021 and the California Building Standards Commission approved incorporating the updated code into the California Building

Standards Code (CALGreen) in December 2021. The 2022 Energy Code went into effect on January 1, 2023. The 2022 Energy Code focuses on four key areas in newly constructed homes and businesses:

- Encouraging electric heat pump technology for space and water heating, which consumes less energy and produces fewer emissions than gas-powered units.
- Establishing electric-ready requirements for single-family homes to position owners to use cleaner electric heating, cooking, and electric vehicle (EV) charging options whenever they choose to adopt those technologies.
- Expanding solar photovoltaic (PV) system and battery storage standards to make clean energy available on site and complement the state's progress toward a 100% clean electricity grid.
- Strengthening ventilation standards to improve indoor air quality.

CALGreen instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential, and state-owned buildings, as well as schools and hospitals. The current code is the 2019 California Building Code. The mandatory standards require the following:

- In new projects or additions to alterations that add 10 or more vehicular parking spaces, provide designated parking for low-emitting, fuel-efficient and carpool/van pool vehicles.
- Construction shall facilitate future installation of EV supply equipment.
- Shade trees shall be planted to comply with specifications for surface parking areas, landscape areas, and hardscape areas.
- Water conserving plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with efficiency standards.
- Outdoor potable water use in landscaped areas shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources Model Water Efficient Landscape Ordinance, whichever is more stringent.
- Outdoor recycled water supply systems shall be installed in accordance with applicable state codes.
- Installations of heating, ventilation, and air conditioning (HVAC); refrigeration; and fire suppression equipment shall comply with specified standards.

The CALGreen standards also include voluntary efficiency measures that are implemented at the discretion of agencies and applicants.

Integrated Energy Policy Report

The CEC is responsible for preparing integrated energy policy reports, which identify emerging trends related to energy supply, demand, conservation, public health and safety, and maintenance of a healthy economy. The latest Integrated Energy Policy Report was released in February 2022 and addressed a variety of issues, including, but not limited to, implementation of SB 350, electricity resource/supply plans, electricity and natural gas demand forecast, natural gas outlook, transportation energy demand forecasts, doubling energy efficiency savings, integrated resource planning, climate adaptation and resiliency, renewable gas, distributed energy resources, strategic transmission investment plan, and existing power plant reliability issues (CEC 2021).

State Vehicle Standards

In response to the transportation sector accounting for more than half of California's carbon dioxide (CO_2) emissions, AB 1493 was enacted in 2002. AB 1493 required CARB to set GHG emissions standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be vehicles whose primary use is noncommercial personal transportation in the state. The bill required that CARB set GHG emissions standards for motor vehicles manufactured in 2009 and all subsequent model years. The 2009–2012 standards resulted in a reduction in approximately 22% of GHG emissions compared to emissions from the 2002 fleet, and the 2013–2016 standards resulted in a reduction of approximately 30% compared to the 2002 fleet.

In 2012, CARB approved a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot, and global-warming gases with requirements for greater numbers of zero-emissions vehicles into a single package of standards called Advanced Clean Cars (ACC). By 2025, when the rules would be fully implemented, new automobiles would emit 34% fewer global-warming gases and 75% fewer smog-forming emissions (CARB 2020).

In 2019, the EPA and NHTSA published the Safer Affordable Fuel-Efficient Vehicles Rule Part One: One National Program (SAFE-1) (84 Fed. Reg. 51310), which revoked California's authority to set its own GHG emissions standards and set zero-emission vehicle (ZEV) mandates in California. In March 2020, Part Two was issued which set CO_2 emissions standards and corporate average fuel economy standards for passenger vehicles and light-duty trucks for model years 2021 through 2026. In March 2022, EPA reinstated California's authority under the Clean Air Act to implement its own GHG emission standards and ZEV sales mandate. EPA's action concludes its reconsideration of the 2019 SAFE-1 rule by finding that the actions taken under the previous administration as a part of SAFE-1 were decided in error and are now entirely rescinded.

Advanced Clean Cars Program

The ACC I program (January 2012) is an emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package of regulations: the Low-Emission Vehicle (LEV) regulation for criteria air pollutant and GHG emissions and a technology forcing regulation for zero-emission vehicles (ZEV) that contributes to both types of emission reductions (CARB 2021a). The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025 cars will emit 75% less smog-forming pollution than the average new car sold in 2015. The ZEV program will act as the focused technology of the ACC I program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid EVs in the 2018 to 2025 model years.

The ACC II program is currently in development to establish the next set of LEV and ZEV requirements for model years after 2025 to contribute to meeting federal ambient air quality ozone standards and California's carbon neutrality standards (CARB 2021a). The main objectives of ACC II are:

1. Maximize criteria and GHG emission reductions through increased stringency and real-world reductions.
2. Accelerate the transition to ZEVs through both increased stringency of requirements and associated actions to support wide-scale adoption and use.

The ACC II rulemaking package considered technological feasibility, environmental impacts, equity, economic impacts, and consumer impacts. In August 2022, CARB approved the ACC II regulations.

Advanced Clean Trucks Program

The purpose of the ACT Regulation (June 2020) is to accelerate the market for zero-emission vehicles in the medium- and heavy-duty truck sector and to reduce emissions NO_x, fine particulate matter, TACs, GHGs, and other criteria pollutants generated from on-road mobile sources (CARB 2021b). Requiring medium- and heavy-duty vehicles to transition to zero-emissions technology will reduce health risks to people living in and visiting California and is needed to help California meet established near- and long-term air quality and climate mitigation targets. The regulation has two components including (1) a manufacturer sales requirement and (2) a reporting requirement:

1. Zero-emission truck sales: Manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines will be required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 straight truck sales, and 40% of truck tractor sales.
2. Company and fleet reporting: Large employers including retailers, manufacturers, brokers and others will be required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, will be required to report about their existing fleet operations. This information will help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

Senate Bill 375

The Sustainable Communities and Climate Protection Act of 2008, or SB 375, coordinates land use planning, regional transportation plans, and funding priorities to help California meet its GHG emissions reduction mandates established in AB 32. As codified in California Government Code Section 65080, SB 375 requires metropolitan planning organizations to include a sustainable communities strategy in their regional transportation plan. The main focus of the sustainable communities strategy is to plan for growth in a fashion that will ultimately reduce GHG emissions, but the strategy is also part of a bigger effort to address other development issues, including transit and VMT, which influence the consumption of petroleum-based fuels. Plan Bay Area 2050 is the Sustainable Communities Strategy (SCS) for the region. As required by SB 375, Plan Bay Area 2050 defines a transportation and land use/housing strategy for the Bay Area to address transportation mobility and accessibility needs, land development, and GHG emissions reduction requirements through 2050 (MTC and ABAG 2021).

Executive Order B-16-12

Governor Brown issued EO S-16-12 on March 23, 2012. The EO requires that state entities under the governor's direction and control support and facilitate the rapid commercialization of ZEVs. It orders CARB, the CEC, CPUC, and other relevant agencies work with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve the following by 2015:

- The state's major metropolitan areas will be able to accommodate ZEVs, each with infrastructure plans and streamlined permitting.
- The state's manufacturing sector will be expanding ZEV and component manufacturing.

- The private sector's investment in ZEV infrastructure will be growing.
- The state's academic and research institutions will be contributing to ZEV research, innovation and education.

CARB, the CEC, and CPUC, are also directed to establish benchmarks to help achieve the following goals by 2020:

- The state's ZEV infrastructure will be able to support up to one million vehicles.
- The costs of ZEV will be competitive with conventional combustion vehicles.
- ZEVs will be accessible to mainstream consumers.
- There will be widespread use of ZEVs for public transportation and freight transport.
- Transportation sector GHG emissions will be falling as a result of the switch to ZEVs.
- EV charging will be integrated into the electricity grid.
- The private sector's role in the supply chain for ZEV component development and manufacturing will be expanding.

Benchmarks are also to be established to help achieve the following goals by 2025:

- Over 1.5 million ZEVs will be on California roads and their market share will be expanding.
- Californians will have easy access to ZEV infrastructure.
- The ZEV industry will be a strong and sustainable part of California's economy.
- California's clean, efficient vehicles will annually displace at least 1.5 billion gallons of petroleum fuels.

On a statewide basis, the EO establishes a target reduction of GHG emissions from the transportation sector equaling 80% less than 1990 levels by 2050.

Assembly Bill 1007

AB 1007 (2005) required the CEC to prepare a statewide plan to increase the use of alternative fuels in California (State Alternative Fuels Plan). The CEC prepared the plan in partnership with the CARB and in consultation with other state agencies, plus federal and local agencies. The State Alternative Fuels Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Senate Bill 1383

SB 1383 (Chapter 395, Statutes of 2016). establishes targets to achieve a 50% reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75% reduction by 2025. Law grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20% of currently disposed of edible food is recovered for human consumption by 2025 (CalRecycle 2019).

3.6.2.3 Local

County of Santa Clara General Plan

The Resource Conservation Element of the General Plan provides the following goals and policies potentially relevant to the Project (County of Santa Clara. 1994-2010 *Santa Clara County General Plan*. *Book A, 1994)*:

C-RC 77. Energy efficiency and conservation efforts in the transportation, industrial, commercial, residential, agricultural and public sectors shall be encouraged at the local, county (sub-regional), and regional level.

C-RC 79. Energy use and fossil fuel dependency in the transportation sector should be reduced by the following general means: a. growth management policies and implementation to minimize increases in the extent of the urbanized area and to promote balanced, compact urban development; b. land use and development standards which support alternative transportation modes; c. travel demand management, TDM, and transportation system operational efficiency; d. expanded transit service; and e. increased availability and use of alternative fuels.

C-RC 80. Sub-regional/countywide planning for Santa Clara County should place major emphasis on the inter-related goals, strategies and policies for improving energy efficiency in transportation, air quality, and reducing traffic congestion.

C-RC 81. Energy conservation in existing buildings and homes, particularly those pre-dating adoption of energy-efficiency building code standards, should be improved and encouraged.

C-RC 82. Alternatives to non-renewable energy sources should be encouraged and implemented in the design of new buildings and incorporated in the redesign and reconstruction of older buildings.

C-RC 83. Industrial and agricultural processes should be modified wherever feasible to take advantage of energy savings, to reduce operational costs, and to enhance competitiveness.

County of Santa Clara Municipal Code

On December 14, 2021, the Santa Clara Board of Supervisors approved a reach code ordinance, which amended Section C3 of the County's Municipal Code. The reach code ordinance became in effect on September 1, 2022. The reach code requires all new construction in unincorporated County areas to use electricity (not natural gas) for water heating, space heating, cooking, clothes drying, indoor and outdoor fireplaces, and decorative appliances. This ordinance would apply to new construction projects. Furthermore, all newly constructed buildings would require installation of a photovoltaic system equivalent in size to 15% of the roof area (County of Santa Clara 2021).

3.6.3 Thresholds of Significance

According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, a project would normally have a significant effect on the environment with respect to energy if the project would:

E-1: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation.

E-2: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

3.6.4 Methodology

As described in Chapter 2, Project Description, the Project consists of amendments to the County's Zoning Ordinance. The Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. Although the Project would not directly construct new development, it would allow and facilitate new agriculture-supportive uses that could directly result in construction or operational impacts to the environment. Therefore, this PEIR does not assess the site-specific construction and operational details of each future development within the project area. Rather, it assesses the impacts associated with proposed land use changes and programs, where reasonably foreseeable physical changes to the environment could occur. Analysis at a parcel or site-specific level was not conducted because, unless otherwise noted within this assessment, the actual locations of project development (and its chronologic sequence or concurrence) that may be implemented in the future are speculative.

Although specifics for construction and operation of future development under the Project are not known, the California Emissions Estimator Model (CalEEMod) default values were assumed based on development land use type and size for a representative project, as described in Section 3.3.5, Methodology of Section 3.3, Air Quality of this PEIR, in order to provide a gauge of energy intensity associated with development allowed under the Project. A brief overview of the methodology applied to assess the representative development's potential energy-related impacts is provided below.

3.6.4.1 Construction

Construction of a representative development allowed under the Project would primarily consume energy in the form of petroleum-based fuels associated with the use of off-road construction equipment and construction worker, delivery trucks, and haul trucks traveling to and from the site. A representative development allowed under the Project, which included 2,500 square feet of agriculture-supportive uses including storage and processing and 2,500 square feet of retail or other gathering space, was modeled. The development scenario was modeled using CalEEMod Version 2020.4.0. Not all future development would require all of the construction phases assumed; however, the following six default CalEEMod construction phases were included to present the potential range of emissions and capture a potential maximum daily and annual scenario: demolition, site preparation, grading, building construction, paving, and architectural coating. During construction, electricity use is anticipated to be minimal and the construction of new buildings typically do not involve the consumption of natural gas. Each energy source is discussed further below.

Electricity

Electricity used on a limited basis to power lighting, electronic equipment, and other construction activities necessitating electrical power, as well as electricity usage associated with the supply and conveyance of water used for dust control during construction, was assumed to be minimal and not estimated herein.

Natural Gas

Natural gas is not anticipated to be required during Project construction because construction of new buildings and facilities typically do not consume natural gas. Peak energy demand specifically applies to electricity; because natural gas (and petroleum) are liquid, these energy resources do not have the same constraints as electricity supply. Nonetheless, any use of natural gas is anticipated to be sufficiently served by existing supply from PG&E and would not require additional local or regional capacity. Any minor amounts of natural gas that may be consumed because of construction would be temporary and negligible and would not have an adverse effect.

Petroleum

Construction of a representative development allowed under the Project would consume energy resources as a result of the use of heavy-duty construction equipment, on-road delivery and haul trucks, and workers commuting to and from a site. Petroleum emissions associated with the use of construction equipment and vehicles, which were used to calculate gallons of petroleum consumed, were calculated using the CalEEMod Version 2020.4.0 and are provided in Appendix B. Fuel consumption from construction equipment was estimated by converting the total CO_2 emissions from each construction phase to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. The conversion factor for gasoline is 8.78 kilograms per metric ton CO_2 per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton CO_2 per gallon (The Climate Registry 2021).

3.6.4.2 Operation

Development allowed under the Project would consume energy resources for building heating, ventilation, and air conditioning (HVAC) system, water demand, wastewater treatment, and vehicle travel. The first full year for buildout of a representative development allowed under the Project was assumed to be 2024. Each energy source is discussed further below.

Electricity

Electricity usage (including electricity usage for water) is based on the estimated total annual building load summaries from CalEEMod. Of importance, it was assumed that the representative development allowed under the Project would be 100% electric and natural gas would be prohibited per the County's Municipal Code.

To estimate energy use associated with the representative development, default CalEEMod values for natural gas demand were converted to electricity demand. In other words, electricity demand was increased to accommodate the removal of natural gas to ensure the energy demand that was assumed to be natural gas for space heating, water heating, and cooking in CalEEMod is adequately covered in the energy consumption estimates. For the proposed newly built buildings allowed under the Project, default CalEEMod values, which assume compliance with the 2019 Title 24 standards were applied.

Natural Gas

Natural gas is prohibited consistent with the County's Municipal Code. Default natural gas usage rates in CalEEMod were converted to electricity consumption as described previously.

Petroleum

Petroleum would be consumed by vehicles accessing the development allowed under the Project, which is a function of total VMT and estimated vehicle fuel economies for the vehicles. Similar to construction worker and vendor trips, fuel consumption was estimated by converting the total CO_2 emissions from mobile sources to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. Based on the annual fleet mix provided in EMFAC2021, approximately 96% of the fleet mix using fossil fuels (with the exception of natural gas) were assumed to run on gasoline and approximately 4% of the fleet mix was assumed to use diesel.[1]

3.6.5 Environmental Impacts

Impact E-1 Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

The Project is not proposing any physical development; however, as previously discussed in Section 3.6.4, a representative development allowed under the Project was assumed in order to assess the impacts in regard to energy consumption.

Construction

Electricity

The electricity demand at any given time would vary throughout the construction period based on the construction activities being performed and would cease upon completion of construction. When not in use, electric equipment would be powered off to avoid unnecessary energy consumption. The electricity used for construction activities would be temporary and minimal; it would be within the supply and infrastructure service capabilities of PG&E and SVCE and it would not require additional local or regional capacity. As the electricity used for construction activities would be temporary and minimal, impacts related to electricity consumption during construction of development allowed under the Project are determined to be less than significant.

Natural Gas

Natural gas is not anticipated to be required during construction because construction of new buildings and facilities typically do not consume natural gas. Any minor amounts of natural gas that may be consumed as a result of construction would be temporary and negligible and would not have an adverse effect on the environment; therefore, impacts are determined to be less than significant.

Petroleum

Offroad equipment used during construction of development allowed under the Project would primarily rely on diesel fuel, as would vendor trucks involved in delivery of materials to the individual parcels, haul trucks exporting demolition material, and haul trucks importing or exporting soil, tree debris, and other materials to and from the site. In addition, construction workers would travel to and from the site throughout the

[1] Vehicles using natural gas are anticipated to be minimal and associated emissions was assumed to be fossil fuel. Electric vehicles were excluded for this calculation as CalEEMod2020.4.0 assumes electric vehicles generate zero GHG emissions and the energy calculated is based on the CalEEMod CO_2 estimates for mobile sources.

duration of construction. It is assumed in this analysis that construction workers would travel in gasoline-powered light-duty vehicles.

For a representative development allowed under the Project, the estimated diesel fuel usage from construction equipment, haul trucks, and vendor trucks, as well as estimated gasoline fuel usage from worker vehicles, is shown in Table 3.6-3. Appendix B lists the assumed equipment usage and vehicle trips.

Table 3.6-3. Total Project Construction Petroleum Demand

Representative Development	Off-Road Equipment (diesel)	Haul Trucks (diesel)	Vendor Trucks (diesel)	Worker Vehicles (gasoline)
	Gallons			
One 5,000 square foot project	5,875	0	247	767

Source: Appendix B.

In summary, construction associated with a representative development allowed under the Project is estimated to consume a total of approximately 767 gallons of gasoline and 6,122 gallons of diesel.[2]

Notably, any future development allowed under the Project would be subject to CARB's In-Use Off-Road Diesel Vehicle Regulation that applies to certain off-road diesel engines, vehicles, or equipment greater than 25 horsepower. The regulation (1) imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles; (2) requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System) and labeled; (3) restricts the adding of older vehicles into fleets starting on January 1, 2014; and (4) requires fleets to reduce their emissions by retiring, replacing, or repowering older engines or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). The fleet must either show that its fleet average index was less than or equal to the calculated fleet average target rate, or that the fleet has met the Best Achievable Control Technology (BACT) requirements. Overall, while construction activities for development allowed under the Project would consume petroleum-based fuels, consumption of such resources would be temporary and would cease upon the completion of construction. Further, the petroleum consumed related to construction would be typical of construction projects of similar types and sizes and would not necessitate new petroleum resources beyond what are typically consumed in California. Therefore, because petroleum use during construction would be temporary and minimal and would not be wasteful or inefficient, impacts are determined to be **less than significant**.

Operation

Electricity

Operation of development allowed under the Project would require electricity for multiple purposes including, but not limited to, building heating and cooling, lighting, appliances, and electronics. Additionally, the supply, conveyance, treatment, and distribution of water would indirectly result in electricity usage. CalEEMod was used to estimate the electricity consumption associated with a representative development allowed under the Project (see Appendix B for calculations). Notably, all development allowed under the

[2] For disclosure only, by comparison, California as a whole consumes approximately 16 billion gallons of petroleum per year. Countywide total petroleum use by on-road vehicles only (i.e., not including construction off-road equipment) is expected to be 41 million gallons per year in 2024 (CARB 2021c).

Project would be 100% electric to support the County's goals and natural gas would be prohibited for all new construction.

Title 24 of the California Code of Regulations serves to enhance and regulate California's building standards. Notably, modeling associated with the representative development allowed under Project operational energy emissions were assumed to meet the 2019 Title 24 Standards, the default assumptions in CalEEMod version 2020.4.0. Of note, application of the 2019 Title 24 standards to the potential land uses would be conservative since future land uses would be required to comply with the then-current (i.e., higher efficiency) standards. According to these estimations, a representative development allowed under the Project would consume approximately 407,128 kWh per year during operation. The energy demand calculations do not take into account that all newly constructed buildings would also require installation of a photovoltaic system equivalent in size to 15% of the roof area which is also required in the County's reach code. As such, the electricity use of any development allowed under the Project would likely be more efficient compared with the existing uses. In addition, more stringent regulations would potentially lower than the calculations presented above.

In summary, although electricity consumption would increase for development allowed under the Project, the Project would support the County's goals with implementing new development that would be 100% electric. For these reasons, electricity consumption of any development allowed under the Project would not be considered inefficient, wasteful, or unnecessary, and impacts would be less than significant.

Natural Gas

As previously discussed under Section 3.6.4.2, Methodology (Operation), installation of natural gas infrastructure is prohibited in accordance with the County's Municipal Code. Accordingly, any development allowed under the Project would be built "all electric" and would not result in natural gas consumption. For these reasons, the natural gas consumption of any development allowed under the Project would not be considered inefficient or wasteful, and impacts would be less than significant.

Petroleum

During operations, the majority of fuel consumption resulting from development allowed under the Project would involve the use of motor vehicles traveling to and from the site, as well as fuels used for alternative modes of transportation that may be used by visitors, employees, and guests.

A representative development allowed under the Project would result in the consumption of an estimated 10,289 gallons of gasoline per year and 274 gallons of diesel per year from operation of vehicle trips traveling to and from the site, for a total of 10,562 gallons of petroleum per year. Fuel would be provided by current and future commercial vendors. Development allowed under the Project does not propose uses or operations that would inherently result in excessive and wasteful vehicle trips and VMT, nor associated excess and wasteful vehicle energy consumption.

Over time, the fuel efficiency of the vehicles being used by the visitors, employees, and guests of any development allowed under the Project is expected to increase. As such, the amount of gasoline consumed as a result of vehicular trips during operation would decrease over time. As discussed under Section 3.6.2, there are numerous regulations in place that require and encourage increased fuel efficiency. For example, CARB has adopted a new approach to passenger vehicles by combining the control of smog-causing

pollutants and GHG emissions into a single coordinated package of standards. The new approach also includes efforts to support and accelerate the numbers of plug-in hybrids and ZEVs in California (CARB 2021a). Additionally, in response to SB 375, CARB has adopted the goal of reducing per-capita GHG emissions from 2005 levels by 10% by the year 2020 and 19% by the year 2035 for light-duty passenger vehicles in the Metropolitan Transportation Commission and Association of Bay Area Governments planning area (MTC and ABAG 2021). As such, operation of the Project is expected to use decreasing amounts of petroleum over time, due to advances in fuel economy. Furthermore, the use of transit and alternative fuel vehicles (e.g., electricity, natural gas, biofuels, hydrogen cells) is anticipated to increase over time, as local and regional plans and policies facilitating increased use and development of transit and alternative fuel vehicle transportation modes are implemented.

In summary, enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources would likely decrease future gasoline fuel demands per VMT. As supported by the preceding discussions, transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary and impacts would be less than significant.

Summary

As explained above, development allowed under the Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources, including electricity, natural gas, or petroleum during construction or operation. Impacts would be **less than significant**.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

No mitigation measures are proposed, and energy impacts would be less than significant without mitigation.

Impact E-2 Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Development allowed under the Project would be subject to and would comply with, at a minimum, the California Building Energy Efficiency Standards (24 CCR, Part 6). Part 6 of Title 24 establishes energy efficiency standards for residential and non-residential buildings constructed in California in order to reduce energy demand and consumption. Part 11 of Title 24 sets forth voluntary and mandatory energy measures that are applicable to any development allowed under the Project under the California Green Building Standards Code. As discussed under Impact 3.6-1, development allowed under the Project would result in an increased demand for electricity and petroleum. In addition, any development allowed under the Project is subject to the County's reach code ordinance which requires new buildings be built "all-electric."

Furthermore, as explained in Section 3.6.1, the County is a partner agency with SVCE, a Community Choice Aggregator, which is the default electric energy provider in Santa Clara County and sources at minimum 50% of its energy from renewable and/or carbon-free sources. Customers have two electricity options to choose from, GreenStart which is 50% renewable energy (default option) and GreenPrime, which is 100% renewable energy. Under both options, development allowed under the Project would include renewable

energy as part of the power content mix and would be consistent with the County's renewable energy commitment.

Because the land uses allowed under the Project would comply with all applicable energy standards and regulations, the Project would result in a less-than-significant impact associated with the potential to conflict or obstruct a state or local plan for renewable energy or energy efficiency.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

No mitigation measures are proposed, and energy impacts would be less than significant without mitigation.

3.6.6 Cumulative Impacts

Where a lead agency concludes that the cumulative effects of a project, taken together with the impacts of other closely related past, present, and reasonably foreseeable future projects are significant, the lead agency then must determine whether the project's incremental contribution to such significant cumulative impact is "cumulatively considerable" (and thus significant in and of itself). The cumulative study area used to assess potential cumulative energy-related impacts include the Santa Clara County as a whole.

Impact E-1.

Cumulative projects that could exacerbate the Project's impacts include any projects that could result in wasteful, inefficient, or unnecessary use of energy. As such, existing and projected cumulative development under approved planning documents (e.g., the Plan Bay Area 2050, and General Plan) has been reviewed for consideration of energy efficiency. Buildout of the cumulative study area would be required by the County's Department of Public Works, Building and Safety to conform to current federal, state, and local energy conservation standards, including the California Energy Code Building Energy Efficiency Standards (24 CCR Part 6), the CALGreen Code (24 CCR Part 11), and SB 743. Future development would also be required to meet even more stringent requirements, including the objectives set forth in the 2022 CARB Scoping Plan. Furthermore, various federal and state regulations, including the Low Carbon Fuel Standard, Pavley Clean Car Standards, and Low Emission Vehicle Program, would serve to reduce the transportation fuel demand of cumulative projects. As a result, development allowed under the Project, in combination with other reasonably foreseeable projects, would not cause a wasteful use of energy or other non-renewable natural resources. The Project would result in less than significant impacts to energy resources due to wasteful, inefficient, or unnecessary consumption of energy resources and would not result in cumulatively considerable impacts.

Impact E-2.

The Project would facilitate development that is consistent with the intent of the Plan Bay Area 2050 goals and policies, and the County's General Plan and Housing Element. The Project would result in less than significant impacts related to potential conflicts with state or local plans for renewable energy or energy efficiency and would not result in cumulatively considerable impacts.

3.6.7 Mitigation Measures

No mitigation is required.

3.6.8 Level of Significance After Mitigation

Impacts E-1 and E-2 would be less than significant prior to implementation of any mitigation measures. Therefore, the impact remains **less than significant.**

3.6.9 References

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3.7 Geology and Soils

This section of the Program Environmental Impact Report (PEIR) evaluates impacts to geology and soils from implementation of the County of Santa Clara (County) Rural Zoning Amendments and Agricultural Impact Threshold (Project). This analysis provides an overview of existing geologic conditions within the project area, which includes select parcels located across unincorporated areas of Santa Clara County.

3.7.1 Environmental Setting

Regional Setting

The project area lies within the geologically complex region of California referred to as the Coast Ranges geomorphic province.[1] The Coast Ranges province lies between the Pacific Ocean and the Great Valley (Sacramento and San Joaquin valleys) provinces and stretches from the Oregon border to the Santa Ynez Mountains near Santa Barbara. Much of the Coast Range province is composed of marine sedimentary deposits and volcanic rocks that form northwest trending mountain ridges and valleys, running subparallel to the San Andreas Fault Zone. The relatively thick marine sediments dip east beneath the alluvium of the Great Valley. The Coast Ranges can be further divided into the northern and southern ranges, which are separated by the San Francisco Bay. The San Francisco Bay lies within a broad depression created from an east-west expansion between the San Andreas and the Hayward fault systems. West of the San Andreas Fault lies the Salinian Block, a granitic core that extends from the southern end of the province to north of the Farallon Islands.

The Northern Coast Ranges are comprised largely of the Franciscan Complex or Assemblage, which consists primarily of graywacke, shale, greenstone (altered volcanic rocks), basalt, chert (ancient silica-rich ocean deposits), and sandstone that originated as ancient sea floor sediments. Franciscan rocks are overlain by volcanic cones and flows of the Quien Sabe, Sonoma and Clear Lake volcanic fields (California Geological Survey [CGS] 2002a).

Topographic Setting

Located at the southern end of the San Francisco Bay, Santa Clara County is roughly 35 miles wide and 40 miles long. The central portion of Santa Clara County contains the Santa Clara Valley, a northwest-southeast low lying valley that drains both into San Francisco and Monterey Bays, the latter only from the very southern end of Santa Clara County. The valley is flanked on either side by the mountain ranges of the Diablo Range to the east and the Santa Cruz Mountains to the west. Ridge crests of the Diablo Range have elevations that range between 2,000 and 4,000 feet above sea level. The highest point in the Santa Cruz Mountains is Loma Prieta at 3,791 feet above sea level.

The Santa Clara Valley varies in width from about 16 miles at its northern end to about 2 miles at Coyote. The southernmost two-thirds of the valley is generally narrow. The valley bottom is relatively flat with slope gradients of less than 5% except for some scattered small hills and the banks of exposed streams.

[1] A geomorphic province is an area that possesses similar bedrock, structure, history, and age. California has 11 geomorphic provinces.

Local Geology

Santa Clara County is generally composed of folded and faulted sedimentary and volcanic rocks that are typical of the Central Coast Ranges geomorphic province. The low lying valley areas consist of more recent alluvial and Bay deposits. The Diablo Range is characterized by sandstones, shale, chert and serpentine of the Franciscan Assemblage which dates from 208 to 66 million years ago (mya). Lesser amounts of Monterey Formation shale, Santa Clara formation gravels and sands, and Briones formation sandstone that range from 66 to 2 mya are also present.

The Santa Clara Valley is underlain by Quaternary age (up to 2.6 million years) alluvial deposits that range up to several feet thick. At the very northern end of the valley are more recent bay deposits known as Bay Mud which tend to have high plasticity. The Santa Cruz Mountains are composed primarily of Franciscan Assemblage sandstone, shale, chert and serpentine with lesser amounts of Santa Clara, Purisima, San Lorenzo, Monterey, and Vaqueros formations also present. The Franciscan Assemblage was originally deposited in a deep marine trench off the California coast. The convergence of the Pacific and North American tectonic plates resulted in deforming these deposits creating folds and faulting of these units.

Regional Faulting and Seismic Setting

The project area lies within a region of California that is considered an area of high seismic activity. The U.S. Geological Survey (USGS) along with the CGS and the Southern California Earthquake Center formed the Working Group on California Earthquake Probabilities (WGCEP) which has evaluated the probability of one or more earthquakes of magnitude 6.7 or higher occurring in the state of California over the next 30 years (beginning in 2014). The result of the most recent evaluation known as the Uniform California Earthquake Rupture Forecast (UCERF3) indicated a 72 percent likelihood that such an earthquake event will occur in the Bay Area region (USGS 2015).

Richter magnitude is a measure of the size of an earthquake as recorded by a seismograph, a standard instrument that records ground shaking at the location of the instrument. The reported Richter magnitude for an earthquake represents the highest amplitude measured by the seismograph at a distance of 100 kilometers from the epicenter. Richter magnitudes vary logarithmically with each whole number step representing a tenfold increase in the amplitude of the recorded seismic waves. Earthquake magnitudes are also measured by their Moment Magnitude (Mw) which is related to the physical characteristics of a fault including the rigidity of the rock, the size of fault rupture, and movement or displacement across a fault (CGS 2002b).

Ground movement during an earthquake can vary depending on the overall magnitude, distance to the fault, focus of earthquake energy, and type of geologic material. The composition of underlying soils, even those relatively distant from faults, can intensify ground shaking. For this reason, earthquake intensities are also measured in terms of their observed effects at a given locality. The Modified Mercalli (MM) intensity scale, commonly used to measure earthquake damage due to ground shaking, provides values for intensity that range from I (earthquake not felt) to XII (damage nearly total), and intensities ranging from IV to X could cause moderate

to significant structural damage.[2] The intensities of an earthquake will vary over the region of a fault and generally decrease with distance from the epicenter of the earthquake.

As discussed in more detail below, the Northern San Andreas, Hayward and Calaveras Faults, which all intersect Santa Clara County, pose the greatest threat of significant damage in the Bay Area according to the WGCEP (USGS, 2015). These three faults exhibit strike-slip orientation and have experienced movement within the last 150 years.[3] Other principal faults outside of Santa Clara County, but capable of producing significant ground shaking in the Bay Area include the Concord–Green Valley, Marsh Creek–Greenville, San Gregorio and Rodgers Creek Faults (Figure 3.7-1).

The CGS defines a fault that has demonstrated surface displacement within approximately the last 11,700 years as a Holocene-active fault. A pre-Holocene fault is defined as a fault that has shown evidence of surface displacement more than 11,700 years ago (CGS 2018). Quaternary faults are those where the evidence of displacement is determined to be between 11,700 and 2.6 million years ago. This definition does not mean that faults lacking evidence of surface displacement are necessarily inactive. Quaternary faults are located throughout the Bay Area.

San Andreas Fault

The San Andreas Fault Zone is a major structural feature that forms at the boundary between the North American and Pacific tectonic plates, extending from the Salton Sea in Southern California near the border with Mexico to north of Point Arena, where the fault trace extends out into the Pacific Ocean. The main trace of the San Andreas fault through the Bay Area trends northwest through the Santa Cruz Mountains and the eastern side of the San Francisco Peninsula. As the principal strike-slip boundary between the Pacific plate to the west and the North American plate to the east, the San Andreas is often a highly visible topographic feature, such as between Pacifica and San Mateo, where Crystal Springs Reservoir and San Andreas Lake clearly mark the rupture zone. In the San Francisco Bay Area, the San Andreas Fault Zone was the source of the two major seismic events in recent history that affected the San Francisco Bay region. The 1906 San Francisco earthquake was estimated at M 7.9 and resulted in approximately 290 miles of surface fault rupture, the longest of any known continental strike slip fault. Horizontal displacement along the fault approached 17 feet near the epicenter. The more recent 1989 Loma Prieta earthquake, with a magnitude of M 7.1 (Mw 6.9), resulted in widespread damage throughout the Bay Area.

Hayward Fault

The Hayward Fault Zone is the southern extension of a fracture zone that includes the Rodgers Creek Fault (north of San Pablo Bay), the Healdsburg fault (Sonoma County), and the Maacama fault (Mendocino County). The Hayward fault trends to the northwest within the East Bay, extending from San Pablo Bay in Richmond, 60 miles south to San Jose. The Hayward fault in San Jose converges with the Calaveras fault, a similar type fault that extends north to Suisun Bay. The Hayward fault is designated by the Alquist-Priolo Earthquake Fault Zoning Act as an active fault.

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2 The damage level represents the estimated overall level of damage that will occur for various MM intensity levels. The damage, however, will not be uniform. Not all buildings perform identically in an earthquake. The age, material, type, method of construction, size, and shape of a building all affect its performance.

3 A strike-slip fault is a fault on which movement is parallel to the fault's strike or lateral expression at the surface.

Historically, the Hayward fault generated one sizable earthquake in the 1800s.[4] In 1868, a Richter magnitude 6.8 (i.e., M 6.8) earthquake on the southern segment of the Hayward Fault ruptured the ground for a distance of about 30 miles.

Although large earthquakes on the Hayward fault have been rare since 1868, slow fault creep has continued to occur and has caused measurable offset. However, a large earthquake could occur on the Hayward fault with an estimated moment magnitude (Mw) of about Mw 7.1. The WGCEP includes the Hayward–Rodgers Creek Fault Systems in the list of those faults that have the highest probability of generating earthquakes of M 6.7 or greater in the Bay Area in the next 30 years beginning 2014 at a probability of 14.3% (USGS 2015).

Calaveras Fault

The Calaveras fault is a major right-lateral strike-slip fault that has been active during the last 11,000 years. The Calaveras Fault is located in the eastern San Francisco Bay region and generally trends along the eastern side of the East Bay Hills, west of San Ramon Valley, and extends into the western Diablo Range, and eventually joins the San Andreas Fault Zone south of Hollister. The northern extent of the fault zone is somewhat conjectural and could be linked with the Concord Fault.

The Calaveras fault is designated as an Alquist-Priolo Earthquake Hazard Zone. The Calaveras Fault has been the source of numerous moderate magnitude earthquakes and the probability of a large earthquake (greater than M 6.7) has been estimated at 7.4% over the next 30 years (USGS, 2015). However, this fault is considered capable of generating earthquakes with upper bound magnitudes ranging from Mw magnitude 6.6 to magnitude 6.8.

Seismic Hazards

Active Faults

Slip along a fault may result in one or more geologic effects that can damage or destroy structures and injure their inhabitants. In general, ground shaking and surface fault rupture are the effects of greatest concern when an earthquake occurs along a fault. For certain structures such as pipelines, dams, and critical facilities such as hospitals, the cascading effects can be very damaging. Seismic records and data, particularly those dating from the mid-20th century, underscore the probability and severity of large earthquakes in the project area.

Surface Fault Rupture

Surface fault rupture can occur during significant seismic events. Surface rupture involves the displacement and cracking of the ground surface along a fault trace. Surface ruptures are visible instances of horizontal or vertical displacement, or a combination of the two, typically confined to a narrow zone along the fault. Surface rupture is more likely to occur in conjunction with active fault segments where earthquakes are large, or where the location of the movement (earthquake hypocenter) is shallow. In general, strike-slip faults such as the San Andreas Fault are more likely to produce lateral offsets in the ground surface, with one side of the fault plane or zone “sliding” past the opposing side. Similarly, faults that generally fail under compressional stress, such as thrust or reverse

[4] Prior to the early 1990s, it was thought that a Richter magnitude 7 earthquake occurred on the northern section of the Hayward Fault in 1836. However, a study of historical documents by the California Geological Survey concluded that the 1836 earthquake was not on the Hayward Fault (Bryant, 2000).

faults, are more prone to vertical offsets in the ground surface. In either case, buildings or other man-made structures that lie atop the fault can experience serious damage or catastrophic failure during a strong earthquake.

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 regulates development near Holocene-active faults to mitigate the hazard of surface fault rupture. This act requires the State Geologist to establish regulatory zones (known as Alquist-Priolo Special Study Fault Zones) around the surface traces of Holocene-active faults and to issue appropriate maps. Local agencies must regulate most development projects within the zones. Before a project can be permitted, cities and counties must require a geologic investigation to demonstrate that proposed buildings will not be constructed across active faults. An evaluation and written report of a specific site must be prepared by a licensed geologist. If a Holocene-active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault.

Strong Seismic Ground Shaking

An earthquake of moderate to high magnitude can cause significant ground shaking that results in substantial damage and injury. The exact degree of shaking experienced at a given location would depend on a host of site-specific factors, such as: the magnitude of the seismic event, the duration of the seismic event, the distance from a given site to the zone of rupture (i.e., hypocenter), local site-specific geologic conditions (i.e., nature, thickness, and extent of underlying soil and/or bedrock), and broader, often regional geologic factors such as basin geometry. In general, the severity of seismic ground shaking tends to abate with increasing distance from the event hypocenter. Seismic ground shaking, if sufficiently intense and sustained, can result in significant damage to, or catastrophic failure of buildings or other man-made structures.

Earthquake risks are not limited to ground shaking, fault rupture, or liquefaction, but also embrace the damage to inhabited buildings or sensitive, manmade infrastructure. Advances in the field of seismic engineering and strengthened building codes have significantly reduced the potential for catastrophic collapse in newly constructed buildings. Nevertheless, many older buildings were designed and constructed before modern seismic design standards were incorporated into the building code. Certain building types are of particular concern:

- **Unreinforced Masonry Buildings:** In the late 1800s and early 1900s, unreinforced masonry was the most common type of construction for commercial buildings and multi-story apartments and hotels. These were recognized as a collapse hazard following the 1906 San Francisco Earthquake, the 1925 Santa Barbara Earthquake, and again, in the aftermath of the 1933 Long Beach Earthquake. These buildings are generally recognized as the most susceptible to seismic damage.
- **Precast Concrete Tilt-up Buildings:** This commercial/industrial building type gained popularity in the late 1950s and 1960s. Extensive damage to concrete tilt-up buildings during the 1971 San Fernando Earthquake revealed the need for seismic reinforcement, such as better anchoring of walls to the roof, floor, and foundation elements, as well as stronger roof diaphragms.

Seismically Induced Slope Failure/Landslides

An earthquake of moderate to high magnitude generated can result in slope failure such as landslides. Although landslides can manifest as a variety of earth movements, a recent study of earthquake-related slope failures found that the following were the most prevalent (in order of decreasing frequency): 1) rock falls, disrupted soil slides, and rock slides; 2) soil lateral spreads, soil slumps, soil block slides, and soil avalanches; and 3) soil falls, rapid soil flows, and rock slumps. The potential for such slope failure is often highly site-specific and can be

exacerbated where saturated soil/bedrock is present, steep and/or eroded slopes are noted, and evidence of historical slides or slide-prone soil or bedrock types. Unstable hillsides occur in steeper portions of the Santa Cruz and Diablo Range mountains with most of the unincorporated area of Santa Clara County containing areas with slopes that exceed 15% inclines (County of Santa Clara 1994).

Figure 3.7-2, *Seismic Hazard Zones*, maps the landslide zones relative to the project area.

Liquefaction

Liquefaction occurs when partially saturated soil enters a liquid state, resulting in the soil's inability to support overlying structures. Liquefaction typically occurs in areas where the groundwater is less than 50 feet from the surface and where the soils are composed of poorly consolidated fine to medium sand. Liquefaction hazards are particularly significant along watercourses. Lateral spreading consists of lateral movement of gently to steeply sloping saturated soil deposits that is caused by earthquake-induced liquefaction. As ground acceleration and shaking duration increase during an earthquake, liquefaction potential increases.

In order to preliminarily evaluate a region's susceptibility to liquefaction, several factors ought to be considered, including:

- The anticipated intensity and duration of ground shaking.
- The origin, texture, and composition of shallow sediments. In general, cohesionless, fine-grained sediments such as silts or silty sands, or areas of uncompacted or poorly compacted fills are more prone to liquefaction. By contrast, coarser grained, poorly sorted sediments such as coarse sands and gravels are less susceptible to liquefaction. Liquefiable sediments are found in a variety of depositional environments, including bays, estuaries, river floodplains and basins, lakes, and Aeolian deposits such as dunes and loess.
- The presence of shallow groundwater. Saturated sediments are necessary for seismically induced liquefaction to occur. In general, the highest liquefaction susceptibility is found in fine-grained sediments of late Holocene to late Pleistocene age (i.e., 1,000 to 15,000 years before present [B.P.]) in areas where the groundwater is shallower than about 50 feet below ground surface.

The above-referenced geological settings and conditions are not unusual and they are found in many parts of the Bay Area especially in low lying areas of the Santa Clara Valley. Comprehensive, project-specific or site-specific evaluations necessarily require more detailed information, beginning with a review of liquefaction hazard mapping and more importantly collection of site-specific soil samples.

Additionally, Figure 3.7-2, *Seismic Hazard Zones*, map the liquefaction zones relative to the project area. Alluvial deposits of Santa Clara Valley that have a high groundwater table may be susceptible to liquefaction. Additionally, loose river deposits in the valleys of the Santa Cruz Mountains and the Diablo Range may be locally prone to liquefaction. The Bay Muds that are associated with areas close to the Bay are extremely susceptible to liquefaction.

Differential Settlement

Earthquake shaking can produce compaction and densification of dry, uniformly graded, granular, and loose soil material. The amount of compaction across an area can vary due to differences in soil types, producing

differential settlement. Artificial fill may also be susceptible to differential settlement. Differential settlement can affect existing and proposed foundations, slabs, and pavements and is dependent on-site specific conditions.

Other Hazards

Expansive Soil

Expansive soils exhibit a "shrink-swell" behavior. Shrink-swell is the cyclic change in volume (expansion and contraction) that occurs in fine-grained clay sediments from the process of wetting and drying. Structural damage may result over an extended period of time, usually as the result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils. Typically, soils that exhibit expansive characteristics comprise the upper five feet of the surface. The effects of expansive soils could damage foundations of above-ground structures, paved roads and streets, and concrete slabs. Expansion and contraction of soils, depending on the season and the amount of surface water infiltration, could exert enough pressure on structures to result in cracking, settlement, and uplift.

Settlement

Settlement can occur from immediate settlement, consolidation, shrinkage of expansive soil, and liquefaction (discussed below). Immediate settlement occurs when a load from a structure or placement of new fill material is applied, causing distortion in the underlying materials. This settlement occurs quickly and is typically complete after placement of the final load. Consolidation settlement occurs in saturated clay from the volume change caused by squeezing out water from the pore spaces. Consolidation occurs over a period of time and is followed by secondary compression, which is a continued change in void ratio under the continued application of the load.

Soils tend to settle at different rates and by varying amounts depending on the load weight or changes in properties over an area, which is referred to as differential settlement. When new structures are located over areas of greatly differing geotechnical engineering properties, differential settlement can result in damages to foundations and utility connections.

Soil Erosion

Soil erosion is the process whereby soil materials are worn away and transported to another area either by wind or water. Rates of erosion can vary depending on the soil material and structure, soil placement, and human activity. Excessive soil erosion can eventually lead to damage of building foundations and other improvements. Erosion is most likely on sloped areas with exposed soil, especially when unnatural slopes are created by cut and fill activities. Soil erosion rates can therefore be higher during the construction phase. Typically, the soil erosion potential during construction is reduced by using modern construction practices; and once an area is graded and covered with concrete, structures, asphalt, or vegetation, the soil erosion potential is nearly eliminated.

Paleontological Resources

Paleontological resources, or fossils, are the remains of once living plants and/or animals and their traces (e.g., burrows and tracks) preserved in Earth's crust and are generally considered to be greater than 5,000 years old or prior to recorded human history per the Society of Vertebrate Paleontology (SVP 2010) guidelines. With the exception of fossils found in low-grade metasedimentary rocks, significant paleontological resources are found in sedimentary rock units that are old enough to preserve the remains or traces of plants and animals.

Santa Clara County is located within the Coast Ranges Geomorphic Province. The Coast Ranges are northwest-trending mountains and valleys that are subparallel to the San Andreas Fault and are dominated by irregular landslide-topography (CGS 2002a). The following are formation descriptions (listed in Table 3.7-1) and all units/sediments listed in the table are found within Santa Clara County. All quadrangle maps, used for formation descriptions, are by Dibblee and Minch (2005-2007) are at a 1:24,000 scale and the geologic time scale by Cohen et al. (2023) was used for age dates. A brief list of fossils that have been found within each formation is also included. Due to the high degree of faulting in the region, some units cannot be continuously correlated across fault boundaries even though they are time and fauna equivalent. Table 3.7-1 below and descriptions that follow show these relationships.

Table 3.7-1. Summary of Geologic Units and Corresponding Paleontological Information

Geologic Unit	Age Range	Fossil Localities	Sensitivity Rating
Surficial sediments, alluvial sediments, artificial fill	Recent to Late Holocene (<4,200)	None, too young to preserve fossils, unless reworked from older sediments	Low to none, sensitivity increases with depth
Landslide Rubble/ Landslide Debris	Early Holocene to Late Pleistocene (8,200 to 129,000 years ago)	None documented/attributed to this geological unit. Age increases with depth.	Low to High, sensitivity increases with depth.
Older Surficial Sediments	Late Pleistocene (11,700 to 129,000 years ago)	11 localities (Jefferson 2012); USGS M1227. The following localities may be from this these geological units and/or the Santa Clara Formation: UCMP V99597, UCMP V99891, UCMP V91128, UCMP V90003, USGS M1203, USGS M1218, USGS M1218A, USGS M1001, USGS M1202, UCMP V4916, and UCMP V65061 (Paleobiology Database, 2023); important fossils from literature (Pampeyan 1993)	High
Santa Clara Formation/ and associated deposits (locally Packwood Gravel (Pleistocene), locally Irvingdale Gravels, Silver Creek Gravel (Pliocene)	Pleistocene to late Pliocene (11,700 to 3.6 mya)	Plant localities (UCMP 160 and CL38), USGS M-1219, SU Loc. C-308, USGS M3824. The following localities may be from this formation and/or from older surficial sediments: UCMP V99597, UCMP V99891, UCMP V91128, UCMP V90003, USGS M1203, USGS M1218, USGS M1218A, USGS M1001, USGS M1202, UCMP V4916, USGS M1715, USGS M1720, USGS M1870 (Paleobiology Database, 2023; UCMP 2023); important fossils from literature (Pampeyan, 1993; Adam et. al. 1983; McLaughlin et.al. 1991)	High
Etchegoin Formation	Pliocene to Latest Miocene	No localities listed but locally invertebrate fossils (Dibblee and	High

Table 3.7-1. Summary of Geologic Units and Corresponding Paleontological Information

Geologic Unit	Age Range	Fossil Localities	Sensitivity Rating
	(2.58 mya to 7.246 mya)	Minch 2006b)	
Purisima Formation	Pliocene to Late Miocene (2.58 mya to 11.63 mya)	2 invertebrate localities (SDNHM 2023), fossils from literature (McLaughlin et.al. 1991)	High
Orinda Formation	Early Pliocene to Late Miocene (3.6 mya to 11.63 mya)	UCMP 218504 (Poust 2016). Important fossils in literature (Lander 2008)	High
Briones Formation	Late Miocene (5.333 mya to 11.63 mya)	UCMP V3512, UCMP V6534, UCMP MF7443 (UCMP, 2023; Paleobiology Database 2023); fossils from literature (Pampeyan 1993)	High
Monterey Shale/Formation (Locally Claremont Formation)	Late Miocene to Middle Miocene (5.333 mya to 15.98 mya)	1 invertebrate locality (SDNHM, 2023); LSJU loc. 450 (Paleobiology Database, 2023); important fossils from literature (Pampeyan, 1993; McLaughlin et.al., 1991)	High
Sobrante Sandstone (equivalent to the Temblor Sandstone of Montgomery and Jones [1992])	Middle Miocene (11.63 mya to 15.98 mya)	Fossils from literature (Montgomery and Jones 1992; Wilmarth 1931; Dibblee and Minch 2005h)	High
Matadero Sandstone	Middle Miocene to Early Miocene (11.63 mya to 23.03 mya)	Fossils from literature (Pampeyan 1993; Dibblee and Minch 2005f & 2007e)	High
Temblor Sandstone	Middle to Early Miocene (11.63 mya to 23.03 mya)	207024- Tuff Hill, Stanford University (Paleobiology Database 2023); important fossils from literature (McLaughlin et.al. 1991; Prothero et al. 2008; Welton 2014; Miller 1961; Barnes 1988)	High
Marine Sedimentary Rocks, Briones Sandstone, Monterey Shale, Temblor Sandstone	Miocene (5.333 mya to 23.03 mya)	3 invertebrate localities (SDNHM 2023). LSJU loc. 451 (Paleobiology Database 2023)	High
Lambert Shale	Early Miocene to Oligocene (15.98 mya to 33.9 mya)	Locally fossiliferous (Dibblee and Minch 2007 d & e), fossils from literature (McLaughlin et.al. 1988)	High
Vaqueros Formation	Early Miocene to Oligocene (15.98 mya to 33.9 mya)	Potentially UCMP MF7497 (Paleobiology Database 2023); fossils from literature (McLaughlin et.al. 1991)	High
San Lorenzo Formation	Oligocene to Late	Potentially UCMP MF7497	High

Table 3.7-1. Summary of Geologic Units and Corresponding Paleontological Information

Geologic Unit	Age Range	Fossil Localities	Sensitivity Rating
	Eocene (23.93 mya to 41.2 mya)	(Paleobiology Database 2023); fossils from literature (McLaughlin et.al. 1991)	
Butano Formation	Late Eocene (33.9 mya to 41.2 mya)	2 invertebrate localities (SDNHM 2023); fossils from literature (McLaughlin et.al. 1991; Pampeyan 1993)	High
Unnamed Sedimentary Rocks	Eocene to Paleocene, (possibly late Cretaceous) (33.9 mya to 100.5 mya)	UCMP MF8127, UCMP MF7499, UCMP MF8999, UCMP MF8234, UCMP MF8863 (Paleobiology Database 2023; UCMP 2023); important fossils from literature (McLaughlin et.al. 1991; Pampeyan 1993)	High
Basalt, Volcanic Rocks, Diabase	Tertiary (2.58 mya to 66 mya	Volcanic rocks, not listed in descriptions below.	None
Panoche Formation (Locally Barryessa Formation/ Oakland Conglomerate)	Late Cretaceous (66 mya to 100.5 mya)	USGS M8575, USGS M8576, USGS M8525, USGS M6781, USGS M8529, USGS M8539, USGS M8535, USGS M8554, USGS M8524, USGS M5890, USGS M8540, USGS M8764, CAS 33711. The following localities could be attributed to this formation and/or the "Knoxville" Formation: LSJU 1800, CAS 31249, CAS 31250 (Paleobiology Database 2023). Fossils from literature (McLaughlin et.al. 1991)	High
"Knoxville" Formation	Early Cretaceous to Late Jurassic (100.5 mya to 161.5 mya)	CAS 61455, USGS M8801, USGS M8802, LSJU 1807, USGS M8720, CAS 33574, CAS 31247. The following localities could be attributed to this formation and/or the Panoche Formation: LSJU 1800, CAS 31249, CAS 31250 (Paleobiology Database 2023); fossils from literature (McLaughlin et.al. 1991)	High
Coast Range Ophiolite Complex	Cretaceous and Jurassic (66 mya to 201.4 mya)	Volcanic and metamorphic rocks	None
Serpentinite	Cretaceous and Jurassic (66 mya to 201.4 mya)	Metamorphic rocks	None
Franciscan Assemblage	Cretaceous and Jurassic (66 mya to 201.4 mya)	USGS MR8843, USGS MR8843, USGS MR8846A, USGS MR8847C, USGS MR8847A, USGS MR8848C,	Low

Table 3.7-1. Summary of Geologic Units and Corresponding Paleontological Information

Geologic Unit	Age Range	Fossil Localities	Sensitivity Rating
		USGS MR8848F (Paleobiology Database, 2023)	

Surficial sediments consist of artificial fill, gravel and sand of Coyote Creek channel, alluvial gravel, sand and clay of valley areas and stream channels, low sloping alluvial fan gravel and sand near foothills (Dibblee and Minch 2005a,b,c,d,e,f; Dibblee and Minch 2006a; Dibblee and Minch 2007a,b). These surficial sediments are recent to late Holocene (<4,200 years ago) and therefore are too young to preserve fossils, any fossils that might be present in this unit would be reworked from older sediments. This unit has low paleontological sensitivity that increases with depth, where older surficial sediments or geological units with high paleontological sensitivity may be present.

Landslide rubble/landslide debris is rubble derived from rocks upslope, rubble from serpentine areas, and rubble of mostly siliceous shale (Monterey Shale) detritus (Dibblee and Minch 2005a,b,c,d,e,f; Dibblee and Minch 2006a, 2007a,b). These sediments are early Holocene to late Pleistocene in age; no previous localities have been reported from these sediments. If fossils were to be found they would be displaced from older sediments. These deposits often overlie older fossiliferous geological units, so there is an increased chance for finding fossils with depth. Therefore these deposits would have a low to high paleontological sensitivity with an increase in depth.

Older surficial sediments within Santa Clara County are generally described as dissected older alluvial gravel and sand deposits and dissected alluvial fan deposits (Dibblee and Minch 2005a,b,c,d,e; Dibblee and Minch 2006a, 2007a,b). These sediments are late Pleistocene in age. Recorded fossils from this unit include: mammals (Columbian mammoth, bison, horse, antelope, camel, giant ground-sloth, mammoth/other members of elephant family, deer, cats, and peccary [*Platygonus*]), rodents (kangaroo rat, pocket gopher, bear, Belding's ground squirrel, squirrels, wood-rats, harvest mice), rabbits, reptiles, fish, invertebrates (gastropods, mollusks), and plants (leaves, seeds, wood) (Paleobiology Database 2023; Jefferson 2012; Pampeyan 1993). Older surficial sediments have high paleontological sensitivity.

The Santa Clara Formation Pleistocene to late Pliocene in age. The formation includes terrestrial clastic rocks that are generally gray in color. Valley sediments of Santa Clara Valley are weakly to moderately lithified gravel and conglomerate, pebbly sandstone, and claystone and pebble, gravel/conglomerate. Units are well bedded, with interbeds of gray, green, and red sandstone and claystone with thin layers of volcanics to gray, rarely bedded, stream-laid, pebbly conglomerate/gravels. The formation may contain basalt beds; gray to red-brown gravel/conglomerate, sandstone, and mudstone; gray to buff claystone and siltstone; pebble and boulder conglomerate in sandy matrix; and lacustrine beds (Dibblee and Minch 2005 a,b,c,d,e,f,g; Dibblee and Minch 2007a,c,e). Fossils reported from this formation include rare land mammal fossils (North American cheetah, horse, deer), birds, fish remains, invertebrates (freshwater gastropods, pelecypods, ostracodes; and marine gastropods and bivalves), plants (fossil leaves, isoete megaspores, spruce and angiosperm pollen, wood/logs) (UCMP 2023; Adam et al. 1983; McLaughlin et al. 1991; Pampeyan 1993; Paleobiology Database 2023). The Santa Clara Formation has high paleontological sensitivity.

The Etchegoin Formation, Pliocene to latest Miocene, is similar to Purisima Formation. It is a tan, bedded, semi-friable, fine to medium grained sandstone, locally with clam shell fossils (Dibblee and Minch 2006 b). Not many fossils have been reported from this formation other than what was reported on the geologic quadrangle map. The Etchegoin Formation has high paleontological sensitivity.

The Pliocene to late Miocene Purisima Formation consists of shallow marine and non-marine clastic rocks; light gray, massive, siltstone with some interbedded, soft, gray fine-grained sandstone; locally diatomaceous (Dibblee and Minch 2007c). Fossils reported from this formation include pelecypods and irregular echinoids (McLaughlin et al. 1991) and marine mammals. The Purisima Formation has high paleontological sensitivity.

The Orinda Formation is an early Pliocene to late Miocene terrestrial clastic formation. It is a weakly lithified, gray, bedded, sandstone and pebble conglomerate that includes red sandstone and claystone layers; greenish-gray and red, bedded, sandstone, claystone; pebble conglomerate; and areas of light gray to tan rhyo-dacite (Dibblee and Minch 2005e,g,h). This formation has similar fauna to other highly sensitive formations throughout the western United States. Several fossil mammal localities are located just north (in neighboring Contra Costa County) of the northern county boundary. A few notable and important fossils include oreodonts (*Merychyus major*) (Lander 2008) and fossil turtle eggshell (Poust 2016). The Orinda Formation has high paleontological sensitivity.

Miocene marine sedimentary rocks consist of the Briones Sandstone, Monterey Shale, Temblor Sandstone, and undifferentiated units similar to these. Each individual formation will be described separately in the following paragraphs as well as the fossils found within each. Marine sedimentary rocks have high paleontological sensitivity.

The Briones Sandstone is late Miocene in age. It consists of a light gray to tan, massive, fine to coarse grained, lithified, marine clastic sandstone, with few interbedded gray siltstones, and is locally fossiliferous (Dibblee and Minch 2005a,b,c,d,e,g,h). The unit contains mollusks (Pampeyan 1993), the marine mammal (*Desmostylus hesperus*) (Paleobiology Database 2023), and foraminifera (UCMP, 2023). The Briones Sandstone has a high paleontological sensitivity rating.

The late to middle Miocene Monterey Shale/Formation is a composed of marine biogenic and clastic rocks. It can be a lithified, white-weathered, platy, thinly bedded, siliceous shale that is locally cherty, to a gray to light gray, soft, thin gray shale; a grayish-brown to black, pale orange to white-weathered, siliceous shale, occurring with chert, diatomaceous mudstone, and minor siltstone and sandstone; or a hard to platy shale and conglomerate, rhythmically bedded (Dibblee and Minch 2005a,b,c,d,e,f,g,h; Dibblee and Minch 2007c). Some fossils from this formation include mammals (seal, whale, *Paleoparadoxia*), fishes, invertebrates (mollusks and barnacles), and nannofossils (foraminifera) (McLaughlin et al. 1991; Pampeyan 1993; Paleobiology Database 2023). The Monterey Formation/ Shale has high paleontological sensitivity.

The Sobrante Sandstone is middle Miocene in age. It is a marine clastic sandstone, similar to the Briones Sandstone (Dibblee and Minch 2005h), and may be equivalent to the Temblor Sandstone (Montgomery and Jones 1992). Marine mollusks have been recorded from this unit (Wilmarth 1931). Due to the potential associations with the Briones and Temblor sandstones, the Sobrante Sandstone has high paleontological sensitivity.

The middle to early Miocene Matadero Sandstone is a marine clastic unit. It is a light gray, soft, massive to poorly bedded, mostly fine grained, sandstone with concretions (Dibblee and Minch 2005f; Dibblee and Minch 2007e).

Fossils recorded from this unit have all been molluscan (Pampeyan 1993). The Matadero Sandstone has high paleontological sensitivity.

The middle to early Miocene Temblor Sandstone is a light gray to tan, massive, fine to medium grained, marine clastic sandstone (Dibblee and Minch 2005a,d,f,h). Fossils reported from this formation include shark teeth, invertebrates (oysters, barnacles, bryozoans, pectins, bivalves), and foraminifera (McLaughlin et al. 1991; Paleobiology Database 2023). The unit may be in part equivalent to the Shark Hill deposit (Round Mountain Silt), which is a very important and diverse locality, in Kern County, California (Wilmarth 1931; Prothero et al. 2008; Welton 2014; Miller 1961; Barnes 1988). The Temblor Sandstone has high paleontological sensitivity.

The Lambert Shale is early Miocene to Oligocene in age. It is composed of marine clastic rocks, gray to dark brown, weathering to chalky white, thin to medium bedded, shale to clay and mudstone, and siltstone, that contains phosphate lenses and laminae and is locally fossiliferous (Dibblee and Minch 2007d,e). This unit contains bathyal foraminifera (McLaughlin et al. 1988). The Lambert Shale has high paleontological sensitivity.

The early Miocene to Oligocene Vaqueros Formation is a marine clastic unit consisting of light gray, massive to thinly bedded, fine to medium grained sandstone with mudstone interbeds. The formation also contains concretions, is locally pebbly and locally fossiliferous (Dibblee and Minch 2007 d,e). Mudstone interbeds include marine mammals, fish scales and fish bone fragments, invertebrates, and benthic foraminifera (McLaughlin et al. 1991). The Vaqueros Formation has high paleontological sensitivity.

The San Lorenzo Formation is Oligocene to late Eocene in age. It is a marine clastic formation composed of dark gray, mudstone and laminated shale, with minor thin layers of fine grained, buff sandstone and is locally fossiliferous (Dibblee and Minch 2007d; Dibblee and Minch 2005i). This formation has produced fossil fish scales and fish bone fragments, diatoms and radiolarians, benthic foraminifera, and sponge spicules (McLaughlin et al. 1991). The San Lorenzo Formation has high paleontological sensitivity.

The late Eocene Butano Formation is a marine clastic formation composed of light gray to buff, hard, massive, sandstone with some greenish-gray shale and lenses of pebble-cobble conglomerate, limestone, locally fossiliferous (Dibblee and Minch 2007c, d). Benthic foraminifera (McLaughlin et all, 1991); foraminifera, coccoliths (Pampeyan, 1993). The Butano Formation has high paleontological sensitivity.

The unnamed sedimentary rocks unit is Eocene to Paleocene in age and is possibly late Cretaceous. It consists of gray to dark gray, moderately bedded clay shale or mudstone and red claystone; light gray to tan, fine to medium grained, bedded sandstones; conglomeratic sandstone; and white, hard limestone (Dibblee and Minch 2005a,c,d,f; Dibblee and Minch 2007a). Fossils recorded from this unit include gastropods, foraminifera, and nannofossils. The Cretaceous portion has produced ammonites, gastropods, mollusks, fish parts, crabs, crinoids, and foraminifera (McLaughlin et al. 1991; Pampeyan 1993; UCMP 2023). These unnamed sedimentary rocks have high paleontological sensitivity.

The late Cretaceous Panoche Formation is a marine clastic formation that consists of lithified, dark gray, bedded clay shale or mudstone, and thin sandstones; light gray to light brown, fine to medium grained sandstone, locally with concretions; and brown, crudely bedded conglomerate (Dibblee and Minch 2005a,b,c,d,e,f,h; Dibblee and Minch 2007a). Fossils reported from the Panoche Formation are as follows: vertebrates (jawless fish, ray-finned fish, cartilaginous fish [sharks and rays]), invertebrates (marine bivalves, clams, oysters, pectins, echinoids, gastropods, crinoids, ghost shrimp, bryozoans, coral, baculites, crabs, ammonites, pelecypods, tubeworms,

sea-urchins), and ichnofossils (barnacle borings, sponge impressions) (Paleobiology Database 2023; McLaughlin et al. 1991). The Panoche Formation has high paleontological sensitivity.

The "Knoxville" Formation is an early Cretaceous to late Jurassic lithified marine, fossiliferous clastic formation. It is a dark gray, thinly bedded, clay shale or mudstone, with thin beds of olive-brown graywacke sandstone (Dibblee and Minch 2005b,c,e). This formation contains bivalves, pelecypods, mussels, oysters, ammonites, belemnites, gastropods, scaphopods, tubeworms, corals, bryozoans, and cartilaginous fish (sharks and rays) (Paleobiology Database 2023; McLaughlin et al. 1991). The "Knoxville" Formation has high paleontological sensitivity.

The Cretaceous and Jurassic Coast Range Ophiolite Complex consists of serpentinite, diabase, basalt, and serpentine (Dibblee and Minch 2005c,e,f). This unit has no fossils and no paleontological sensitivity.

The Cretaceous and Jurassic Serpentinite consists of serpentinite and diabase that is hydrothermally metamorphosed from mafic igneous rocks (Dibblee and Minch 2005d; Dibblee and Minch 2007a,b). This unit has no fossils and no paleontological sensitivity.

The Cretaceous and Jurassic Franciscan Assemblage is a mélange of dark gray claystone, chert, and graywacke; volcanics; chert and metachert, glaucophane blueschist, graywacke sandstone, and clay shale; and graywacke to meta graywacke, greenstone (metabasalt) (Dibblee and Minch 2005a,b,c,d,e,f; Dibblee and Minch 2006a, 2007a,b,d). This unit contains fossilized radiolarians (Paleobiology Database 2023) and has a low paleontological sensitivity rating.

3.7.2 Relevant Plans, Policies, and Ordinances

Federal

The following federal regulations pertaining to geology, soils, and seismic hazards would apply to the Project.

Earthquake Hazards Reduction Act

The Earthquake Hazards Reduction Act was enacted in 1997 to "reduce the risks to life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards and reduction program." To accomplish this, the Act established the National Earthquake Hazards Reduction Program (NEHRP). This program was substantially amended in November 1990 to refine the description of agency responsibilities, program goals, and objectives.

NEHRP's mission includes improved understanding, characterization, and prediction of hazards and vulnerabilities; improvement of building codes and land use practices; risk reduction through post-earthquake investigations and education; development and improvement of design and construction techniques; improvement of mitigation capacity; and accelerated application of research results. The NEHRP designates the Federal Emergency Management Agency (FEMA) as the lead agency of the program and assigns it with several planning, coordinating, and reporting responsibilities. Programs under NEHRP help inform and guide planning and building code requirements such as emergency evacuation responsibilities and seismic code standards.

Occupational Safety and Health Administration (OSHA) Regulations

OSHA's Excavation and Trenching standard, Title 29 of the Code of Federal Regulations (CFR), Part 1926.650, covers requirements for excavation and trenching operations. OSHA requires that all excavations in which employees could potentially be exposed to cave-ins be protected by sloping or benching the sides of the excavation, supporting the sides of the excavation, or placing a shield between the side of the excavation and the work area.

State

The following state regulations pertaining to geology, soils, and seismic hazards would apply to the Project.

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (California Public Resources Code Section 2621) was enacted by the State of California in 1972 to address the hazard of surface faulting to structures for human occupancy. The Alquist-Priolo Earthquake Fault Zoning Act was a direct result of the 1971 San Fernando Earthquake in Southern California, which was associated with extensive surface fault ruptures that damaged homes, commercial buildings, and other structures. The primary purpose of the Alquist-Priolo Earthquake Fault Zoning Act is to prevent the construction of buildings intended for human occupancy on the surface traces of active faults. The Alquist-Priolo Earthquake Fault Zoning Act is also intended to provide citizens with increased safety and minimize the loss of life during and immediately following earthquakes, by facilitating seismic retrofitting to strengthen buildings against ground shaking.

The Alquist-Priolo Earthquake Fault Zoning Act requires the State Geologist to establish regulatory zones, known as "earthquake fault zones," around the surface traces of active faults and to issue appropriate maps to assist cities and counties in planning, zoning, and building regulation functions. Maps are distributed to all affected cities and counties for the controlling of new or renewed construction and are required to sufficiently define potential surface rupture or fault creep. The State Geologist is charged with continually reviewing new geologic and seismic data and revising existing zones and delineating additional earthquake fault zones when warranted by new information.

Local agencies must enforce the Alquist-Priolo Earthquake Fault Zoning Act in the development permit process, where applicable, and may be more restrictive than state law requires. According to the Alquist-Priolo Earthquake Fault Zoning Act, before a project can be permitted, cities and counties shall require a geologic investigation, prepared by a licensed geologist, to demonstrate that buildings will not be constructed across active faults. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back a minimum of 50 feet. The Alquist-Priolo Earthquake Fault Zoning Act and its regulations are presented in California Department of Conservation, California Geological Survey, Special Publication 42, Fault-Rupture Hazard Zones in California.

Seismic Hazards Mapping Act

In order to address the effects of strong ground shaking, liquefaction, landslides, and other ground failures due to seismic events, the State of California passed the Seismic Hazards Mapping Act of 1990 (California Public Resources Code Sections 2690–2699). Under the Seismic Hazards Mapping Act, the State Geologist is required to delineate "seismic hazard zones." Cities and counties must regulate certain development projects

within these zones until the geologic and soil conditions of the project site are investigated and appropriate mitigation measures, if any, are incorporated into development plans. The State Mining and Geology Board provides additional regulations and policies to assist municipalities in preparing the Safety Element of their General Plan and encourage land use management policies and regulations to reduce and mitigate those hazards to protect public health and safety.

Under California Public Resources Code Section 2697, cities and counties shall require, prior to the approval of a project located in a seismic hazard zone, a geotechnical report defining and delineating any seismic hazard. Each city or county shall submit one copy of each geotechnical report, including mitigation measures, to the State Geologist within 30 days of its approval. California Public Resources Code Section 2698 does not prevent cities and counties from establishing policies and criteria that are stricter than those established by the State Mining and Geology Board.

State publications supporting the requirements of the Seismic Hazards Mapping Act include the California Geological Survey Special Publication 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California, and Special Publication 118, Recommended Criteria for Delineating Seismic Hazard Zones in California. The objectives of Special Publication 117A are to assist in the evaluation and mitigation of earthquake-related hazards for projects within designated zones of required investigations and to promote uniform and effective statewide implementation of the evaluation and mitigation elements of the Seismic Hazards Mapping Act. Special Publication 118 implements the requirements of the Seismic Hazards Mapping Act in the production of Probabilistic Seismic Hazard Maps for the state.

California Building Standards Code

The state regulations protecting structures from geo-seismic hazards are contained in the California Building Code (CBC; 24 CCR, Part 2), which is updated on a triennial basis. These regulations apply to public and private buildings in the state. Until January 1, 2008, the CBC was based on the then-current Uniform Building Code and contained additions, amendments, and repeals specific to building conditions and structural requirements of the State of California. The 2022 CBC, effective January 1, 2023, is based on the current (2021) International Building Code and enhances the sections dealing with existing structures. Seismic-resistant construction design is required to meet more stringent technical standards than those set by previous versions of the CBC.

Chapters 16 and 16A of the 2022 CBC include structural design requirements governing seismically resistant construction, including (but not limited to) factors and coefficients used to establish seismic site class and seismic occupancy category for the soil/rock at the building location and the proposed building design. Chapters 18 and 18A include (but are not limited to) the requirements for foundation and soil investigations (Sections 1803 and 1803A); excavation, grading, and fill (Sections 1804 and 1804A); damp-proofing and water-proofing (Sections 1805 and 1805A); allowable load-bearing values of soils (Sections 1806 and 1806A); the design of foundation walls, retaining walls, embedded posts and poles (Sections 1807 and 1807A), and foundations (Sections 1808 and 1808A); and design of shallow foundations (Sections 1809 and 1809A) and deep foundations (Sections 1810 and 1810A). Chapter 33 of the 2022 CBC includes (but is not limited to) requirements for safeguards at work sites to ensure stable excavations and cut or fill slopes (Section 3304).

Construction activities are subject to occupational safety standards for excavation and trenching, as specified in the California Safety and Health Administration regulations (Title 8 of the California Code of Regulations) and in Chapter 33 of the CBC. These regulations specify the measures to be used for excavation and trench work where

workers could be exposed to unstable soil conditions. The Project would be required to employ these safety measures during excavation and trenching.

Construction General Permit (SWRCB Order 2009-0009-DWQ, as amended)

For stormwater discharges associated with construction activity in the State of California, the State Water Resources Control Board (SWRCB) has adopted the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) to avoid and minimize water quality impacts attributable to such activities. In accordance with National Pollutant Discharge Elimination System Phase I Permit requirements, the Construction General Permit applies to all projects in which construction activity disturbs 1 acre or more of soil. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground, such as stockpiling and excavation. The Construction General Permit requires the development and implementation of a stormwater pollution prevention plan (SWPPP), which would include and specify water quality best management practices (BMPs) designed to prevent pollutants from contacting stormwater and keep all products of erosion from moving off site into receiving waters. Routine inspection of all BMPs is required under the provisions of the Construction General Permit, and the SWPPP must be prepared and implemented by qualified individuals as defined by the SWRCB.

Local

The following local/regional regulations pertaining to geology, soils, and seismic hazards would apply to the Project.

Santa Clara County General Plan

The Safety and Noise Element of the General Plan provides the following goals and policies potentially relevant to the Project:

Policy C-SH 33

Development in areas of natural hazards should be designed, located, and otherwise regulated to reduce associated risks, by regulating the type, density, and placement of development where it will not:

A. Be directly jeopardized by hazards;
B. Increase hazard potential; and
C. Increase risks to neighboring properties.

Paleontological resources are included in the Resource and Conservation Chapter (Heritage Resources) of the General Plan, which provides the following strategies and policies relevant to the Project:

R-RC 81. Heritage resources within the rural unincorporated areas of Santa Clara County shall be preserved, restored wherever possible, and commemorated as appropriate for their scientific, cultural, historic and place values.

R-RC 82. The following strategies should provide overall direction to efforts to preserve heritage resources:

- Inventory and evaluate heritage resources.

- Prevent, or minimize, adverse impacts on heritage resources.
- Restore, enhance, and commemorate resources as appropriate.

Strategy #1: Inventory and Evaluate Heritage Resources

R-RC 83. The County's Heritage Resources data base shall be maintained and used to review private development projects and guide the design of public projects.

Strategy #2: Prevent or Minimize Adverse Impacts on Heritage Resources

R-RC 85. No heritage resource shall knowingly be allowed to be destroyed or lost through a discretionary action (zoning, subdivision site approval, grading permit, building permit, etc.) of the County of Santa Clara unless:

- the site or resource has been reviewed by experts and the County Historic Heritage Commission and has been found to be of insignificant value; or
- there is an overriding public benefit from the project and compensating mitigation to offset the loss is made part of the project.

R-RC 86. Projects in areas found to have heritage resources shall be conditioned and designed to avoid loss or degradation of the resources. Where conflict with the resource is unavoidable, mitigation measures that offset the impact may be imposed.

R-RC 88. For projects receiving environmental assessment, expert opinions and field reconnaissance may be required if needed at the applicant's expense to determine the presence, extent, and condition of suspected heritage resources and the likely impact of the project upon the resources.

R-RC 90. Heritage and old growth trees, particularly redwoods, should not be cut, except in instances where public safety is jeopardized.

Strategy #3: Restore, Enhance and Commemorate Resources

R-RC 93. Heritage resources should be restored, enhanced and commemorated as appropriate to the value and significance of the resource. All historic rehabilitation activities should comply with the Secretary of Interior's Standards for Rehabilitation.

County of Santa Clara Code

In addition to the adoption of the CBC by reference, the County Code also contains rules and regulations that govern activities that involve new construction. These rules and regulations include seismic safety requirements for certain building types that represent additions, deletions, and amendments to the 2022 California Building Code (Division C3 Article 2). The stated goal of these ordinances is to promote public safety and welfare by reducing the risk of death or injury that could result from earthquake damage to certain types of older buildings during moderate or strong earthquakes. Based on the findings of required structural analysis, deficient buildings may need to be strengthened or demolished.

3.7.3 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment with respect to geology and soils if the project would:

GEO-1: Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. (Refer to Division of Mines and Geology Special Publication 42.)
2. Strong seismic ground shaking.
3. Seismic-related ground failure, including liquefaction.
4. Landslides

GEO-2: Result in substantial soil erosion or the loss of topsoil.

GEO-3: Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

GEO-4: Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.

GEO-5: Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

GEO-6: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

3.7.4 Methodology

As described in Chapter 2, Project Description, the Project consists of amendments to the County's Zoning Ordinance. The Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. Although the Project would not directly construct new development, it would allow and facilitate new agriculture-supportive uses that could directly result in construction or operational impacts to the environment. The geology and soils analysis considers whether the Project would exacerbate existing geologic and seismic hazards which could expose people or structures to potential substantial adverse effects. Geologic hazards consider potential seismic hazards (e.g., earthquakes), liquefaction, soil expansion, landslides, subsidence, expansive soils, and paleontological resources. The method to determine significance of potential impacts is done by reviewing the project area against the location of seismic hazards, such as active fault, landslide, and liquefaction zones and consideration of existing regulatory requirements. For portions of the project located within the aforementioned zones, it is assumed that all construction would adhere to existing building code requirements, and then if still necessary to reduce potential impacts, mitigation measures can be provided. For determination of significant impacts unrelated to seismic hazard zones, the analysis considers the Project buildout against existing rules and

regulations on a federal, state, and local level. Typically, compliance with all applicable regulations would ensure a less than significant impact towards future development and the people that would eventually live there.

3.7.5 Environmental Impacts

Impact GEO-1: Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. (Refer to Division of Mines and Geology Special Publication 42.)?

According to Figure 3.7-1, *Regional Faults*, and Figure 3.7-2*, Seismic Hazard Zones*, which depict the Alquist-Priolo zones for the Holocene-Active faults, the San Andreas, Hayward, and Calaveras faults along with their associated Alquist-Priolo Earthquake Fault Zones all intersect the project area (County boundaries).

The Project would amend the County's Zoning Ordinance for rural zoning districts that could promote agriculture-supportive development. More details on the Project can be found in Chapter 2, Project Description. While the Project would not directly construct new residential units, it would promote and facilitate new agricultural and agriculture-supportive uses and other development in various locations throughout the rural zoning districts. The siting of these new structures would have to comply with the requirements of the Alquist-Priolo Earthquake Fault Zoning Act, the purpose of which is to prevent the construction of residential buildings or any habitable structures, defined as a building that would be occupied by someone for at least 2,000 hours per year, on top of the traces of active faults. In addition, the Project would not directly or indirectly cause or exacerbate existing fault rupture risks to people from the construction of new buildings and associated infrastructure in the project area. As a result, a **less-than-significant** impact related to surface rupture of a known earthquake fault would occur.

ii) Strong seismic ground shaking?

The project area is located in a seismically active area and there is a potential for strong seismic ground shaking to occur throughout Santa Clara County with varying levels of severity depending on various factors of the seismic event and underlying characteristics of underlying geologic materials (e.g., distance to the source of the earthquake, duration of shaking, and presence of loose alluvial soils). However, the Project would not directly or indirectly cause substantial adverse effects involving strong seismic ground shaking. The Project does not directly include construction of new structures, but new structures including agriculture-supportive uses could be built as a result of the rezoning. All development within the project area would be required to comply with the seismic safety requirements of the California Building Code (CBC) as well as any local building code amendments. The CBC provides seismic standards for earthquake-resistant structural design that include considerations for on-site soil conditions, occupancy, and the configuration of the structure, including the structural system and height. Although substantial damage to structures may be unavoidable during large earthquakes, the proposed structures would be designed to resist structural collapse and thereby provide reasonable protection from serious injury, catastrophic property damage, and loss of life. As previously discussed, Chapters 18 and 18A of the CBC include (but are not limited to) the requirements for foundation and soil investigations (Sections 1803 and 1803A); excavation, grading, and fill (Sections 1804 and 1804A); damp-proofing and water-proofing

(Sections 1805 and 1805A); allowable load-bearing values of soils (Sections 1806 and 1806A); the design of foundation walls, retaining walls, embedded posts and poles (Sections 1807 and 1807A), and foundations (Sections 1808 and 1808A); and design of shallow foundations (Sections 1809 and 1809A) and deep foundations (Sections 1810 and 1810A).

The County building regulations are included in the County Code, Title C, where the County has adopted the most recent version of the CBC by reference. Future development projects facilitated by the Project would be required to adhere to the provisions of the CBC, which are imposed on project developments by the County during the building plan check and development review process. Each future development would be preceded by a detailed, site-specific geotechnical investigation. The geotechnical investigation would calculate seismic design parameters pursuant to CBC requirements, and would include foundation and structural design recommendations, as needed, to reduce hazards to people and structures arising from ground shaking. Compliance with the requirements of the CBC for structural safety during a seismic event would reduce the hazards associated with strong seismic ground shaking to a less than significant level.

In conjunction with these CBC requirements, as well as the County General Plan Safety Element policies and County Code, which are aimed at mitigating and minimizing geologic hazards, the Project would not directly or indirectly cause substantial adverse effects involving strong seismic ground shaking. Impacts would be **less than significant**.

iii) Seismic-related ground failure, including liquefaction?

Implementation of the Project could potentially result in construction of new buildings, in the project area. As seen on Figure 3.7-2, *Seismic Hazard Zones*, the project area includes areas that have been identified as being susceptible to liquefaction in accordance with the Seismic Hazards Zonation Program. Liquefaction potential, however, is highly dependent on site specific conditions of the underlying materials.

Hazards associated with soil liquefaction and seismic-related ground failure include temporary loss of soil-bearing capacity, lateral spreading, differential compaction, and slope instability. In regions with extremely saturated, unstable soils, select areas of soil may be stabilized using a gelling agent prior to construction; shoring may be required to stabilize temporary excavations; and structural piles may be required for building foundations. In locations with high groundwater levels, dewatering may be required to ensure a dry construction area during foundation construction.

In compliance with the CBC, the County would require completion of final design level geotechnical studies to address any geologic hazards associated with liquefaction and seismic-related ground failure. Final design level geotechnical investigations for future development projects considered for approval by the County pursuant to the Project would be required to evaluate the potential for liquefaction as well as other seismic ground failure such as lateral spreading, under the respective future project sites and provide geotechnical measures such as soil treatments or removal and replacement with engineered fills. Final design level geotechnical reports would provide recommendations for grading and for foundation design to reduce hazards to people and structures arising from liquefaction and other seismic-related ground failure. Future development projects facilitated by the Project would be required to adhere to existing building and grading codes, and construction-related grading requires the preparation and submittal of site-specific grading plans and geotechnical reports that must be reviewed and approved by the County beforehand. Each future development project would be required to comply with the

recommendations in the geotechnical investigation report and comply with the CBC, thereby reducing such hazards.

Although future development within the project area could be subject to liquefaction, the Project would not increase or exacerbate the potential for liquefaction to occur and therefore would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismically related ground failure, including liquefaction. Impacts would be **less than significant**.

iv) Landslides?

The rural zoning districts include upland areas that are mapped as susceptible to earthquake induced landslides (Figure 3.7-2, *Seismic Hazard Zones*). The propensity for earthquake-induced landslides is dependent on site specific conditions but is generally greatest in hilly areas, with steep slopes and bedrock or soils that are prone to mass movement, especially as identified by the CGS as part of the Seismic Hazards Zonation Program.

Notwithstanding the above, development associated with the Project would be completed in compliance with CBC regulations and County Ordinances, as well as compliance with County General Plan policies related to grading, thus reducing the potential for any slope instability to occur. Therefore, implementation of the Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. Impacts are considered **less than significant.**

Impact GEO-2 Would the project result in substantial soil erosion or the loss of topsoil?

Construction

The Project would not directly result in new construction but would facilitate future construction of limited agriculture-supportive uses, all of which would involve ground-disturbing activities. The Project would also establish limits to the size, scale, and intensity of development within the rural zoning districts. Nevertheless, there is a potential for erosion and loss of topsoil during construction of allowable land uses.

In general, upland areas with steeper slopes are more susceptible to erosion than flatlands. In either case, grading temporarily increases the potential for erosion by removing protective vegetation, changing natural drainage patterns, and in some cases producing over- steepened slopes. The Santa Clara County Grading Ordinance under Chapter III of Division C12, establishes the minimum requirements for all grading and drainage alteration work done within the unincorporated County lands. Proposed development plans are reviewed for compliance with the requirements stated in the Grading Ordinance and other applicable code requirements, to prevent soil erosion primarily for the purpose of protecting surface water quality, neighboring properties, the environment, and the transport of soil sediments.

Additionally, state and federal National Pollutant Discharge Elimination System requirements include preparation and implementation of a SWPPP for projects with cumulative ground disturbance in excess of one acre. In compliance with Construction General Permit requirements, the SWPPP would establish erosion and sediment control BMPs for construction activities. Typical examples of erosion-related construction BMPs include:

1. silt fences and/or fiber rolls installed along limits of work and/or the project construction site;

2. stockpile containment and exposed soil stabilization structures (e.g., visqueen plastic sheeting, fiber rolls, gravel bags, and/or hydroseed);
3. runoff control devices (e.g., fiber rolls, gravel bag barriers/chevrons, etc.) used during construction phases conducted during the rainy season;
4. wind erosion (dust) controls;
5. tracking controls at the site entrance, including regular street sweeping and tire washes for equipment; and
6. regular inspections and maintenance of BMPs.

These BMPs would be refined and/or added to as necessary by a qualified SWPPP professional to meet the performance standards in the Construction General Permit.

Development activities would comply with County grading and erosion control standards to minimize soil erosion. Compliance with the Construction General Permit, as well as with Santa Clara County Ordinances would ensure that soil erosion or loss of topsoil impacts would be **less than significant.**

Operation

In general, once construction of any future development within the project area is complete, soils are either covered by impervious surfaces or landscaped where the potential for erosion is much reduced if not eliminated. Compliance with regulatory stormwater drainage control requirements are typically sufficient to reduce the potential for erosion or loss of top soil to less than significant levels. As a result, Project operations would result in a **less-than-significant** impact associated with soil erosion and loss of topsoil.

Impact GEO-3: Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

As described above for Impact GEO-1(iii), the Project would not increase the potential for liquefaction and lateral spreading to occur. Therefore, potential impacts associated with liquefaction/lateral spreading would be less than significant.

Areas of unstable geologic units or unstable or expansive soils are dependent on site-specific conditions but could be present within the project area. Construction of allowed (including ministerial “Limited” uses) under the Project could expose structures or persons to potentially significant hazards due to unstable geologic units or soils if not designed appropriately. However, individual development projects would be required to adhere to existing building and grading codes. These codes contain provisions for soil preparation/conditioning to minimize hazards from unstable and expansive soils. Grading and soil compaction also requires the preparation of site-specific grading plans, soils and geology reports to address liquefaction, subsidence, and other potential geologic or soil stability issues. Such plans and reports must be tendered to the County for review and approval before future projects can commence. Submittal of these technical plans and studies would ensure that hazards arising from unstable and expansive soils would be minimized to the extent practicable.

Compliance with existing state and County regulations, including building codes and County ordinances as part of the Project, would ensure that the impacts associated with erosion and topsoil loss, as well as

development atop unstable geologic units and soil or expansive soil, are minimized to the maximum extent practicable. Consequently, the overall, associated impacts would be **less than significant**.

Impact GEO-4 Would the project be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial risks to life or property?

Expansive soils are clay-rich soils that experience volumetric changes (i.e., shrink when dry and swell when wet) with changes in moisture content. These changes in volume can, over time, exert substantial pressure on foundations, resulting in structural distress and/or damage. The rural zoning districts affected by the Project are underlain by a variety of soils, but could contain expansive soils. As previously mentioned, future development projects facilitated by the Project would be required to submit a Geotechnical Investigation for approval by the County prior to commencement of construction activities. In the event a site-specific geotechnical investigation identifies expansive soils, Chapter 18 of the CBC includes measures to alleviate potential impacts of expansive soils:

- Excavation of expansive soils until such a depth that competent material is encountered
- Installation of foundations designed to resist forces exerted on the foundation due by expansive soils
- Stabilization of the soils by chemical, dewatering, pre-saturation, or equivalent techniques

Such requirements would be set forth in the subsequent final design-level geotechnical investigations prepared in accordance with the CBC. Construction occurring as a result of the Project would be in compliance with the CBC, and County building codes and requirements, and as a result, would not increase or exacerbate the potential for expansive soils to create substantial direct or indirect risks to life or property. As a result, impacts would be **less than significant**.

Impact GEO-5: Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

In rural areas where public sanitary sewer systems are not available, new development would require the use of septic tanks or alternative wastewater disposal systems. However, in the event that a septic or other alternative wastewater system is proposed, the project proponent would be required to comply with the County's ordinance governing individual on-site wastewater treatment systems (OWTS). Santa Clara County Onsite Wastewater Systems Ordinance is codified in Sections B11-60 through B11-95 of the Santa Clara County Code, which requires initial testing of soils to ensure that the underlying materials of the proposed location can accommodate the proposed OWTS.

As such, with adherence to the County Code, there would be a **less-than-significant** impact from implementation of the Project at sites where soils might otherwise not be capable of supporting the use of septic tanks or alternative wastewater disposal systems.

Impact GEO-6 Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The project area is underlain by geological units/formations ranging from no paleontological sensitivity to high paleontological sensitivity. The Project would not directly include new construction but would facilitate future construction of limited agriculture-supportive uses, all of which would involve ground

disturbing activities. The Project would also establish limits to the developable area within the rural zoning districts. Nevertheless, there is a potential for impacts to paleontological resources to occur during construction of allowable land uses in areas underlain by geological units/formations with high paleontological sensitivity. However, a Demand Assessment Study conducted for the Project indicates that the Project would not induce growth by streamlining certain uses (which are already allowed under the existing Zoning Ordinance), and, therefore, the overall amount of development is not expected to change (although future individual projects may be less intense, due to the proposed development standards) (BAE 2021). While future individual development projects facilitated by the Project have the potential to affect paleontological resources, the overall impact to paleontological resources would not significantly change under the Project. It is anticipated that ground disturbance would be minimal, and the construction of agriculture-supportive uses would typically be located on previously disturbed land. Each future individual project would be required to avoid disturbance of paleontological resources to the extent feasible in accordance with federal, state, and local guidelines (see Section 3.7.2). Additionally, existing policies in the County General Plan encourage protection of paleontological resources. Policy R-RC 81 states that the general approach to heritage resources preservation should include inventorying and evaluating heritage resources (which include paleontological resources), preventing or minimizing adverse impacts, and restoring, enhancing, and commemorating resources as appropriate. Policy R-RC-85 would address future development projects allowed under the proposed zoning amendments. Overall, the Project would not cause a substantial adverse change in the significance of paleontological resources and impacts would be **less than significant.**

3.7.6 Cumulative Impacts

All of the greater Bay Area is located in an area of a relatively high seismic activity, including cumulative projects in Santa Clara County. Potential cumulative impacts on geology and soils would result from projects within Santa Clara County that combine with projects associated with the proposed rezoning to create geologic hazards, including unstable geologic conditions, or contribute substantially to erosion. All cumulative development, within the project area and adjacent cities would be subject to the CBC, which contains requirements for development in areas susceptible to seismic activity to include seismic design measures into site preparation and foundation design. Additionally, cumulative projects would be subject to the Alquist-Priolo Earthquake Fault Zone Act, which restricts development on and near active fault traces. Due to the site-specific nature of geological conditions (i.e., soils, geological features, seismic features, etc), geology and soils impacts are typically assessed on a project-by-project basis, rather than on a cumulative basis. Nonetheless, cumulative growth through Project buildout would expose a greater number of people to seismic hazards. Future cumulative development under the Project and the surrounding area would be subject to the same local, state, and federal regulations pertaining to geology and soils, including CBC and Santa Clara County Building Code requirements (or city building code requirements, as appropriate). Therefore, cumulative development in the region would not result in a significant cumulative impact. The Project, in combination with other cumulative projects, would not contribute to a potentially significant cumulative impact. Cumulative impacts would be **less than significant.**

3.7.7 Mitigation Measures

No mitigation measures are required.

3.7.8 Level of Significance After Mitigation

No significant impacts relating to geological resources have been identified.

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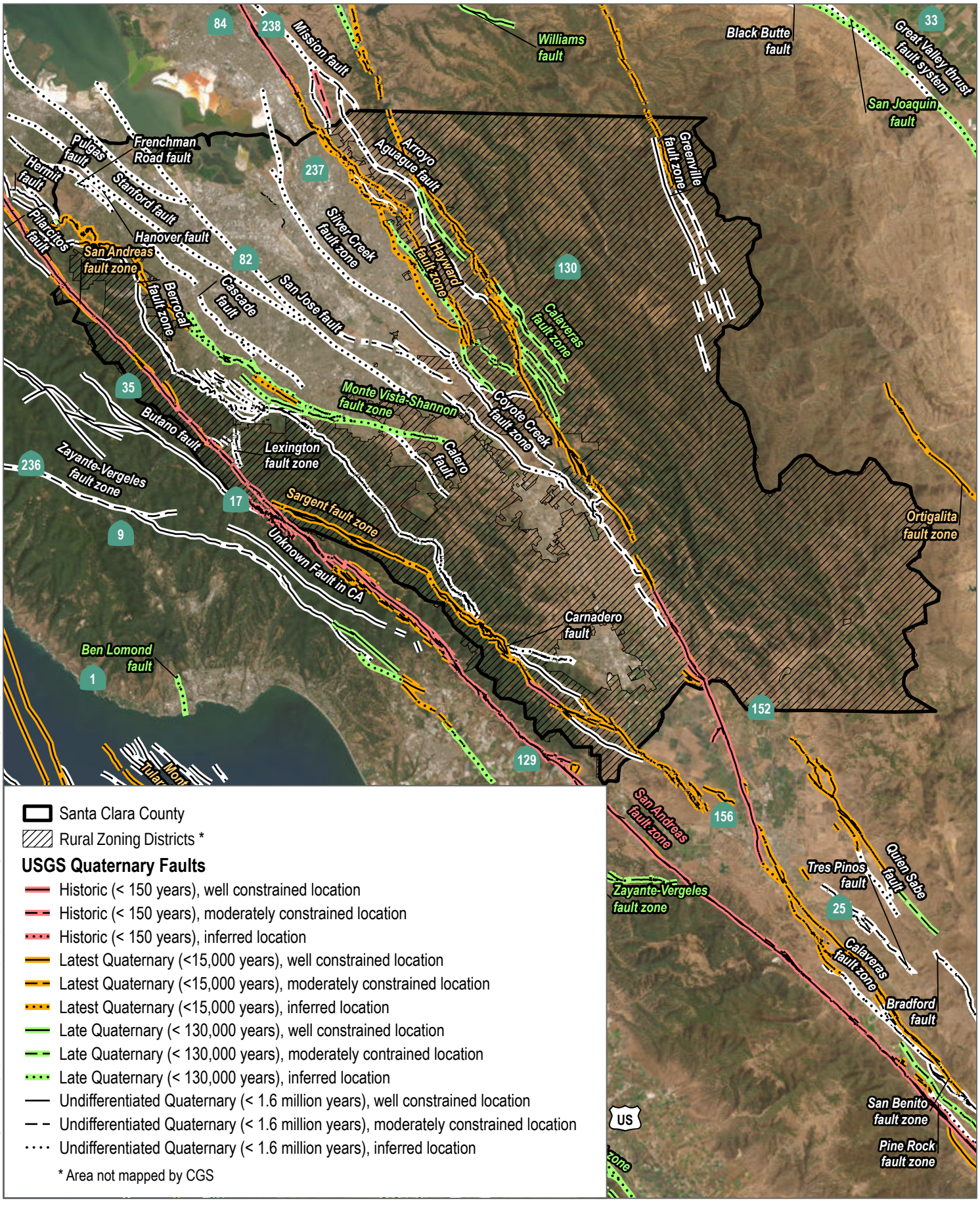
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SOURCE: Esri 2023; USGS 2023

FIGURE 3.7-1

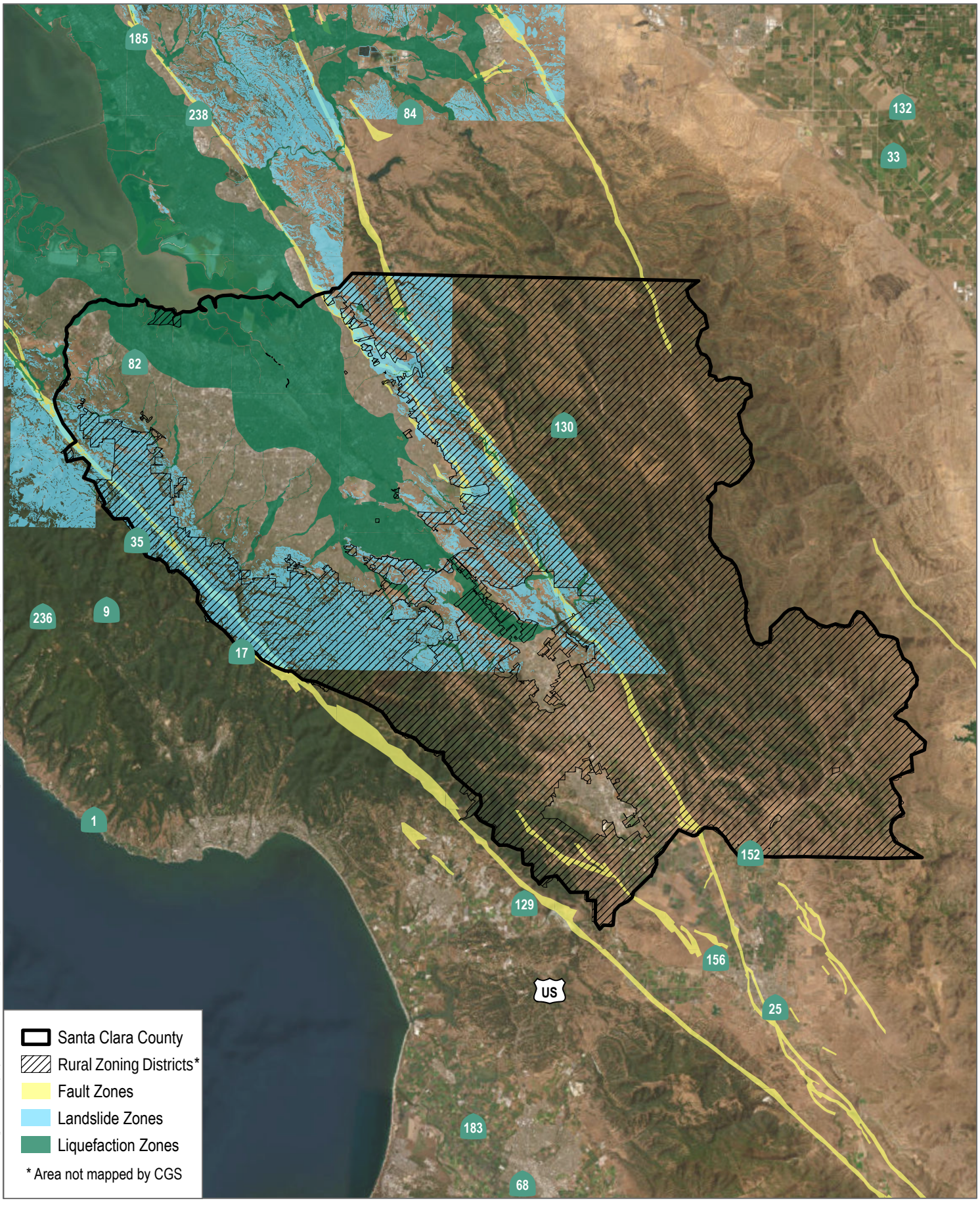
Regional Faults

Santa Clara County Rural Zoning Ordinance Amendments EIR

DUDEK

0 7 Miles

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SOURCE: Esri 2023; USGS 2023

FIGURE 3.7-2

Seismic Hazard Zones

Santa Clara County Rural Zoning Ordinance Amendments EIR

DUDEK

0 3.75 7.5 Miles

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3.8 Greenhouse Gas

This section of the Program Environmental Impact Report (PEIR) evaluates potential impacts related to greenhouse gas (GHG) emissions from implementation of the County of Santa Clara (County) Rural Zoning Amendments and Agricultural Impact Threshold (Project). This section includes a discussion of the existing conditions to present the environmental baseline for the Project and an analysis of GHG emissions of a representative development allowed under the Project, and compliance with state or local GHG reduction plans.

3.8.1 Environmental Setting

3.8.1.1 Climate Change Overview

Climate change refers to any significant change in measures of climate—such as temperature, precipitation, or wind patterns—lasting for an extended period of time (decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system. Many factors, both natural and human, can cause changes in Earth's energy balance, including variations in the sun's energy reaching Earth, changes in the reflectivity of Earth's atmosphere and surface, and changes in the greenhouse effect, which affects the amount of heat retained by Earth's atmosphere (EPA 2017a).

The greenhouse effect is the trapping and build-up of heat in the atmosphere (troposphere) near the Earth's surface. The greenhouse effect traps heat in the troposphere through a threefold process as follows: short-wave radiation emitted by the Sun is absorbed by the Earth, the Earth emits a portion of this energy in the form of long-wave radiation, and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and toward the Earth. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature and creates a pleasant, livable environment on the Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise.

The scientific record of the Earth's climate shows that the climate system varies naturally over a wide range of time scales and that, in general, climate changes prior to the Industrial Revolution in the 1700s can be explained by natural causes, such as changes in solar energy, volcanic eruptions, and natural changes in GHG concentrations. However, recent climate changes, in particular the warming observed over the past century, cannot be explained by natural causes alone. Rather, it is extremely likely that human activities have been the dominant cause of warming since the mid-twentieth century and are the most significant driver of observed climate change (IPCC 2013, EPA 2017a). Human influence on the climate system is evident from the increasing GHG concentrations in the atmosphere, positive radiative forcing, observed warming, and improved understanding of the climate system (IPCC 2013). The atmospheric concentrations of GHGs have increased to levels unprecedented in the last 800,000 years, primarily from fossil fuel emissions and secondarily from emissions associated with land use changes (IPCC 2013). Continued emissions of GHGs will cause further warming and changes in all components of the climate system.

3.8.1.2 Greenhouse Gases

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in California Health and Safety Code section 38505(g) for purposes of administering many of the state's primary GHG emissions reduction programs, GHGs include carbon dioxide (CO_2), methane (CH_4),

nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3) (see also 14 CCR 15364.5).[1] Some GHGs, such as CO_2, CH_4, and N_2O are emitted into the atmosphere through natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Manufactured GHGs, which have a much greater heat-absorption potential than CO_2, include fluorinated gases, such as HFCs, PFCs, and SF_6, which are associated with certain industrial products and processes. The following paragraphs provide a summary of the most common GHGs and their sources.[2]

Carbon Dioxide. CO_2 is a naturally occurring gas and a by-product of human activities and is the principal anthropogenic GHG that affects the Earth's radiative balance. Natural sources of CO_2 include respiration of bacteria, plants, animals, and fungus; evaporation from oceans; volcanic out-gassing; and decomposition of dead organic matter. Human activities that generate CO_2 are from the combustion of fuels such as coal, oil, natural gas, and wood and changes in land use.

Methane. CH_4 is produced through both natural and human activities. CH_4 is a flammable gas and is the main component of natural gas. Methane is produced through anaerobic (without oxygen) decomposition of waste in landfills, flooded rice fields, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.

Nitrous Oxide. N_2O is produced through natural and human activities, mainly through agricultural activities and natural biological processes, although fuel burning and other processes also create N_2O. Sources of N_2O include soil cultivation practices (microbial processes in soil and water), especially the use of commercial and organic fertilizers, manure management, industrial processes (such as in nitric acid production, nylon production, and fossil-fuel-fired power plants), vehicle emissions, and using N_2O as a propellant (such as in rockets, racecars, and aerosol sprays).

Fluorinated Gases. Fluorinated gases (also referred to as F-gases) are synthetic powerful GHGs emitted from many industrial processes. Fluorinated gases are commonly used as substitutes for stratospheric O_3-depleting substances (e.g., CFCs, HCFCs, and halons). The most prevalent fluorinated gases include the following:

- **Hydrofluorocarbons:** HFCs are compounds containing only hydrogen, fluorine, and carbon atoms. HFCs are synthetic chemicals used as alternatives to O_3-depleting substances in serving many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are used in manufacturing.
- **Perfluorocarbons:** PFCs are a group of human-made chemicals composed of carbon and fluorine only. These chemicals were introduced as alternatives, with HFCs, to the ozone depleting substances. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing. Since PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere, these chemicals have long lifetimes, ranging between 10,000 and 50,000 years.
- **Sulfur Hexafluoride:** SF_6 is a colorless gas soluble in alcohol and ether and slightly soluble in water. SF_6 is used for insulation in electric power transmission and distribution equipment, semiconductor manufacturing, the magnesium industry, and as a tracer gas for leak detection.

1 Climate forcing substances include GHGs and other substances such as black carbon and aerosols.

2 The descriptions of GHGs are summarized from the IPCC Fourth Assessment Report (2007), CARB's "Glossary of Terms Used in GHG Inventories" (2018), and EPA's "Climate Change" (2017).

- **Nitrogen Trifluoride:** NF_3 is used in the manufacture of a variety of electronics, including semiconductors and flat panel displays.

Chlorofluorocarbons. CFCs are synthetic chemicals that have been used as cleaning solvents, refrigerants, and aerosol propellants. CFCs are chemically unreactive in the lower atmosphere (troposphere), and the production of CFCs was prohibited in 1987 due to the chemical destruction of stratospheric O_3.

Hydrochlorofluorocarbons. HCFCs are a large group of compounds, whose structure is very close to that of CFCs—containing hydrogen, fluorine, chlorine, and carbon atoms—but including one or more hydrogen atoms. Like HFCs, HCFCs are used in refrigerants and propellants. HCFCs were also used in place of CFCs for some applications; however, their use in general is being phased out.

Black Carbon. Black carbon is a component of $PM_{2.5}$, which has been identified as a leading environmental risk factor for premature death. It is produced from the incomplete combustion of fossil fuels and biomass burning, particularly from older diesel engines and forest fires. Black carbon warms the atmosphere by absorbing solar radiation, influences cloud formation, and darkens the surface of snow and ice, which accelerates heat absorption and melting. Black carbon is a short-lived substance that varies spatially, which makes it difficult to quantify the global warming potential (GWP). Diesel exhaust emissions are a major source of black carbon and are TACs that have been regulated and controlled in California for several decades to protect public health. In relation to declining DPM as a result of CARB's regulations pertaining to diesel engines, diesel fuels, and burning activities, CARB estimates that annual black carbon emissions in California have reduced by 70% between 1990 and 2010, with 95% control expected by 2020 (CARB 2014).

Water Vapor. The primary source of water vapor is evaporation from the ocean, with additional vapor generated by sublimation (change from solid to gas) from ice and snow, evaporation from other water bodies, and transpiration from plant leaves. Water vapor is the most important, abundant, and variable GHG in the atmosphere and maintains a climate necessary for life.

Ozone. Tropospheric O_3, which is created by photochemical reactions involving gases from both natural sources and human activities, acts as a GHG. Stratospheric O_3, which is created by the interaction between solar ultraviolet radiation and molecular oxygen, plays a decisive role in the stratospheric radiative balance. Depletion of stratospheric O_3, due to chemical reactions that may be enhanced by climate change, results in an increased ground-level flux of ultraviolet-B radiation.

Aerosols. Aerosols are suspensions of particulate matter in a gas emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light.

3.8.1.3 Global Warming Potential

Gases in the atmosphere can contribute to climate change both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo) (EPA 2017a). The Intergovernmental Panel on Climate Change (IPCC) developed the GWP concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to

that of 1 kilogram of a reference gas (IPCC 2014). The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in metric tons of CO_2 equivalent (MT CO_2e).

The current version of CalEEMod (Version 2022.1) assumes that the GWP for CH_4 is 25 (so emissions of 1 MT of CH_4 are equivalent to emissions of 25 MT of CO_2), and the GWP for N_2O is 298, based on the IPCC's Fourth Assessment Report (IPCC 2007).

3.8.2 Relevant Plans, Policies, and Ordinances

3.8.2.1 Federal

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (Public Law 110-140), among other key measures, would do the following, which would aid in the reduction of national GHG emissions:

- Increase 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.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020, and directs National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy-efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

Massachusetts v. U.S. Environmental Protection Agency

On April 2, 2007, in *Massachusetts v. U.S. Environmental Protection Agency*, the U.S. Supreme Court ruled that CO_2 was a pollutant and directed the EPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the EPA administrator is required to follow the language of Section 202(a) of the Clean Air Act. On December 7, 2009, the administrator signed a final rule with two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- The elevated concentrations of GHGs—CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbons, and SF_6—in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the "endangerment finding."
- The combined emissions of GHGs—CO_2, CH_4, N_2O, and hydrofluorocarbons—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is referred to as the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

EPA and National Highway Traffic Safety Administration Joint Final Rule for Vehicle standards

In response to the U.S. Supreme Court ruling discussed above, the Bush Administration issued Executive Order (EO) 13432 in 2007 directing the EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the National Highway Traffic Safety Administration (NHTSA) issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011; and, in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016 (75 FR 25324–25728).

In 2010, President Obama issued a memorandum directing the Department of Transportation, Department of Energy, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of CO_2 in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021 (77 FR 62624–63200). On January 12, 2017, EPA finalized its decision to maintain the current GHG emissions standards for model years 2022–2025 cars and light trucks (EPA 2017b).

In August 2016, the EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO_2 emissions by approximately 1.1 billion MT and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program (EPA and NHTSA 2016).

In August 2018, EPA and NHTSA proposed to amend certain fuel economy and GHG standards for passenger cars and light trucks and establish new standards for model years 2021 through 2026. Compared to maintaining the post-2020 standards now in place, the 2018 proposal would increase U.S. fuel consumption by about half a million barrels per day (2%–3% of total daily consumption, according to the Energy Information Administration) and would impact the global climate by 3/1000th of one degree Celsius by 2100 (EPA and NHTSA 2018). California and other states have stated their intent to challenge federal actions that would delay or eliminate GHG reduction measures and have committed to cooperating with other countries to implement global climate change initiatives. Thus, the timing and consequences of the 2018 federal proposal are speculative at this time.

In 2019, the EPA and NHTSA published the Safer Affordable Fuel-Efficient Vehicles Rule Part One: One National Program (SAFE-1)(84 Fed. Reg. 51310), which revoked California's authority to set its own GHG emissions standards and set zero-emission vehicle (ZEV) mandates in California. In March 2020, Part Two was issued which set CO_2 emissions standards and corporate average fuel economy standards for passenger vehicles and light-duty trucks for model years 2021 through 2026. In March 2022, EPA reinstated California's authority under the Clean Air Act to implement its own GHG emission standards and ZEV sales mandate. EPA's action concludes its reconsideration of the 2019 SAFE-1 rule by finding that the actions taken under the previous administration as a part of SAFE-1 were decided in error and are now entirely rescinded.

3.8.2.2 State

The Statewide GHG emissions regulatory framework is summarized as follows by category: State climate change targets, building energy, renewable energy and energy procurement, mobile sources, solid waste, water, and other State regulations and goals. The following text describes EOs, assembly bills (ABs), senate bills (SBs), and other regulations and plans that would directly or indirectly reduce GHG emissions. The State's adoption and implementation of various legislation demonstrates California's leadership in addressing the critical challenge of addressing climate change. Of importance, the Project and/or users of the Project would be required to comply with the various regulatory measures that would reduce GHG emissions, which would reduce the Project contribution to cumulative GHG emissions and associated climate change impacts.

State Climate Change Targets

The State has taken a number of actions to address climate change. These include EOs, legislation, and CARB plans and requirements. These are summarized as follows.

EO S-3-05

EO S-3-05 (June 2005) established California's GHG emissions reduction targets and laid out responsibilities among the State agencies for implementing the EO and for reporting on progress toward the targets. This EO established the following targets:

- By 2010, reduce GHG emissions to 2000 levels
- By 2020, reduce GHG emissions to 1990 levels
- By 2050, reduce GHG emissions to 80% below 1990 levels

EO S-3-05 also directed the California Environmental Protection Agency to report biannually on progress made toward meeting the GHG targets and the impacts to California due to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry.

AB 32

In furtherance of the goals established in EO S-3-05, the Legislature enacted AB 32 (Núñez and Pavley). The bill is referred to as the California Global Warming Solutions Act of 2006 (September 27, 2006). AB 32 provided initial direction on creating a comprehensive multiyear program to limit California's GHG emissions at 1990 levels by 2020 and initiate the transformations required to achieve the State's long-range climate objectives.

SB 32 and AB 197

SB 32 and AB 197 (enacted in 2016) are companion bills. SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that Statewide GHG emissions are reduced to 40% below 1990 levels by 2030.

AB 1279

The Legislature enacted AB 1279, the California Climate Crisis Act, in September 2022. The bill declares the policy of the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and

maintain net negative GHG emissions thereafter. Additionally, the bill requires that by 2045, statewide anthropogenic GHG emissions be reduced to at least 85% below 1990 levels.

Although AB 1279 establishes an overall policy to achieve net zero greenhouse gas emissions as soon as possible, but no later than 2045, recognizing the need to implement CO_2 removal and carbon capture, utilization and storage technologies, the Legislature established a specific target of 85% below 1990 levels by 2045 for anthropogenic GHG emissions. Therefore, the net zero target does not directly apply to development projects, but the 2045 target of 85% below 1990 levels represents the reductions required to contribute to accomplishing the State's overall net zero policy.

CARB's Climate Change Scoping Plan

One specific requirement of AB 32 is for CARB to prepare a "scoping plan" for achieving the maximum technologically feasible and cost-effective GHG emission reductions by 2020 (Health and Safety Code, Section 38561(a)), and to update the plan at least once every 5 years. In 2008, CARB approved the first scoping plan. The *Climate Change Scoping Plan: A Framework for Change* (*Scoping Plan*) included a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs calculated to meet the 2020 Statewide GHG emission limit and initiate the transformations needed to achieve the State's long-range climate objectives.

In 2014, CARB approved the first update to the Scoping Plan. The *First Update to the Climate Change Scoping Plan: Building on the Framework* (*First Update)* defined the State's GHG emission reduction priorities for the next 5 years and laid the groundwork to start the transition to the post-2020 goals set forth in EOs S-3-05 and B-16-2012. The *First Update* concluded that California is on track to meet the 2020 target but recommended a 2030 mid-term GHG reduction target be established to ensure a continuum of action to reduce emissions (CARB 2014).

In 2015, as directed by EO B-30-15, CARB began working on an update to the Scoping Plan to incorporate the 2030 target of 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80% below 1990 levels by 2050 as set forth in S-3-05.

In December 2017, CARB adopted the *2017 Climate Change Scoping Plan Update (2017 Scoping Plan)* (CARB 2017). The 2030 Scoping Plan builds on the successful framework established in the initial Scoping Plan and First Update, while identifying new, technologically feasible and cost-effective strategies that will serve as the framework to achieve the 2030 GHG target and define the State's climate change priorities to 2030 and beyond.

The Scoping Plan recommends strategies for implementation at the Statewide level to meet the goals of AB 32, SB 32, and the EOs and establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. A project is considered consistent with the statutes and EOs if it meets the general policies in reducing GHG emissions to facilitate the achievement of the State's goals and does not impede attainment of those goals. As discussed in several cases, a given project need not be in perfect conformity with each and every planning policy or goals to be consistent. A project would be consistent, if it will further the objectives and not obstruct their attainment. Notably, CARB is currently developing the 2022 Scoping Plan Update, which will assess progress towards achieving the SB 32 2030 target and lay out a path to achieve carbon neutrality by 2050.

The Final 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) was issued on November 16, 2022 (CARB 2022) and approved on December 15, 2022. The 2022 Scoping Plan lays out a path

not just to carbon neutrality by 2045 but also to the 2030 GHG emissions reduction target. The 2022 Scoping Plan analyzed four scenarios, with the objective of informing the most viable path to remain on track to achieve the 2030 GHG reduction target. The scenario modeling indicates that, if the plan described in the Proposed Scenario is fully implemented, and done so on schedule, the State would cut GHG emissions by 85% below 1990 levels, result in a 71% reduction in smog-forming air pollution, reduce fossil fuel consumption by 94%, create 4 million new jobs, among other benefits (CARB 2022).

The Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32, SB 32, and the EOs; it also establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. A project is considered consistent with the statutes and EOs if it would meet the general policies in reducing GHG emissions in order to facilitate the achievement of the state's goals and would not impede attainment of those goals.

EO B-55-18

EO B-55-18 (September 2018) establishes a Statewide policy for California to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net-negative emissions thereafter. The goal is an addition to the existing Statewide targets of reducing the State's GHG emissions. CARB will work with relevant State agencies to ensure that future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.

Building Energy

Title 24, Part 6

Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically established Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These regulations are carefully scrutinized and analyzed for technological and economic feasibility (California Public Resources Code, Section 25402(d)) and cost effectiveness (California Public Resources Code, Sections 25402(b)(2) and (b)(3)). As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The 2019 Title 24 Building Energy Efficiency Standards were adopted in December 2018 and became effective January 1, 2020. In general, single-family residences built to the 2019 standards are anticipated to use approximately 7% less energy due to energy efficiency measures than those built to the 2016 standards; once rooftop solar electricity generation is factored in, single-family residences built under the 2019 standards would use approximately 53% less energy than those under the 2016 standards (CEC 2018). Nonresidential buildings built to the 2019 standards are anticipated to use an estimated 30% less energy than those built to the 2016 standards (CEC 2018a).

The current Title 24 standards are the 2022 Title 24 Building Energy Efficiency Standards. On August 11, 2021, the CEC adopted the 2022 Energy Code. In December 2021, it was approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The 2022 Energy Code encourages efficient electric heat pumps, establishes 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 Energy Code.

Title 24, Part 11

In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CALGreen and establishes minimum mandatory standards as well as voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The 2019 CALGreen standards are the current applicable standards. For nonresidential projects, some of the key mandatory CALGreen 2019 standards involve requirements related to bicycle parking, designated parking for clean air vehicles, electric vehicle (EV) charging stations, shade trees, water conserving plumbing fixtures and fittings, outdoor potable water use in landscaped areas, recycled water supply systems, construction waste management, excavated soil and land clearing debris, and commissioning (24 CCR Part 11).

Title 20

Title 20 of the California Code of Regulations requires manufacturers of appliances to meet State and federal standards for energy and water efficiency. The CEC certifies an appliance based on a manufacturer's demonstration that the appliance meets the standards.

Renewable Energy and Energy Procurement

SB 1078, EO-14-08, SBX1-2, SB 350, and SB 100

SB 1078 (Sher) (September 2002) established the Renewable Portfolio Standard (RPS) program, which required an annual increase in renewable generation by the utilities equivalent to at least 1% of sales, with an aggregate goal of 20% by 2017. EO S-14-08 (November 2008) required that all retail suppliers of electricity in California serve 33% of their load with renewable energy by 2020. SBX1-2 expanded the RPS by establishing a renewable energy target of 20% of the total electricity sold to retail customers in California per year by December 31, 2013, and 33% by December 31, 2020, and in subsequent years. SB 350 (October 2015) further expanded the RPS by establishing a goal of 50% of the total electricity sold to retail customers in California per year by December 31, 2030. SB 100 (2018) increased the standards set forth in SB 350 establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030, be secured from qualifying renewable energy sources. SB 100 states that it is the policy of the State that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California.

Mobile Sources

State Vehicle Standards (AB1493 and EO B-16-12)

AB 1493 (July 2002) was enacted in a response to the transportation sector accounting for more than half of California's CO_2 emissions. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the State board to be vehicles that are primarily used for noncommercial personal transportation in the State. The bill required that CARB set GHG emission standards for

motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. EO B-16-12 (March 2012) required that State entities under the governor's direction and control support and facilitate the rapid commercialization of zero-emissions vehicles. It ordered CARB, CEC, California Public Utilities Commission, and other relevant agencies to work with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve benchmark goals by 2015, 2020, and 2025. On a Statewide basis, EO B-16-12 established a target reduction of GHG emissions from the transportation sector equaling 80% less than 1990 levels by 2050. This directive did not apply to vehicles that have special performance requirements necessary for the protection of the public safety and welfare. As explained under the "Federal Vehicle Standards" description above, EPA and NHTSA approved the SAFE Vehicles Rule Part One and Two, which revoked California's authority to set its own GHG emissions standards and set zero-emission vehicle mandates in California. As President Biden issued EO 13990 to review Part One and Part Two of the SAFE Vehicles Rule, this analysis continues to utilize the best available information at this time, as set forth in EMFAC and assumed in CalEEMod.

Heavy Duty Diesel (Title 13, Division 3, Chapter 1, Section 2025)

CARB adopted the final Heavy Duty Truck and Bus Regulation, Title 13, Division 3, Chapter 1, Section 2025, on December 31, 2014, to reduce particulate matter and NO_x emissions from heavy-duty diesel vehicles. The rule requires particulate matter filters be applied to newer heavier trucks and buses by January 1, 2012, with older vehicles required to comply by January 1, 2015. The rule will require nearly all diesel trucks and buses to be compliant with the 2010 model year engine requirement by January 1, 2023. CARB also adopted an Airborne Toxic Control Measure to limit idling of diesel-fueled commercial vehicles on December 12, 2013. This rule requires diesel-fueled vehicles with gross vehicle weights greater than 10,000 pounds to idle no more than 5 minutes at any location (13 CCR 2485).

ES S-1-07

EO S-1-07 (January 2007, implementing regulation adopted in April 2009) sets a declining low carbon fuel standard (LCFS) for GHG emissions measured in CO_2e grams per unit of fuel energy sold in California. The initial target of the LCFS was to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020 (17 CCR 95480 et seq.). In September 2018, CARB approved amendments for the LCFS that require a 20% reduction in carbon intensity by year 2030.

SB 375

SB 375 (Steinberg) (September 2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 requires CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035 and to update those targets every 8 years. SB 375 requires the State's 18 regional metropolitan planning organizations (MPOs) to prepare a Sustainable Communities Strategy (SCS) as part of their Regional Transportation Plan (RTP) that will achieve the GHG reduction targets set by CARB.

Advanced Clean Cars Program and Zero-Emissions Vehicle Program

The Advanced Clean Cars (ACC) I program (January 2012) is an emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package of regulations: the Low-Emission Vehicle (LEV) regulation for criteria air pollutant and GHG emissions and a technology forcing regulation for zero-emission vehicles (ZEV) that contributes to both types of emission reductions (CARB 2021b). The package includes elements to reduce smog-forming pollution, reduce

GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025 cars will emit 75% less smog-forming pollution than the average new car sold in 2015. The ZEV program will act as the focused technology of the ACC I program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid EVs in the 2018 to 2025 model years.

The ACC II program is currently in development to establish the next set of LEV and ZEV requirements for model years after 2025 to contribute to meeting federal ambient air quality ozone standards and California's carbon neutrality standards (CARB 2021b). The main objectives of ACC II are:

1. Maximize criteria and GHG emission reductions through increased stringency and real-world reductions.
2. Accelerate the transition to ZEVs through both increased stringency of requirements and associated actions to support wide-scale adoption and use.

The ACC II rulemaking package considered technological feasibility, environmental impacts, equity, economic impacts, and consumer impacts. In August 2022, CARB approved the ACC II regulations.

AB 1236

AB 1236 (October 2015) required a city, county, or city and county to approve an application for the installation of EV charging stations, as defined, through the issuance of specified permits, unless the city or county makes specified written findings based upon substantial evidence in the record that the proposed installation would have a specific, adverse impact upon the public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact. The bill provided for appeal of that decision to the planning commission, as specified. The bill provided that the implementation of consistent Statewide standards to achieve the timely and cost-effective installation of EV charging stations is a matter of Statewide concern. The bill required EV charging stations to meet specified standards. The bill required a city, county, or city and county with a population of less than 200,000 residents to adopt this ordinance by September 30, 2017.

EO-79-20

EO N-79-20 (September 2020) requires CARB to develop regulations as follows: (1) passenger vehicle and truck regulations requiring increasing volumes of new ZEVs sold in the State towards the target of 100% of in-State sales by 2035; (2) medium- and heavy-duty vehicle regulations requiring increasing volumes of new zero-emission trucks and buses sold and operated in the State towards the target of 100% of the fleet transitioning to zero-emission vehicles by 2045 everywhere feasible and for all drayage trucks to be zero emission by 2035; and (3) strategies, in coordination with other State agencies, the EPA and local air districts, to achieve 100% zero-emission from off-road vehicles and equipment operations in the State by 2035. EO N-79-20 called for the development of a Zero-Emissions Vehicle Market Development Strategy, which was released February 2021, to be updated every 3 years, that ensures coordination and implementation of the EO and outlines actions to support new and used ZEV markets. In addition, the EO specifies identification of near-term actions, and investment strategies, to improve clean transportation, sustainable freight, and transit options; and calls for development of strategies, recommendations, and actions by July 15, 2021, to manage and expedite the responsible closure and remediation of former oil extraction sites as the State transitions to a carbon-neutral economy.

Advanced Clean Trucks (ACT) Regulation

The purpose of the ACT Regulation (June 2020) is to accelerate the market for zero-emission vehicles in the medium- and heavy-duty truck sector and to reduce emissions NO_x, fine particulate matter, TACs, GHGs, and other criteria pollutants generated from on-road mobile sources (CARB 2021c). Requiring medium- and heavy-duty vehicles to transition to zero-emissions technology will reduce health risks to people living in and visiting California and is needed to help California meet established near- and long-term air quality and climate mitigation targets.

The regulation has two components including (1) a manufacturer sales requirement and (2) a reporting requirement:

1. Zero-emission truck sales: Manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines will be required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 straight truck sales, and 40% of truck tractor sales.
2. Company and fleet reporting: Large employers including retailers, manufacturers, brokers and others will be required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, will be required to report about their existing fleet operations. This information will help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

Water

EO B-29-15

In response to the ongoing drought in California, EO B-29-15 (April 2015) set a goal of achieving a Statewide reduction in potable urban water usage of 25% relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives have become permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the State.

EO B-37-16

Issued May 2016, EO B-37-16 directed the State Water Resources Control Board (SWRCB) to adjust emergency water conservation regulations through the end of January 2017 to reflect differing water supply conditions across the State. The SWRCB also developed a proposal to achieve a mandatory reduction of potable urban water usage that builds off the mandatory 25% reduction called for in EO B-29-15. The SWRCB and Department of Water Resources will develop new, permanent water use targets that build upon the existing State law requirements that the State achieve 20% reduction in urban water usage by 2020. EO B-37-16 also specifies that the SWRCB permanently prohibit water-wasting practices such as hosing off sidewalks, driveways, and other hardscapes; washing automobiles with hoses not equipped with a shut-off nozzle; using non-recirculated water in a fountain or other decorative water feature; watering lawns in a manner that causes runoff, or within 48 hours after measurable precipitation; and irrigating ornamental turf on public street medians.

EO N-10-21

In response to a state of emergency due to severe drought conditions, EO N-10-21 (July 2021) called on all Californians to voluntarily reduce their water use by 15% from their 2020 levels. Actions suggested in EO N-10-21

include reducing landscape irrigation, running dishwashers and washing machines only when full, finding and fixing leaks, installing water-efficient showerheads, taking shorter showers, using a shut-off nozzle on hoses, and taking cars to commercial car washes that use recycled water.

Solid Waste

AB 939, AB 341, AB 1826, and SB 1383

In 1989, AB 939, known as the Integrated Waste Management Act (California Public Resources Code, Sections 40000 et seq.), was passed because of the increase in waste stream and the decrease in landfill capacity. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25% by 1995 and 50% by the year 2000. AB 341 (Chapter 476, Statutes of 2011) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the State that not less than 75% of solid waste generated be source-reduced, recycled, or composted by the year 2020, and annually thereafter. AB 1826 (Chapter 727, Statutes of 2014, effective 2016) requires businesses to recycle their organic waste (i.e., food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste) depending on the amount of waste they generate per week. SB 1383 (Chapter 395, Statutes of 2016) establishes targets to achieve a 50% reduction in the level of the Statewide disposal of organic waste from the 2014 level by 2020 and a 75% reduction by 2025. CalRecycle was granted the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20% of currently disposed edible food is recovered for human consumption by 2025 (CalRecycle 2019).

3.8.2.3 Local

3.8.2.3.1 Bay Area Air District

Air districts typically act in an advisory capacity to local governments in establishing the framework for environmental review of air pollution impacts under CEQA. This may include recommendations regarding significance thresholds, analytical tools to estimate emissions and assess impacts, and mitigations for potentially significant impacts. As discussed in Section 3.8.4, Thresholds of Significance, the Bay Area Air District (BAAD) has adopted numeric CEQA significance thresholds for GHG emissions for lead agencies to use in assessing GHG impacts.

3.8.2.3.2 Metropolitan Transportation Commission and Association of Bay Area Governments

SB 375 requires MPOs to prepare an SCS in their RTP. In the Bay Area, the MTC and the ABAG are jointly responsible for developing and adopting a SCS that integrates transportation, land use, and housing to meet GHG reduction targets set by CARB. CARB set a target of 7% per capita reduction by 2020 and a 15% per capita reduction by 2035 for the Bay Area. The *Plan Bay Area 2050* is a 30-year plan that charts a course for a Bay Area that is affordable, connected, diverse, healthy and vibrant for all residents through 2050 and beyond. There are 35 strategies that comprise the heart of the plan to improve housing, the economy, transportation and the environment across the Bay Area's nine counties (MTC and ABAG 2021). Under Plan Bay Area 2050's strategies, just under half of all Bay Area households would live within one half-mile of frequent transit by 2050, with this share increasing to over 70% for households with low incomes. Transportation and environmental strategies that support active and shared modes, combined with a transit-supportive land use pattern, are forecasted to lower the share of Bay Area residents that drive to work alone from 50% in 2015 to 33% in 2050. GHG emissions from

transportation would decrease significantly as a result of these transportation and land use changes, and the Bay Area would meet the state mandate of a 19% reduction in per capita emissions by 2035 — but only if all strategies are implemented (MTC and ABAG 2021).

3.8.2.3.3 County of Santa Clara Reach Codes

On December 7, 2021 the Board of Supervisors approved an ordinance that requires all new construction in unincorporated areas of Santa Clara County to use electricity (not natural gas) for water heating, space heating, cooking, clothes drying, indoor and outdoor fireplaces, and decorative appliances. Known as "reach codes," these ordinances go beyond state minimum requirements to encourage electrification of buildings. New dwellings are also required to have wiring installed that will facilitate installation of battery storage (County of Santa Clara 2022).

3.8.2.3.4 County of Santa Clara General Plan

The Resource Conservation Element of the General Plan provides the following goals and policies potentially relevant to the Project (County of Santa Clara. 1994-2010 *Santa Clara County General Plan*. *Book A, 1994)*:

C-RC 77. Energy efficiency and conservation efforts in the transportation, industrial, commercial, residential, agricultural and public sectors shall be encouraged at the local, county (sub-regional), and regional level.

C-RC 79. Energy use and fossil fuel dependency in the transportation sector should be reduced by the following general means: a. growth management policies and implementation to minimize increases in the extent of the urbanized area and to promote balanced, compact urban development; b. land use and development standards which support alternative transportation modes; c. travel demand management, TDM, and transportation system operational efficiency; d. expanded transit service; and e. increased availability and use of alternative fuels.

C-RC 80. Sub-regional/countywide planning for Santa Clara County should place major emphasis on the inter-related goals, strategies and policies for improving energy efficiency in transportation, air quality, and reducing traffic congestion.

C-RC 81. Energy conservation in existing buildings and homes, particularly those pre-dating adoption of energy-efficiency building code standards, should be improved and encouraged.

C-RC 82. Alternatives to non-renewable energy sources should be encouraged and implemented in the design of new buildings and incorporated in the redesign and reconstruction of older buildings.

C-RC 83. Industrial and agricultural processes should be modified wherever feasible to take advantage of energy savings, to reduce operational costs, and to enhance competitiveness.

3.8.3 Greenhouse Gas Inventories and Climate Change Conditions

3.8.3.1 Sources of Greenhouse Gas Emissions

Global Inventory

Anthropogenic GHG emissions worldwide in 2020 (the most recent year for which data is available) totaled approximately 49,800 million metric tons (MMT) of CO_2e, excluding land use change and forestry (PBL 2022). The top six GHG emitters include China, the United States, the Russian Federation, India, Japan, and the European Union, which accounted for approximately 60% of the total global emissions, or approximately 30,270 MMT CO_2e (PBL 2022). Table 3.8-1 presents the top GHG-emissions-producing countries.

Table 3.8-1. Six Top Greenhouse-Gas-Producer Countries and the European Union

Emitting Countries (listed in order of emissions)	Greenhouse Gas Emissions (MMT CO_2e)
China	14,300
United States	5,640
European Union	3,440
India	3,520
Russian Federation	2,210
Japan	1,160
Total	**30,270**

Source: PBL 2022.
Note: MMT CO_2e = million metric tons of carbon dioxide equivalent.

National Inventory

Per the U.S. Environmental Protection Agency (EPA) Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990 to 2021 (EPA 2023), total United States GHG emissions were approximately 6,340.2 MMT CO_2e in 2021 (EPA 2023). The primary GHG emitted by human activities in the United States was CO_2, which represented approximately 79.4% of total GHG emissions (5,032. MMT CO_2e). The largest source of CO_2, and of overall GHG emissions, was fossil-fuel combustion, which accounted for approximately 92.2% of CO_2 emissions in 2021 (4,639 MMT CO_2e). Total U.S. emissions have decreased by 2.3% from 1990 to 2021, down from a high of 15.8% above 1990 levels in 2007. Emissions increased from 2020 to 2021 by 5.2% (314.3 MMT CO_2e.). Net emissions (i.e., including sinks) were 5,586.0 MMT CO_2e in 2021. Overall, net emissions increased 6.4% from 2020 to 2021 and decreased 16.6% from 2005 levels. The sharp decline in emissions from 2019 to 2020 is largely due to the impacts of the coronavirus (COVID-19) pandemic on travel and economic activity. Between 2020 and 2021, the increase in total GHG emissions was driven largely by a 6.8% increase in CO_2 emissions from fossil fuel combustion due to economic activity rebounding after the height of the COVID-19 pandemic. In a shift from recent trends, CO_2 emissions from coal consumption increased by 121.7 MMT CO_2e in 2021, a 14.6% increase from 2020. The increase in natural gas consumption and emissions in 2021 is observed across all sectors except the Electric Power sector and U.S. Territories, while the coal increase is primarily in the Electric Power sector (EPA 2023).

State Inventory

According to California's 2000–2021 GHG emissions inventory (2021 edition), California emitted approximately 381.3 MMT CO_2e in 2021, including emissions resulting from out-of-state electrical generation (CARB 2023). The sources of GHG emissions in California include transportation, industry, electric power production from both in-state and out-of-state sources, residential and commercial activities, agriculture, high-GWP substances, and recycling and waste. Table 3.8-2 presents California GHG emission source categories and their relative contributions to the emissions inventory in 2021.

Table 3.8-2. Greenhouse Gas Emissions Sources in California

Source Category	Annual GHG Emissions (MMT CO_2e)	Percent of Total[a]
Transportation	145.6	38.2%
Industrial	73.9	19.4%
Electric power	62.4	16.4%
Commercial and residential	38.8	10.2%
Agriculture	30.9	8.1%
High global-warming potential substances	21.3	5.6%
Recycling and waste	8.4	2.2%
Total	**381.3**	**100%**

Source: CARB 2023.
Notes: GHG = greenhouse gas; MMT CO_2e = million metric tons of carbon dioxide equivalent; GWP = global warming potential. Emissions reflect 2021 California GHG inventory.
[a] Percent of total has been rounded, and total does not sum due to rounding.

Between 2000 and 2021, per-capita GHG emissions in California have dropped from a peak of 13.8 MT CO_2e per person in 2001 to 9.7 MT CO_2e per person in 2021, representing an approximate 29% decrease. In addition, total GHG emissions in 2021 were approximately 12.6 MMT CO_2e higher than 2020 emissions (CARB 2023).

Local Inventory

The County published the 2017 Community Wide Greenhouse Gas Inventory and Forecast in June 2021. The 2017 Santa Clara County community emissions are detailed below in Table 3.8-3. The two primary sources of GHGs in the community are the transportation sector and the use of natural gas, which account for approximately 45% and 22% of the total communitywide emissions, respectively (County of Santa Clara 2023).

Table 3.8-3. Santa Clara County Greenhouse Gas Emissions Summary by Sector – Year 2017

Source Category	County GHG Emissions (MT CO_2e)	Percentage of Total	Unincorporated County GHG Emissions (MT CO_2e)	Percentage of Total
Residential Electricity	357,750	3%	14,276	4.0%
Commercial Electricity	2,020,766	19%	94,308	23%
Residential Natural Gas	1,205,906	11%	48.503	0.01%

Table 3.8-3. Santa Clara County Greenhouse Gas Emissions Summary by Sector – Year 2017

Source Category	County GHG Emissions (MT CO_2e)	Percentage of Total	Unincorporated County GHG Emissions (MT CO_2e)	Percentage of Total
Commercial Natural Gas	1,214,604	11%	126,474	31%
Passenger VMT	3,868,364	36%	33,052	8.0%
Commercial VMT	984,542	9%	8,412	2%
Off-road VMT	515,612	5%	32,282	8%
Waste	574,003	5%	40,500	10%
Water	34,812	0.3%	6,766	2%
Wastewater	12,880	0.1%	520	0.1%
Total	**10,789,339**	**100%**	**405,091**	**100%**

Source: County of Santa Cara 2023
Notes: GHG = greenhouse gas; MT CO_2e = metric tons of carbon dioxide equivalent
Emissions reflect 2017 County of Santa Clara GHG inventory.

3.8.3.2 Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The 2014 IPCC Synthesis Report (IPCC 2014) indicated that warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. Signs that global climate change has occurred include warming of the atmosphere and ocean, diminished amounts of snow and ice, rising sea levels, and ocean acidification (IPCC 2014).

In California, climate change impacts have the potential to affect sea-level rise, agriculture, snowpack and water supply, forestry, wildfire risk, public health, frequency of severe weather events, and electricity demand and supply. The primary effect of global climate change has been a rise in average global tropospheric temperature. Reflecting the long-term warming trend since pre-industrial times, observed global mean surface temperature for the decade 2006–2015 was 0.87°C (1.6°F) (likely between 0.75°C [1.4°F] and 0.99°C [1.8°F]) higher than the average over the 1850–1900 period (IPCC 2018). Scientific modeling predicts that continued emissions of GHGs at or above current rates would induce more extreme climate changes during the twenty-first century than were observed during the twentieth century. Human activities are estimated to have caused approximately 1.0°C (1.8°F) of global warming above pre-industrial levels, with a likely range of 0.8°C to 1.2°C (1.4°F to 2.2°F) (IPCC 2018). Global warming is likely to reach 1.5°C (2.7°F) between 2030 and 2052 if it continues to increase at the current rate (IPCC 2018).

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The Office of Environmental Health Hazard Assessment identified various indicators of climate change in California, which are scientifically based measurements that track trends in various aspects of climate change. Many indicators reveal discernible evidence that climate change is occurring in California and is having significant, measurable impacts in the state. Changes in the state's climate have been observed, including an increase in annual average air temperature with record warmth from 2012 to 2016, more frequent extreme heat events, more extreme drought, a decline in winter chill,

an increase in cooling degree days and a decrease in heating degree days, and an increase in variability of statewide precipitation (OEHHA 2018).

Warming temperatures and changing precipitation patterns have altered California's physical systems—the ocean, lakes, rivers, and snowpack—upon which the state depends. Winter snowpack and spring snowmelt runoff from the Sierra Nevada and southern Cascade Mountains provide approximately one-third of the state's annual water supply. Impacts of climate on physical systems have been observed such as high variability of snow-water content (i.e., amount of water stored in snowpack), decrease in snowmelt runoff, glacier change (loss in area), rise in sea levels, increase in average lake water temperature and coastal ocean temperature, and a decrease in dissolved oxygen in coastal waters (OEHHA 2018).

Impacts of climate change on biological systems, including humans, wildlife, and vegetation, have also been observed, including climate change impacts on terrestrial, marine, and freshwater ecosystems. As with global observations, species responses include those consistent with warming: elevational or latitudinal shifts in range, changes in the timing of key plant and animal life cycle events, and changes in the abundance of species and in community composition. Humans are better able to adapt to a changing climate than plants and animals in natural ecosystems. Nevertheless, climate change poses a threat to public health as warming temperatures and changes in precipitation can affect vector-borne pathogen transmission and disease patterns in California as well as the variability of heat-related deaths and illnesses. In addition, since 1950, the area burned by wildfires each year has followed an increasing trend overall.

The California Natural Resources Agency (CNRA) has released four California Climate Change Assessments (2006, 2009, 2012, and 2018), which have addressed the following: acceleration of warming across the state, more intense and frequent heat waves, greater riverine flows, accelerating sea level rise, more intense and frequent drought, more severe and frequent wildfires, more severe storms and extreme weather events, shrinking snowpack and less overall precipitation, and ocean acidification, hypoxia, and warming. To address local and regional governments' need for information to support action in their communities, the Fourth Assessment (2018) includes reports for nine regions of the state. Key highlights for the San Francisco Bay Area Region (which includes Santa Clara County where the Project is located) include the following (CNRA 2018):

- The impacts of climate change are already being felt in the San Francisco Bay Area and Northern California:
  - Overall, the Bay Area's average annual maximum temperature increased by 1.7°F (0.95 °C) from 1950-2005.
  - Several studies suggest that coastal fog along the California coast, so critical to the Bay Area climate, is less frequent than before.
  - Sea level in the Bay Area has risen over 20 centimeters (8 inches) in the last 100 years.
  - The powerful 2015-16 El Niño, one of the three largest in the historical record, resulted in winter wave energy that was over 50% larger than the typical winter in the Bay Area, driving unprecedented outer coast beach erosion.
  - The 2012-2016 California drought led to the most severe moisture deficits in the last 1,200 years and a 1-in-500 year low in Sierra snowpack. The 2012-2016 record low snowpack resulted in $2.1 billion in economic losses and 21,000 jobs lost in the agricultural and recreational sectors statewide and exacerbated an ongoing trend of groundwater overdraft.

- These changes are projected to increase significantly in the coming decades over the region:
  - Even with substantial global efforts to reduce GHG emissions, the Bay Area will likely see a significant temperature increase by mid-century. By the end of the century, the difference between lower and higher global emissions scenarios will make a major difference in how much Bay Area temperatures rise.
  - Precipitation in the Bay Area will continue to exhibit high year-to-year variability - "booms and busts" - with very wet and very dry years. The Bay Area's largest winter storms will likely become more intense, and potentially more damaging, in the coming decades. Under a high emissions scenario, average Sierra Nevada snowpack is projected to decline by nearly 20% in the next 2-3 decades, 30% to 60% in mid-century and by over 80% in late century.
  - Future increases in temperature, regardless of whether total precipitation goes up or down, will likely cause longer and deeper California droughts, posing major problems for water supplies, natural ecosystems, and agriculture.
  - California's Fourth Climate Change Assessment projects median sea level rise between 0.74 meters (RCP 4.5) and 1.37 meters (RCP8.5) for 2100 along the California coast. However, recent science studies, using advanced models and ice sheet observations, suggest the possibility of extensive loss from Antarctic ice sheets in the 21st century — possibly producing sea level rise by 2100 that could approach 3 meters.
  - Even with high levels of emissions reductions, research now suggests that at least 2 meters of sea level rise is inevitable over the next several centuries due to the lag of sea level rise in response to increasing global temperatures.
- Changes in temperature, precipitation, and sea level rise will produce substantial impacts on Bay Area social systems and the built environment:
  - The three-way relationship between land use, transportation infrastructure, and energy systems — all of which are vulnerable to climate impacts — is perhaps the most critical interdependence in determining the future growth and prosperity of the Bay Area.
  - Future land use decisions will significantly influence the Bay Area's efforts to address climate change, affecting building and transportation energy, urban water demand, and wildfire ignitions. For example, the critical lack of affordable housing in the core of the region is forcing households further south, north, and inland, with negative energy and environmental consequences. At the same time, building energy demand is higher in inland regions (warmer summers/cooler winters) so reducing Bay Area energy consumption will strongly depend on where new housing and business growth are located.
  - Much of the Bay Area's transportation system — airports, roads, and railways — is concentrated along the bay where flooding from sea level rise and storm surge is a major vulnerability.
  - The Bay Area electrical grid is vulnerable to power outages during wind and wildfire events while much of the natural gas transmission system is located along waterways and will be impacted by flooding from sea level rise and extreme storm events.
  - Warmer summers will increase summer energy demand across the region, with the largest increase expected in coastal cities as air conditioning adoption grows there.
  - Climate impacts — such as earlier melting of snowpack, increasing seawater intrusion into groundwater, increased rates of evapotranspiration, and levee failures or subsidence that contaminate Delta supplies — will affect both the quantity of water available and the quality of supplies.

- Wastewater treatment plants, historically located along bay shorelines where effluent discharge was convenient, are now highly vulnerable to future sea level rise. Rising bay water and groundwater levels will also increase salinity intrusion and subsurface flooding. Climate change will require improved stormwater management in the Bay Area as extreme storm events increase in size and frequency.
- Bay Area public health is threatened by a number of climate-related changes, including more extreme heat events, increased air pollution from O_3 formation and wildfires, longer and more frequent droughts, and flooding from sea level rise and high-intensity rain events.
- High levels of socioeconomic inequity in the Bay Area create large differences in the ability of individuals to prepare for and recover from heat waves, foods, and wildfires. Financial resources as well as improved social structures are important to enhance community resilience and reduce these disparities.
- Heat waves pose increased health risks due to urban heat islands and lack of local experience and cooling infrastructure (air conditioning) in bayside cities. These risks are compounded for low-income communities.
- Natural infrastructure can play an important role in climate change adaptation, enhancing biodiversity and ecosystem services while reducing societal risks.
- While bayside communities are on the front lines for future food risk, many may have limited ability or resources to pursue adaptation strategies. Without inclusive engagement among communities, disparities in economic and political power will undermine regional solutions and leave communities acting independently, with highly variable results for resilience and community health.

- Climate change will produce substantial impacts on Bay Area natural and managed resource systems:
  - The future climate of the Bay Area will become less suitable for evergreen forests — redwoods and Douglas fir — and more favorable for hot adapted vegetation such as chaparral shrub land.
  - The ability of vegetation to respond to the rapidly changing conditions in the 21st century is poorly understood. It is possible that vegetation will be increasingly "out of sync" with climate and vulnerable to heat and drought.
  - The most threatening effect of climate change to Bay Area wildlife is the impact of rising sea levels on wetlands because of the limited potential for wetlands to move inland and become established. At the same time, less rainfall, more summer heat, and increased drought will hurt amphibians and reptiles, while heat and wildfires may negatively affect upland birds, mammals, amphibians, and reptiles. Some wildlife species may need to shift locations as the vegetation they inhabit transforms with a changing climate.
  - The Bay Area's mild climate and accessible open spaces are vital to the region's quality of life. Regional conservation efforts, including coordinated open space protection design and implementation of landscape corridors, climate-smart conservation, and restoration practices, will enhance success in a changing climate.
  - In the Bay Area, future fire activity will be driven by both changes in urban development and in climate. Land use planning, together with fire-safe building standards and near-building vegetation management, are important strategies for managing future fire risk to people and structures.
  - Forests can play an important role in carbon sequestration. Fuel and fire management will be critical, as fire is the primary source of carbon loss from forests. Recently, carbon loss from fires exceeded carbon uptake by vegetation in California.

- Nearly every aspect of Bay-Delta ecosystems will be affected by climate change as a result of rising sea levels, increases in air temperatures, changes in precipitation, changes in sediment supply and more. All-natural areas of the shore will need to adapt or transform.
- The interruption of natural processes over the past 200 years as the region has developed has decreased natural Bay-Delta resiliency. A dynamic, resilient ecosystem has become a rigid landscape with brittle features that will have trouble adapting. New approaches that use natural shoreline infrastructure, like beaches, marshes, and mudflats, together with managed retreat where necessary, can create more resilient shorelines that respond well to changing conditions.
- Nearly 70% of California's existing area of wine production will be vulnerable under future climate change projections by mid-century. Wine grape production in the Bay Area could be vulnerable to extreme temperatures and temperature-related water scarcity.
- The sensitivity of Bay Area rangeland vegetation to precipitation dynamics makes these ecosystems particularly vulnerable to climate change. Changes in rainfall regimes are also likely to affect plant production and associated patterns in soil carbon and GHG production. Grazing and rangeland management practices can play a significant role in enhancing soil moisture and belowground carbon sequestration. Current research highlights the potential role of compost together with grazing on California pasturelands as a targeted strategy to increase carbon sequestration.

- A growing number of Bay Area local governments, regional agencies, non-profits, and private sector stakeholders are taking actions that advance climate adaptation and resilience:
  - Projects include comprehensive vulnerability assessments, plans for infrastructure improvements, new governance structures, and actual on-the-ground projects to address sea level rise, drought and other climate impacts.
  - Examples include Resilient by Design: Bay Area Challenge, the Sonoma County Regional Climate Authority, Adaptation to Rising Tides, the Bay Area Regional Reliability Project, Bay Area Regional Health Inequities Initiative, San Francisco Climate & Health Profile, RISeR SF Bay, Marin County C-SMART, Sea Change San Mateo County, Climate Ready North Bay, and the San Francisco Bay.

3.8.4 Thresholds of Significance

According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, a project would normally have a significant effect on the environment with respect to GHG emissions if the project would:

GHG-1: Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

GHG-2: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. There are currently no established thresholds for assessing whether the GHG emissions of a project, such as the Project, would be considered a cumulatively considerable contribution to global climate change; however, all reasonable efforts should be made to minimize a project's contribution to global climate change. In addition, while GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008), GHG emissions impacts must also be evaluated on a project-level under CEQA.

The CEQA Guidelines do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009). The State of California has not adopted emission-based thresholds for GHG emissions under CEQA. The Governor's Office of Planning and Research's Technical Advisory, titled Discussion Draft CEQA and Climate Change Advisory (OPR 2018), states that:

> [N]either the CEQA statute nor the CEQA Guidelines prescribe thresholds of significance or particular methodologies for perming an impact analysis. This is left to lead agency judgment and discretion, based upon factual data and guidance from regulatory agencies and other sources where available and applicable. Even in the absence of clearly defined thresholds for GHG emissions, such emissions must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact.

Furthermore, the advisory document indicates that "in the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a 'significant impact,' individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice." Section 15064.7(c) of the CEQA Guidelines specifies that "when adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

In April 2022 the BAAD adopted an update to their CEQA Thresholds of Significance for Climate Impacts. (BAAD 2022), which identify the BAAD's thresholds of significance for use in determining whether a Project will have a significant impact on climate change and provides the substantial evidence that lead agencies will need to support their use of these thresholds. The guidance document establishes land use project and general plan and related planning document thresholds of significance for climate impacts. The Project, which includes amendments to the County's Zoning Ordinance, would best fit the thresholds established for general plans and related planning documents. The BAAD's CEQA Thresholds Justification Report establishes two pathways for assessing climate impacts for general plans and related planning documents.

A. Meet the State's goals to reduce emissions to 40% below 1990 levels by 2030 and carbon neutrality by 2045: or
B. Be consistent with a local GHG reduction strategy that meets the criteria under State CEQA guidelines section 15183.5(b)

For long-term communitywide planning documents (e.g., general plans, long-range development plans, climate action plans) to have a less-than-significant climate impact, they must demonstrate that GHG emissions from the jurisdiction will decline consistent with California's GHG reduction targets of 40% below 1990 levels by 2030 and carbon neutrality by 2045. A city or county that plans to develop in a manner that will cause emissions to exceed these targets will hinder the State's ability to achieve its climate goals and thus will have a significant climate impact. Conversely, a city or county that will develop in a way that will meet those targets will support the State's ability to achieve its climate goals and thus will have a less-than-significant impact on GHG emissions. Therefore, a communitywide long-term plan must demonstrate that the community will have GHG emissions 40% below its 1990 levels by 2030 and support the State's goal of carbon neutrality by 2045.

3.8.5 Methodology

As described in Chapter 2, Project Description, the Project consists of amendments to the County's Zoning Ordinance. The Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. Although the Project would not directly construct new development, it would allow and facilitate new agriculture-supportive uses that could directly result in construction or operational impacts to the environment. Therefore, this PEIR does not assess the site-specific construction and operation details of each future development within the project area. Rather, it assesses the impacts associated with proposed land use changes and programs, where reasonably foreseeable physical changes to the environment could occur. Notably, unless otherwise noted within this assessment, the actual locations of project development (and its chronologic sequence or concurrence) that may be implemented in the future are speculative. However, to gauge potential GHG emissions and for informational disclosure, a representative development was modeled and includes 2,500 square feet of storage or processing space and 2,500 square feet of retail or gathering space consistent with the Project. Since specifics for construction and operation of future development under the representative development are not available, the California Emissions Estimator Model (CalEEMod) default values were assumed based on development land use type and size.

3.8.5.1 Construction

CalEEMod Version 2040.4.0 was used to estimate potential representative development-generated GHG emissions during construction. Construction of the representative development allowed under the Project would result in GHG emissions primarily associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. All details for construction criteria air pollutants discussed in Section 3.3 are also applicable for the estimation of construction-related GHG emissions. As such, see Section 3.3 for a discussion of construction emissions calculation methodology and assumptions.

3.8.5.2 Operation

As with the air quality analysis, emissions from the operational phase of the representative development were estimated using CalEEMod Version 2040.4.0. All details for criteria air pollutants discussed in Section 3.3, Air Quality, are applicable for the estimation of operational GHG emissions. See section 3.3.5.2 for a discussion of the land use assumptions applied in modeling for the representative development.

Area

CalEEMod was used to estimate GHG emissions from the representative development area sources, which include operation of gasoline-powered landscape maintenance equipment, which produce minimal GHG emissions. See Section 3.3.5.2 for a discussion of landscaping equipment emissions calculations. Consumer product use and architectural coatings result in VOC emissions, which are analyzed in air quality analysis only, and little to no GHG emissions.

Energy

The estimation of operational energy emissions was based on CalEEMod land use defaults and units or total area (i.e., square footage) of the representative development's land uses. The energy use from non-residential land uses is calculated in CalEEMod energy intensity value (electricity or natural gas usage per square foot per year) assumptions were based on the California Commercial End-Use Survey database. Emissions are calculated by multiplying the energy use by the utility carbon intensity (pounds of GHGs per kilowatt-hour for electricity or 1,000 British thermal units for natural gas) for CO_2 and other GHGs (CAPCOA 2021).

The current Title 24, Part 6 standards, referred to as the 2019 Title 24 Building Energy Efficiency Standards, became effective on January 1, 2020. The current version of CalEEMod assumes compliance with the 2019 Title 24 Building Energy Efficiency Standards (CAPCOA 2021). Additionally, in compliance with the County of Santa Clara's reach code, the energy intensity values were adjusted to account for building electrification.

CalEEMod default energy intensity factors (CO_2, CH_4, and N_2O mass emissions per kilowatt-hour) for Silicon Valley Clean Energy, which are based on 2021 data, were applied to the analysis for the representative development. However, as explained in Section 4.8.1, SB 100 calls for further development of renewable energy, with a renewable energy target of 44% by December 31, 2024; 52% by December 31, 2027; and 60% by December 31, 2030. As such, GHG emissions associated with representative development electricity demand would continue to decrease over time.

Mobile Sources

All details for criteria air pollutants discussed in Section 3.3.5.2 are also applicable for the estimation of operational mobile source GHG emissions. Regulatory measures related to mobile sources include AB 1493 (Pavley) and related federal standards. AB 1493 required that CARB establish GHG emission standards for automobiles, light-duty trucks, and other vehicles determined by CARB to be vehicles that are primarily used for noncommercial personal transportation in the State. In addition, the NHTSA and EPA have established corporate fuel economy standards and GHG emission standards, respectively, for automobiles and light-, medium-, and heavy-duty vehicles. Implementation of these standards and fleet turnover (replacement of older vehicles with newer ones) will gradually reduce emissions from the representative development's motor vehicles. The effectiveness of fuel economy improvements was evaluated by using the CalEEMod emission factors for motor vehicles in 2024 for the representative development to the extent it was captured in EMFAC 2017.

Solid Waste

The representative development would generate solid waste, and therefore, result in CO_2e emissions associated with landfill off-gassing. CalEEMod default values for solid waste generation were used to estimate GHG emissions associated with solid waste for the representative development land uses. No diversion was assumed; however, it should be noted that this is a conservative assumption, as AB 939, Integrated Waste Management Act requires a 50% solid waste diversion rate and the goal for the State is 75% diversion by 2020 in accordance with AB 341.

Water and Wastewater Treatment

Supply, conveyance, treatment, and distribution of water for the representative development land uses require the use of electricity, which would result in associated indirect GHG emissions. Similarly, wastewater generated by the representative development land uses requires the use of electricity for conveyance and treatment, along with GHG

emissions generated during wastewater treatment. The indoor and outdoor water use and electricity consumption from water use, and wastewater generation were estimated using CalEEMod default values for the representative development.

3.8.6 Environmental Impacts

Impact GHG-1 Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment??

Impact GHG-2 Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Representative Development-Generated GHG Emissions

Construction Emissions

As discussed previously, the Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. Although the Project would not directly construct new development, it would allow and facilitate new agriculture-supportive uses that could directly result in construction emissions impacts. To gauge potential GHG emissions and for informational disclosure, a representative development has been based on the Development Standards established in Section 2, Project Description, and is described herein for informational purposes.

Construction of the representative development would result in GHG emissions, which are primarily associated with use of off-road construction equipment, vendor and haul trucks, and worker vehicles. Since the BAAD has not established construction-phase GHG thresholds, construction GHG emissions were amortized assuming a 30-year development life after completion of construction. A detailed depiction of the construction schedule—including information regarding phasing, equipment utilized during each phase, trucks, and worker vehicles—is included in Appendix B. The estimated representative development-generated GHG emissions from construction activities are shown in Table 3.8-4.

Table 3.8-4. Estimated Annual Construction Greenhouse Gas Emissions

Year	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
2023	69.22	0.09	0.00	69.86
			Amortized	**2.34**

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.
Total emissions may not sum due to rounding.
See Appendix B.

As shown in Table 3.8-4, the estimated total GHG emissions during construction would be approximately 70 MT CO_2e over the construction period. Estimated total representative development-generated construction emissions amortized over 30 years would be approximately 2 MT CO_2e per year. GHG

emissions generated during construction of the representative development would be short term in nature, lasting only for the duration of the construction period, and would not represent a long-term source of GHG emissions.

Operational Emissions

Operation of the representative development modeled would generate GHG emissions through mobile sources (motor vehicle trips); area sources (landscape maintenance equipment); energy use (electricity consumed); solid waste disposal; and water supply, treatment, and distribution and wastewater treatment. CalEEMod was used to calculate the annual GHG emissions based on the operational assumptions described in Section 3.8.5.2, Operation.

The estimated operational GHG emissions associated with the representative development allowed under the Project are shown in Table 3.8-5.

Table 3.8-5. Estimated Annual Operational Greenhouse Gas Emissions

Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Existing Scenario				
Area	<0.01	0.00	0.00	<0.01
Energy	54.42	0.01	<0.01	54.78
Mobile	91.42	0.01	0.01	93.13
Solid waste	1.09	0.06	0.00	2.71
Water supply and wastewater	1.46	0.04	<0.01	2.86
Total	**148.39**	**0.12**	**0.01**	**153.47**
			Amortized construction emissions	**2.34**
			Total operational + amortized construction GHGs	**155.81**

Notes: GHG = greenhouse gas; CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.
Totals may not sum due to rounding.
See Appendix B for complete results.

As shown in Table 3.8-5, estimated annual GHG emissions under the representative development would be approximately 153 MT CO_2e per year as a result of operation. After adding the amortized construction emissions, total GHGs generated by the representative development would be approximately 153 MT CO_2e per year. As noted previously, no numeric threshold is applied to the estimated emissions for the representative development to evaluate potential GHG emissions impacts under CEQA.

Project Potential to Conflict with MTC/ABAG Plan Bay Area

MTC and ABAG's Plan Bay Area 2050 is a regional growth-management strategy that focuses on reducing GHG emissions as it relates to transportation, pursuant to SB 375. The Plan Bay Area 2050 incorporates local land use projections and circulation networks in city and county general plans and is comprised of 35 strategies across the elements of housing, the economy, transportation and the environment which are public policies or set of investments that can be implemented in the Bay Area at the city, county, regional or state level over the next 30 years.

As discussed previously, the Project consists of amendments to the County's Zoning Ordinance. Although the Project would not directly construct new development, it would allow and facilitate new agriculture-supportive uses. The Project would not have the potential to conflict with local and regional plans, programs, and policies. Additionally, approval of the Project itself, would not change these local and regional plans, programs and policies and would not provide any goals, policies, or programs that would significantly impact the GHG reduction targets within the County. Any impacts identified for a future individual project facilitated by the Project would be addressed through the project approval process, including Architectural and Site Approval (ASA), Design Review, environmental review, and mitigation measures specific to any identified impacts. Future projects that would not require discretionary approval as a result of the Project would not conflict with the Plan Bay Area 2050 because the Project supports the Plan Bay Area 2050's Priority Conservations Areas, which includes Agriculture and Working Lands. Therefore, the Project would not conflict with applicable goals and strategies set forth in the Plan Bay Area 2050.

Project Consistency with the CARB Scoping Plan, SB 32, and EO S-3-05

The Scoping Plan, approved by CARB in 2008 and updated in 2014 and 2017, provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. As such, the Scoping Plan is not directly applicable to specific projects. Relatedly, in the Final Statement of Reasons for the Amendments to the CEQA Guidelines, the CNRA observed that "[t]he [Scoping Plan] may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009a). Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., LCFS), among others. Any development allowed under the Project would comply with all applicable regulations adopted in furtherance of the Scoping Plan to the extent required by law.

As discussed in Section 3.8.2.2, EO S-3-05 established a goal to reduce statewide GHG emissions to the 1990 level by 2020, and to reduce statewide GHG emissions to 80% below the 1990 level by 2050. SB 32 establishes a statewide GHG emissions reduction target whereby CARB, in adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions, shall ensure that statewide GHG emissions are reduced to at least 40% below 1990 levels by 2030. While there are no established protocols or thresholds of significance for that future year analysis, CARB forecasts that compliance with the current Scoping Plan puts the state on a trajectory of meeting these long-term GHG goals, although the specific path to compliance is unknown (CARB 2022).

The 2017 Scoping Plan included measures to promote renewable energy and energy efficiency (including the mandates of SB 350), increase stringency of the Low Carbon Fuel Standard, measures identified in the Mobile Source and Freight Strategies, measures identified in the proposed Short-Lived Climate Pollutant Plan, and increase stringency of SB 375 targets. The 2022 Scoping Plan builds upon and accelerates programs currently in place, including moving to zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high GWP; providing communities with sustainable options for walking, biking, and public transit; and displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind

turbines) (CARB 2022). Many of the measures and programs included in the Scoping Plan would result in the reduction of Project-related GHG emissions with no action required at the project-level. Additionally, in compliance with the County of Santa Clara's reach code, all development allowed under the Project would be 100% electric and natural gas would be prohibited for all new construction. As such, the electricity use of any development allowed under the Project would likely be more efficient compared with the existing uses. Further, the Project would also benefit from the gradual increase in energy efficiency and reduction in GHG emissions due to the shift from fossil fuels that will be achieved through the statewide programs and measures.

The 2045 carbon neutrality goal required CARB to expand proposed actions in the 2022 Scoping Plan to include those that capture and store carbon in addition to those that reduce only anthropogenic sources of GHG emissions. However, the 2022 Scoping Plan emphasizes that reliance on carbon sequestration in the state's natural and working lands will not be sufficient to address residual GHG emissions, and achieving carbon neutrality will require research, development, and deployment of additional methods to capture atmospheric GHG emissions (e.g., mechanical direct air capture). Given that the specific path to neutrality will require development of technologies and programs that are not currently known or available, the Project's role in supporting the statewide goal would be speculative and cannot be wholly identified at this time.

As previously discussed, the Project consists of amendments to the County's Zoning Ordinance. As mentioned above, several Scoping Plan measures would result in reductions of Project-related GHG emissions with no action required at the project-level, including those related to energy efficiency, reduced fossil fuel use, and renewable energy production by the utility. As demonstrated above, the Project would not conflict with CARB's 2017 or 2022 Scoping Plan updates and with the state's ability to achieve the 2030 and 2045 GHG reduction and carbon neutrality goals.

Based on the above consideration, the Project would not conflict with local and regional plans, programs, and policies. Additionally, approval of the Project itself, would not change these local and regional plans, programs and policies and would not provide any goals, policies, or programs that would significantly impact the GHG reduction plans within the County. Therefore, impacts would be **less than significant**.

3.8.7 Cumulative Impacts

Where a lead agency concludes that the cumulative effects of a project, taken together with the impacts of other closely related past, present, and reasonably foreseeable future projects are significant, the lead agency then must determine whether the project's incremental contribution to such significant cumulative impact is "cumulatively considerable" (and thus significant in and of itself). The cumulative study area used to assess potential cumulative greenhouse gas emissions impacts includes the entire planet and is not limited to any particular region.

Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. As previously discussed in Section 3.8.1.1, Climate Change Overview, GHG emissions inherently contribute to cumulative impacts, and thus, any additional GHG emissions would result in a cumulative impact. As discussed in Section 3.8.6, the Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. Although no actual development is proposed

as part of Project, it would allow and facilitate new agriculture-supportive uses. However, the Project would not have the potential to conflict with local and regional plans, programs, and policies. Additionally, approval of the Project itself, would not change these local and regional plans, programs and policies and would not provide any goals, policies, or programs that would significantly impact the GHG reduction plans within the County. Therefore, the Project would not contribute to a cumulatively considerable impact with regard to generation of GHG emissions.

3.8.8 Mitigation Measures

No mitigation is required.

3.8.9 Level of Significance After Mitigation

No impacts related to Greenhouse Gas Emissions have been identified.

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3.9 Hazards and Hazardous Materials

This section of the Program Environmental Impact Report (PEIR) evaluates the potential impacts related to hazards and hazardous materials from implementation of the County of Santa Clara (County) Rural Zoning Amendments and Agricultural Impact Threshold (Project). This section includes a discussion of the existing environment including existing hazards and hazardous sites. Appropriate mitigation measures or standard conditions are included as necessary.

3.9.1 Environmental Setting

Hazardous materials refer to hazardous substances that exhibit corrosive, poisonous, toxic, flammable, and/or reactive properties and have the potential to harm human health and/or the environment. Hazardous materials are used in products (e.g., household cleaners, industrial solvents, paint, pesticides) and in the manufacturing of products (e.g., electronics, newspapers, plastic products). Hazardous materials can include petroleum, natural gas, synthetic gas, acutely toxic chemicals, and other toxic chemicals that are used in agriculture, commercial, and industrial uses; businesses; hospitals; and households. Accidental releases of hazardous materials have a variety of causes, including highway incidents, warehouse fires, train derailments, shipping accidents, and industrial incidents and unintentional releases.

Hazardous Materials Sites

California Government Code Section 65962.5 requires the California Environmental Protection Agency (Cal/EPA) to compile, maintain, and update specified lists of hazardous material release sites. The California Environmental Quality Act (CEQA) Guidelines (California Public Resources Code Section 21092.6) require the lead agency to consult the lists compiled pursuant to Government Code Section 65962.5 to determine whether the Project and any alternatives are identified on any of the following lists:

- **EPA NPL (National Priorities List):** Lists all sites under the U.S. Environmental Protection Agency's (EPA) Superfund program, which was established to fund cleanup of contaminated sites that pose risk to human health and the environment.
- **EPA CERCLIS and Archived Sites:** The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) list contains 15,000 sites nationally identified as hazardous sites. This would also involve a review for archived sites that have been removed from CERCLIS due to No Further Remedial Action Planned (NFRAP) status.
- **EPA RCRIS (RCRAInfo):** Resource Conservation and Recovery Act Information System (RCRIS or RCRAInfo) is a national inventory system about hazardous waste handlers. Generators, transporters, handlers, and disposers of hazardous waste are required to provide information for this database.
- **DTSC Cortese List:** The Department of Toxic Substances Control (DTSC) maintains the Hazardous Waste and Substances Sites (Cortese) List as a planning document for use by the State and local agencies to comply with the CEQA requirements in providing information about the location of hazardous materials release sites. This list includes the Site Mitigation and Brownfields Reuse Program Database (CalSites).
- **DTSC HazNet:** DTSC uses this database to track hazardous waste shipments.
- **SWRCB LUSTIS:** Leaking Underground Storage Tank Information System. The State Water Resources Control Board (SWRCB) maintains an inventory of underground storage tanks and leaking underground storage tanks, which tracks unauthorized releases.

The required lists of hazardous material release sites are commonly referred to as the "Cortese List." Because the statute was enacted more than 20 years ago, some of the provisions refer to agency activities that were conducted many years ago and are no longer being implemented and, in some cases, the information to be included in the Cortese List does not exist. Those requesting a copy of the Cortese Lists are now referred directly to the appropriate information resources contained on internet websites hosted by the boards or departments referenced in the statute, including DTSC's online EnviroStor database and the SWRCB's online GeoTracker database. These two databases include hazardous material release sites, along with other categories of sites or facilities specific to each agency's jurisdiction. A search of commonly accessed online databases on May 25, 2022 identified the following information potentially relevant to the Project.

EnviroStor

The EnviroStor database, maintained by the DTSC, identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes federal Superfund sites (National Priorities List); state response sites, voluntary cleanup sites; school investigation and cleanup sites; corrective action sites; and tiered California permit sites. It also includes sites that are being investigated for suspected but unconfirmed contamination.

A search of this database found 45 active sites within Santa Clara County that have the potential to be within the Project's zoning update area and be impacted by it. Of these sites, there are 20 voluntary cleanups, 8 school cleanup/investigation, 5 tiered permit, 4 corrective action, 4 state response, 2 evaluation, and 2 federal superfund listed programs. These sites are dominantly located in San Jose, followed by Mountain View, Palo Alto, Santa Clara, Cupertino, Gilroy, Los Altos and Alviso (DTSC 2024).

GeoTracker

The GeoTracker database, maintained by the SWRCB, lists a range of types of hazardous materials sites that could affect groundwater quality, including leaking underground storage tank sites, cleanup program sites, land disposal sites, and military sites. A search of the GeoTracker database listed 495 open cases within County. (SWRCB 2024). Out of the 495 open cases, 100 are in remediation, 163 are in the site assessment process, 71 are in the verification monitoring process, 69 are inactive, 15 are long term management, and 15 are eligible for closure (SWRCB 2024).

Airport Hazards

Assembly Bill 2776, which went into effect January 1, 2004, defines an "airport influence area" as the area where airport-related factors "may significantly affect land uses or necessitate restrictions on those uses as determined by an airport land use commission." The California Public Utilities Code establishes airport land use commissions in every county to provide for the orderly development of air transportation and ensure compatible land uses around airports that are open to public use. According to the State Division of Aeronautics, the airport influence area is usually the planning area designated by an airport land use commission for each airport.

The Santa Clara County Airport Land-Use Commission (ALUC) was established to provide for appropriate development of areas surrounding public airports in Santa Clara County. It is intended to minimize the public's exposure to excessive noise and safety hazards, and to ensure that the approaches to airports are kept clear of structures that could pose an aviation safety hazard Santa Clara County Department of Planning and Development (County of Santa Clara 2024a).

There are five public use airports within the boundaries of Santa Clara ALUC's jurisdiction, which is conterminous with Santa Clara County. Three are designated for general aviation uses (Palo Alto, Reid-Hillview and San Martin), one is an international airport (San Jose), and one is under federal jurisdiction (Moffet) (County of Santa Clara 1994a).

Palo Alto Airport is a civilian airport for general aviation located on 182 acres near San Francisco Bay within Palo Alto City limits. The airport contains one 2,500-foot-long runway and is classified by the Federal Aviation Administration (FAA) as a Basic Utility II airport, meaning it can serve about 75% of the single-engine and small twin-engine airplanes used for personal and business purposes in the County (County of Santa Clara 1994a).

Reid-Hillview Airport is a civilian airport for general aviation located within the San Jose City limits in east San Jose. This airport, also classified as Basic utility II Facility, occupies 179 acres and contains two runways (County of Santa Clara 1994a).

San Martin Airport is a civilian airport for general aviation located in an unincorporated area near San Martin. This airport, also classified as a Basic Utility II facility, occupies 179 acres and contains one runway. This is the only airport in rural unincorporated portion of Santa Clara County (County of Santa Clara 1994a).

San Jose International Airport is the only major commercial passenger airport in Santa Clara County, although it handles significant general aviation as well. This airport is located within the San Jose City limits and is owned and operated by the City of San Jose. The airport occupies 1,050 acres, contains three runways, and serves all sizes and types of aircraft (County of Santa Clara 1994a).

Moffet Naval Air Station (Moffet Field) is a federal installation that is located in the portion of unincorporated Santa Clara County and is not subject to local jurisdiction. This facility was transferred to the National Aeronautics and Space Administration (NASA) as of July 1, 1994 (County of Santa Clara 1994a).

Each airport is required to have its own Comprehensive Land Use Plan (CLUP) that provides guidance related to the placement of land uses near the aforementioned airports. These recommendations are based on a variety of factors, including those related to noise, safety, and aircraft movement. In addition to the identification of land use compatibility issues, the Airport Land Use Compatibility Plan identifies notification disclosure areas around each airport and ensures compliance with the County's ALUC (County of Santa Clara 1994a).

Emergency Operations Plans

Emergency operations plans include elements to maintain continuity of government, emergency functions of governmental agencies, mobilization and application of resources, mutual aid, and public information. Emergency operations plans are maintained at the federal, state, and local level for all types of disasters and hazards, including human-made and natural. It is the responsibility of government to undertake an ongoing comprehensive approach to emergency management in order to avoid or minimize the effects of hazardous events. Local governments have the primary responsibility for preparedness and response activities.

Santa Clara County maintains an Emergency Operations Plan (EOP) and an Operational Area Hazard Mitigation Plan (County of Santa Clara 2017a; County of Santa Clara 2017b). The Santa Clara County's Office of Emergency Management (OEM) assesses needs and develops strategies to achieve stronger preparedness, prevention, response, and mitigation capabilities within the Santa Clara County Operational Area. The OEM is responsible for supporting first responders including fire, law enforcement, and emergency medical services in emergencies and

disasters. It is also responsible for facilitating the coordination of resources from local and state partners, community-based organizations, and faith-based organizations to provide community members with relief and supplies in an emergency or disaster (Santa Clara County 2022).

Wildfire Hazards

Fire Hazard Severity Areas in Santa Clara County are designated by the California Department of Forestry and Fire Prevention, and by the Santa Clara County Fire Marshal's Office and the appropriate fire department within cities. Fire hazard severity zone (FHSZ) levels range from Moderate to Very High. FHSZs are designated in three types of areas based on what level of government is financially responsible for preventing and suppressing wildfires:

- **Federal Responsibility Areas (FRAs):** The federal government is financially responsible for wildfire suppression. Within the County, a small portion of the Joseph D. Grant County Park land is in the FRAs (CalFire 2024a).
- **State Responsibility Areas (SRAs):** The state is financially responsible for wildfire suppression. Within the County, SRAs are in outlying areas such as the Henry W. Coe State Park, Joseph D. Grant County Park and Sierra Azul Open Space Preserve (CalFire 2024a).
- **Local Responsibility Areas (LRAs):** Cities or the County are financially responsible for wildfire suppression. LRAs in Santa Clara County include the cities in the central area of the County. These include the City of San Jose, Santa Clara, Sunnyvale, Santa Cruz, Gilroy and more (CalFire 2024a).

Very high FHSZs are particularly evident along the eastern side of Santa Clara County, as well as along the southwestern portion from Los Altos Hills to outside Gilroy (CalFire 2024b; CalFire 2008). For further discussion of Wildland Fire Hazards, including a figure of the FHSZs within Santa Clara County, refer to EIR Section 3.18-1, Wildfire.

3.9.2 Regulatory Setting

Federal

The following federal regulations pertaining to hazards and hazardous materials would apply to the Project.

Resource Conservation and Recovery Act of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984

Federal hazardous waste laws are generally promulgated under the Resource Conservation and Recovery Act (RCRA). These laws provide for the "cradle to grave" regulation of hazardous wastes. Any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed. DTSC is responsible for implementing the RCRA program as well as California's own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law. Under the Certified Unified Program Agency (CUPA) program, Cal/EPA has in turn delegated enforcement authority to the County for state law regulating hazardous waste producers or generators. The County of Santa Clara Hazardous Materials Compliance Division is the CUPA throughout Santa Clara County, except in the cities of Santa Clara, Gilroy, and Sunnyvale, which operate as their own CUPAs (County of Santa Clara 2024b).

Comprehensive Environmental Response, Compensation, and Liability Act and the Superfund Amendments and Reauthorization Act of 1986

Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, on December 11, 1980. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites; provided for liability of persons responsible for releases of hazardous waste at these sites; and established a trust fund to provide for cleanup when no responsible party could be identified. The Superfund Amendments and Reauthorization Act (SARA) amended the CERCLA on October 17, 1986. SARA stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites; required Superfund actions to consider the standards and requirements found in other state and federal environmental laws and regulations; provided new enforcement authorities and settlement tools; increased state involvement in every phase of the Superfund program; increased the focus on human health problems posed by hazardous waste sites; encouraged greater citizen participation in making decisions on how sites should be cleaned up; and increased the size of the trust fund to $8.5 billion.

Emergency Planning Community Right-to-Know Act

The Emergency Planning Community Right-to-Know Act (EPCRA), also known as SARA Title III, was enacted in October 1986. This law requires any infrastructure at the state and local levels to plan for chemical emergencies. Reported information is then made publicly available so that interested parties may become informed about potentially dangerous chemicals in their community. EPCRA Sections 301 through 312 are administered by EPA's Office of Emergency Management. EPA's Office of Information Analysis and Access implements the EPCRA Section 313 program. In California, SARA Title III is implemented through the California Accidental Release Prevention (CalARP) Program.

Hazardous Materials Transportation Act

The Department of Transportation regulates hazardous materials transportation under Title 49 of the Code of Federal Regulations (CFR). State agencies that have primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol and the California Department of Transportation. These agencies also govern permitting for hazardous materials transportation. Title 49 CFR reflects laws passed by Congress as of January 2, 2006.

Federal Response Plan

The Federal Response Plan of 1999 is a signed agreement among 27 federal departments and agencies, including the American Red Cross, that provides the mechanism for coordinating delivery of federal assistance and resources to augment efforts of state and local governments overwhelmed by a major disaster or emergency; supports implementation of the Robert T. Stafford Disaster Relief and Emergency Act, as well as individual agency statutory authorities; and supplements other federal emergency operations plans developed to address specific hazards. The Federal Response Plan is implemented in anticipation of a significant event likely to result in a need for federal assistance or in response to an actual event requiring federal assistance under a Presidential declaration of a major disaster or emergency.

2018 International Fire Code

The International Fire Code (IFC), created by the International Code Council, is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The IFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The IFC and the International Building Code use a hazard classification system to determine what measures are required to protect against structural fires. These measures may include construction standards, separations from property lines, and specialized equipment. To ensure that these safety measures are met, IFC employs a permit system based on hazard classification. The IFC is updated every 3 years.

State

The following state regulations pertaining to hazards and hazardous materials would apply to the Project.

California Health and Safety Code and Code of Regulations

California Health and Safety Code Chapter 6.95 and 19 California Code of Regulations Section 2729 set out the minimum requirements for business emergency plans and chemical inventory reporting. These regulations require businesses to provide emergency response plans and procedures, training program information, and a hazardous material chemical inventory disclosing hazardous materials stored, used, or handled on site. A business that uses hazardous materials or a mixture containing hazardous materials must establish and implement a business plan if the hazardous material is handled in certain quantities.

California Environmental Protection Agency

The Cal/EPA was created in 1991 by Governor Executive Order W-5-91. Several state regulatory boards, departments, and offices were placed under the Cal/EPA umbrella to create a cabinet-level voice for the protection of human health and the environment and to assure the coordinated deployment of state resources. Among those responsible for hazardous materials and waste management are the DTSC, Department of Pesticide Regulation, and Office of Environmental Health Hazard Assessment. Cal/EPA also oversees the unified hazardous waste and hazardous materials management regulatory program (Unified Program), which consolidates, coordinates and makes consistent the following six programs:

- Hazardous Materials Release Response Plans and Inventories (Business Plans)
- Underground Storage Tank Program
- Aboveground Petroleum Storage Tank Act
- Hazardous Waste Generator and Onsite Hazardous Waste Treatment Programs
- California Uniform Fire Code: Hazardous Material Management Plans and Inventory Statements
- California Accidental Release Prevention (CalARP) Program

California Department of Toxic Substances Control

The California DTSC, which is a department of Cal/EPA, is authorized to carry out the federal RCRA hazardous waste program in California to protect people from exposure to hazardous wastes. The department regulates hazardous waste, cleans up existing contamination, and looks for ways to control and reduce the hazardous waste produced in California, primarily under the authority of RCRA and in accordance with the California

Hazardous Waste Control Law (California H&SC Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (Title 22, California Code of Regulations [CCR], Divisions 4 and 4.5). Permitting, inspection, compliance, and corrective action programs ensure that people who manage hazardous waste follow state and federal requirements and other laws that affect hazardous waste specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

California Education Code

The California Education Code (CEC) establishes the law for California public education. CEC requires that the DTSC be involved in the environmental review process for the proposed acquisition and/or construction of school properties that will use state funding. The CEC requires a Phase I Environmental Site Assessment be completed prior to acquiring a school site or engaging in a construction project. Depending on the outcome of the Phase I Environmental Site Assessment, a Preliminary Environmental Assessment and remediation may be required. The CEC also requires potential, future school sites that are proposed within 2 miles of an airport to be reviewed by Caltrans Division of Aeronautics. If Caltrans does not support the proposed site, no state or local funds can be used to acquire the site or construct the school.

California State Aeronautics Act

The State Aeronautics Act is implemented by Caltrans Division of Aeronautics. The purpose of this Act is to do the following:

- Foster and promote safety in aeronautics
- Ensure the state provides laws and regulations relating to aeronautics are consistent with federal aeronautics laws and regulations
- assure that persons residing in the vicinity of airports are protected against intrusions by unreasonable levels of aircraft noise
- develop informational programs to increase the understanding of current air transportation issues

Caltrans Division of Aeronautics issues permits for and annually inspects hospital heliports and public-use airports, makes recommendations regarding proposed school sites within two miles of an airport runway, and authorizes helicopter landing sites at/near schools.

California Building Code

The State of California provided a minimum standard for building design through the 2019 California Building Code (CBC), which is located in Part 2 of Title 24 of the California Code of Regulations. The 2019 CBC is based on the 1997 Uniform Building Code but has been modified for California conditions. It is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions. Commercial and residential buildings are plan-checked by local city and County building officials for compliance with the CBC. Typical fire safety requirements of the CBC include the installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildlife hazard areas.

California Fire Code (2019)

California Code of Regulations, Title 24, also known as the California Building Standards Code (CBC), contains the California Fire Code, included as Part 9 of that title. Updated every three years, the California Fire Code includes provisions and standards for emergency planning and preparedness, fire service features, fire protection systems, hazardous materials, fire flow requirements, and fire hydrant locations and distribution. The Santa Clara County Fire Department provides fire protection services for the unincorporated areas of Santa Clara County. As such, the Santa Clara County Fire Department implements and enforces the California Fire Code in the Project Area.

Asbestos-Containing Materials Regulations

State-level agencies, in conjunction with the EPA and the Occupational Safety and Health Administration (OSHA), regulate removal, abatement, and transport procedures for asbestos-containing materials. Releases of asbestos from industrial, demolition, or construction activities are prohibited by these regulations and medical evaluation and monitoring is required for employees performing activities that could expose them to asbestos. Additionally, the regulations include warnings that must be heeded and practices that must be followed to reduce the risk for asbestos emissions and exposure. Finally, federal, state, and local agencies must be notified prior to the onset of demolition or construction activities with the potential to release asbestos.

Polychlorinated Biphenyls

The EPA prohibited the use of Polychlorinated Biphenyls (PCBs) in the majority of new electrical equipment starting in 1979 and initiated a phase-out for much of the existing PCB-containing equipment. The inclusion of PCBs in electrical equipment and the handling of those PCBs are regulated by the provisions of the Toxic Substances Control Act, 15 USC Section 2601 et seq. Relevant regulations include labeling and periodic inspection requirements for certain types of PCB-containing equipment and outline highly specific safety procedures for their disposal. The state likewise regulates PCB-laden electrical equipment and materials contaminated above a certain threshold as hazardous waste; these regulations require that such materials be treated, transported, and disposed accordingly. At lower concentrations for non-liquids, regional water quality control boards may exercise discretion over the classification of such wastes.

Lead-Based Paint

Cal OSHA's Lead in Construction Standard is contained in Title 8, Section 1532.1 of the California Code of Regulations. The regulations address all of the following areas: permissible exposure limits; exposure assessment; compliance methods; respiratory protection; protective clothing and equipment; housekeeping; medical surveillance; medical removal protection; employee information, training, and certification; signage; record keeping; monitoring; and agency notification.

Local

Santa Clara County General Plan

The Growth and Development Element of the 1994 Santa Clara County General Plan (County of Santa Clara 1994b) provides the following goals and policies relevant to the Project:

R-GD 3. Land uses and development permitted under County jurisdiction shall be consistent with the following major County policies: a. conservation of natural resources; b. avoidance of natural hazards and the

prevention of pollution which could pose a threat to public health, safety, and welfare; c. minimizing demand for public services and costs to the general public of providing and maintaining services; d. preservation of rural character, rural lifestyle opportunities, and scenic resources; e. preservation of agriculture; and f. preventing unwanted or premature development that would preclude efficient conversion to urban uses and densities in areas suitable and intended for future annexation.

R-GD 16. Goals and policies of the General Plan recognize the development constraints, issues, and sensitivity of the hillsides of Santa Clara County for new development. The goals of the General Plan, outlined in the Open Space Action Program, are to prevent further urban uses and development outside cities, conserve wildlife habitat, avoid natural hazards, and preserve the generally natural appearance of the hillsides as much as possible.

The Safety and Noise Element of the Santa Clara County 1994 General Plan provides the following goals and policies potentially relevant to the Project:

R-HS 5. Strategies for reducing the threat of natural hazards to life and property within rural unincorporated areas shall be to: 1. Inventory hazards and monitor changing conditions. 2. Maintain low resident population densities within high hazard areas. 3. Design, locate and regulate development to avoid or withstand hazards. 4. Reduce the magnitude of the hazard, if possible. 5. Provide public information regarding natural hazards.

R-HS 6. Inventories and mapping of natural hazards shall be adequately maintained for use in planning and decision-making, including: a. Relative Seismic Stability Map; b. Composite Geologic Hazards Map; c. Soil Creep; d. Saturated, Unstable Soils; e. Slope Maps; f. Flood Hazards maps; g. Relative Fire Hazard Rating; h. Dam Failure Inundation Areas maps; i. Airport Safety Zones; and j. closed Solid Waste Disposal Sites

R-HS 7. Areas of significant natural hazards, especially high or extreme fire hazard, shall be designated in the County's General Plan as Resource Conservation Areas, with generally low development densities in order to minimize public exposure to risks associated with natural hazards and limit unplanned public costs to maintain and repair public infrastructure.

R-HS 9. Development in rural unincorporated areas affected by natural hazards should be designed, located, and otherwise regulated to avoid or reduce associated risks to an acceptable level: 1. In areas of highest potential hazard, such as floodways, active landslides, fault traces, and airport safety zones, no new habitable structures shall be allowed. 2. In other areas of lesser hazards, there shall be no major structures for involuntary occupancy, such as schools, hospitals, correctional facilities or convalescent centers.

R-HS 10. In all hazard areas, projects shall be designed and conditioned to avoid placement of structures and improvements where they would: a. be directly jeopardized by hazards; b. increase the hazard potential; and/or c. increase risks to neighboring properties

R-HS 11. Proposals for General Plan amendments, zone changes, use permits, variances, building site approvals, and all land development applications subject to environmental assessment shall be reviewed for the presence of hazardous conditions, utilizing the best, most up-to-date information available. If a development proposal would require a major investment or addition to public infrastructure in areas

subject to high hazards, objective estimates of the probable public costs of maintaining and repairing the infrastructure should be provided to decision-makers.

R-HS 12. Proposals shall be conditioned as necessary to conform with County General Plan policies on public safety. Projects which cannot be conditioned to avoid hazards shall be conditioned to reduce the risks associated with natural hazards to an acceptable level or shall be denied

R-HS 13. Where needed to adequately assess the hazards of a proposal, the County shall require on-site investigations and analysis by certified professionals.

R-HS 22. Adequate access and water supplies for fire safety shall be required for all new development, including building sites, subdivisions, and clustered development

R-HS 27. The County should encourage the use of fire-retardant building materials and landscaping not already required by County development and building codes when new development and rebuilding are proposed in areas of high or extreme fire hazard.

R-HS 28. Development projects shall be reviewed by the County Fire Marshall's Office for safety code compliance and should also be referred if necessary to the appropriate fire protection authority or district for further review and recommendations

R-HS 34. Public awareness of the prevalence and risks of natural hazards should be maintained and enhanced by activities and programs of the County, safety service providers, and through the educational system

R-HS 37. Land use designations and development proposals within the ALUC Airport Influence Areas for the rural unincorporated areas of Santa Clara County shall be consistent with ALUC's Comprehensive Land Use Plans for airport safety.

R-HS 38. Santa Clara County shall comply with ALUC height restrictions and other regulations intended to ensure operational safety of aircraft and the safety of those occupying nearby buildings.

R-HS 39. Land uses, structures, and objects which could distract, confuse, or otherwise contribute to pilot error shall not be allowed within the vicinity of airport operations.

The Land Use Element of the General Plan provides the following goals and policies potentially relevant to the Project:

R-LU 25. Non-residential land uses allowed in 'Hillsides' areas shall be of a generally low density or low intensity nature, depending on the use, as is consistent with the basic intent of the Hillsides designation to preserve the resources and rural character of the land. Non-residential uses shall: a. avoid or minimize any potentially significant adverse environmental impacts; b. provide adequate access to safely accommodate potential traffic without significantly impacting local transportation routes; c. demonstrate no significantly increased risks associated with natural hazards; d. not create adverse visual impacts as viewed from the Valley floor or from adjacent public recreational areas; and e. cause no significant increase in the demand for public services or infrastructure, including potential impacts on school districts.

South County Joint Area Plan

The South County Joint Area Plan from the General Plan provides the following goals and policies potentially relevant to the Project:

SC 9.4. Submittal of a hazardous materials handling plan should be a prerequisite for developments requiring zone changes, use permits, etc.

SC 9.8. Public education regarding hazardous materials and waste management should be coordinated and implemented among the local jurisdictions (Morgan Hill, Gilroy, the County), local agencies (SCVWD, GWCD, RWQCBs, etc.) and local groups (League of Women Voters, Lions Club, etc.)

SC 9.9. During the implementation of "AB 2185" (Calif. Health and Safety Code Chap. 6.95 Division 20 Section 25500 et seq) and successor legislation in South County, every effort should be made to achieve maximum integration between newly mandated actions and elements and ongoing programs (e.g., Hazardous Waste Generator inspections, Hazardous Materials Storage Ordinances and controls and pretreatment), particularly as they apply to: a. coordinated permit and fee structure, b. coordinated inspections, c. emergency response ("business") plans, d. training programs, e. evacuation requirements, and f. information requirements.

SC 15.0. New development should avoid hazardous and sensitive areas, and should occur only where it can be built without risking health and safety. New habitable structures should not be allowed in areas of highest hazard such as floodways, active landslides, active fault traces, and Airport safety zones. In areas of less risk, development should be limited and designed to reduce risks to an acceptable level. Hillsides should be protected, and development should be carefully controlled on steep slopes; when hillside land is developed, it should be done with minimum disruption of topography and vegetative cover. Natural streamside areas should be left in a natural state.

SC 15.2. Development in hazardous areas should be: a. kept to a minimum by encouraging low density, low-intensity uses and the types of uses least disruptive to the soil and vegetative cover; b. regulated in such a way that it minimizes disruption of the environment and does not trigger or accelerate the hazardous processes which exist in South County; c. prohibited on known active landslides and limited in areas where such development might initiate sliding or be affected by sliding on adjacent parcels. d. prohibited in areas where increased runoff from the addition of impervious surfaces and drainage would increase the probability of downslope landsliding, or where additional projects would add to the cumulative effect of increased runoff, unless a downslope drainage improvement plan has been approved; and e. clustered, with dwellings grouped on the least hazardous portion of the property.

SC 15.3. Development in less hazardous areas should be limited and designed to reduce risks to an acceptable level.

SC 15.4. Development in fire hazard areas should be minimized. When development is permitted, it should be planned and constructed so as to reduce exposure to fire hazards and to facilitate fire suppression efforts in the event of a wildfire. Actions which increase fire risk, such as increasing public access roads in fire hazard areas, should be avoided because of the great environmental damage and economic loss associated with a large wildfire.

Santa Clara County Municipal Code

Chapter 13 – Hazardous Materials Storage, Article 3 Containment Standards

Section B11-285 of the Santa Clara County Municipal Code states that operational permits are requirement to store, transport on site, dispense, use or handle hazardous materials in excess of amounts listed in Table 105.6.20 of the County's Municipal Code.

Chapter 13 – Hazardous Materials Storage, Article 4 Hazardous Materials Disclosure

Section B11-300 and B11-301 of the Santa Clara County Municipal Code states that a Hazardous Materials Business Plan (HMBP) disclosing all hazardous materials which are stored or handled at any facility must be submitted for approval by the Director.

County of Santa Clara Office of Emergency Management

The County of Santa Clara Office of Emergency Management (OEM) engages the whole community in assessing needs and developing strategies to achieve stronger preparedness, prevention, response, and mitigation capabilities within the Santa Clara County Operational Area.

The OEM supports first responders, including fire, law enforcement, and emergency medical services in emergencies and disasters. OEM is also responsible for facilitating the coordination of resources from Local and State partners, community-based organizations, and faith-based organizations to provide community members with relief and supplies in an emergency or disaster (County of Santa Clara 2024c).

Santa Clara County Emergency Operations Plan

The County of Santa Clara Emergency Operations Plan (EOP) establishes the County's incident management organization that supports first responders, facilitates public information and interagency communication, and maintains continuity of government. The EOP is an all-hazards document describing the County's incident management organization, compliance with relevant legal statutes, community engagement efforts, government focus, and critical components of the incident management structure. The incident management system is a component-based system designed to be scaled up as necessary to reflect the incident/event's escalation from routine incident(s) to emergency, disaster, or catastrophe affecting the County. The Santa Clara County Operational Area consists of all the political subdivisions within the geographical boundaries of Santa Clara County. The EOP is not intended to address specific emergency responses, scenarios, hazards, or threats (County of Santa Clara 2017a).

Santa Clara County Operational Area Hazard Mitigation Plan

The Santa Clara County Operational Area Hazard Mitigation Plan is a multi-jurisdictional plan for hazard mitigation. It formed a Planning Partnership to leverage resources and to meet requirements of the federal Disaster Mitigation Act (DMA) for as many eligible local governments as possible (County of Santa Clara 2017b).

Santa Clara County Ordinance Code

Division B7- Fire Protection, Chapter 1 and 2

The County Fire Code is the 2018 International Fire Code (IFC), as published by the International Code Council and amended by the California Building Standards Commission in the 2019 California Fire Code (CFC). The County Fire Code modifies the IFC and CFC as appropriate to provide fire protection services to the residents.

3.9.3 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment with respect to hazards and hazardous materials if the project would:

HAZ-1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

HAZ-2: 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.

HAZ-3: Emit hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of an existing or proposed school.

HAZ-4: Be located on a site which is included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.

HAZ-5: 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 result in a safety hazard for people residing or working in the Project Area.

HAZ-6: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

HAZ-7: Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to the urbanized areas or where residences are intermixed with wildlands.

3.9.4 Methodology

The hazards and hazardous materials analysis considers if implementation of the Project would result in significant exposure of people or property to hazardous materials. The location of existing hazardous materials sites relative to the project area is an important consideration in this analysis. Compliance with federal, state, and local hazardous materials regulations and standards would likely reduce potential impacts. If the Project has the potential to result in potential impacts, mitigation measures could be provided to reduce these impacts.

3.9.5 Environmental Impacts

Impact HAZ-1 Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

The Project would consist of amendments to the Santa Clara County Zoning Ordinance that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards.. The Project would also establish a threshold of significance to evaluate a project's agricultural impacts under CEQA. While the Project would not directly result in new development, nor would it specifically authorize the routine transport, use or disposal of hazardous materials, it would facilitate new agriculture-supportive uses and introduce development standards in unincorporated areas of Santa Clara County. Construction of development within the rural zoning districts may include the use of hazardous materials such as, but not limited to, fuel, oils and lubricants, paints and paint thinners, glues, cleaners, pesticides and herbicides. Numerous federal, state and local regulations exist (as described in Section 3.9.2, Regulatory Setting) that require strict adherence to specific guidelines regarding the use, transportation, and disposal of hazardous materials. For development within the State of California, Government Code Section 65850.2 requires that no final certificate of occupancy or its substantial equivalent be issued unless there is verification that the owner or authorized agent has met, or is meeting, the applicable requirements of the Health and Safety Code, Division 20, Chapter 6.95, Article 2, Sections 25500 through 25520.

Operation of reasonably foreseeable uses implemented as a result of the Project may use, store, or dispose of hazardous materials associated with agricultural and common residential grade hazardous materials (e.g., cleaners, solvents, fuels, paint). The use, storage, and disposal of such materials would be required to occur in compliance with existing regulations and requirements intended to reduce or eliminate the potential for hazardous releases.

Projects implemented as a result of the proposed amendments would be required to comply with existing federal, State and local regulations intended to reduce or eliminate the potential for hazards resulting from the transport, use, and/or disposal of hazardous materials. Furthermore, any projects that may use larger quantities of hazardous materials would not be streamlined under the Project, and additional review would be required. Therefore, project impacts would be **less than significant**.

Impact HAZ -2 Would the project 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?

The Project would facilitate new development of agriculture-supportive uses within the rural zoning districts in unincorporated Santa Clara County through proposed amendments related to clarifying, simplifying, and standardizing the permit process for agriculture-supportive uses, aligning development in the Exclusive Agriculture zoning district with existing County land use policies, and replacing the existing "local-serving" provisions with objective development standards. Future development within the rural zoning districts could occur on properties that are known to include hazardous materials. Alternatively, construction of future uses, as well as demolition of existing structures, under the Project could disturb or encounter previously unidentified contamination or hazardous material/waste. Such activities could expose workers, the public, and the environment to hazardous materials and result in the release of hazardous materials into the environment. As described in Impact HAZ-1, operation of reasonably foreseeable uses implemented as a result of the Project may use, store, or dispose of hazardous materials associated with agricultural and common residential grade hazardous materials (e.g., cleaners, solvents, fuels, paint).

As discussed in Section 3.9.2, *Regulatory Setting*, existing regulations, programs, and County General Plan policies are in place to prevent and/or reduce potential impacts associated with upset or accidental hazardous releases. Specifically, General Plan Policies R-GD 3(b), R-HS 5, and R-HS 11 include guidelines for avoidance and reduction of hazard conditions within unincorporated areas of the County. Future projects resulting from Project implementation would be required to comply with existing federal, State, and local requirements intended to reduce or avoid hazardous material releases in addition to new streamlined permitting processes required under the Project. Compliance with applicable regulations and processes would ensure that the Project would not result in a significant hazard to the public or the environment as a result of accident or upset involving hazardous material release. Impacts would be **less than significant impact**.

Impact HAZ -3 Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of an existing or proposed school?

As detailed in Section 3.15, *Public Services,* there are several schools serving the County and its unincorporated areas that have the potential to be within one-quarter mile of future projects implemented as a result of the Project. The Project would not authorize the emission or handling of acutely hazardous materials, and such uses would not be subject to the streamlining provisions of the Project. However, as discussed in Impact HAZ-2, construction and operation of reasonably foreseeable future uses resulting from the Project could result in the upset or accidental release of hazardous materials. As previously described, future projects would be required to comply with existing regulations, programs, and County General Plan policies (discussed in Section 3.9.2, Regulatory Setting) intended to prevent and/or reduce potential impacts associated with hazardous conditions.

Applicable regulations governing hazardous materials are further described in Section 3.9.2, Regulatory Setting,

As the Project would not authorize the use or handling of acutely hazardous materials, and all future development within the rural zoning districts must comply with applicable regulations intended to avoid and/or prevent adverse effects related to the use, storage, transport, handling, and/or release of hazardous materials, impacts associated with hazardous emissions and hazardous material handling within proximity to existing and planned schools is not anticipated to occur. Impacts would be **less than significant**.

Impact HAZ -4 Would the project be located on a site which is included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?

As discussed in the Section 3.9.1, *Environmental Setting*, numerous sites within the project area are listed on hazardous materials databases complied pursuant to Government Code Section 65962.5 (DTSC 2024, SWRCB 2022). The Project would facilitate new development of agriculture-supportive uses within the rural zoning districts in unincorporated Santa Clara County through proposed amendments related to clarifying, simplifying, and standardizing the permit process for agriculture-supportive uses, aligning development in the Exclusive Agriculture zoning district with existing County land use policies, and replacing the existing "local-serving" provisions with objective development standards. Development resulting from implementation of the Project could occur on properties that may be listed on a hazardous materials database. Construction and/or operation of subsequent projects on or within the vicinity of these sites could create a significant hazard to the public or environment.

As discussed above, future projects resulting from the Project would be required to comply with existing federal, State, and local regulations, programs, and County General Plan policies that are intended to prevent and/or reduce potential impacts associated with hazardous conditions. Specifically, General Plan Policies R-GD 3(b), R-HS 5, and R-HS 11 include guidelines for avoidance and reduction of hazard conditions within unincorporated areas of the County. Additionally, known hazardous materials sites would be required to comply with CCR Title 22 regulations, as described under Section 3.9.2, *Regulatory Setting*, related to the inspection, remediation, and cleanup of sites representing hazardous conditions or containing hazardous materials. Compliance with applicable regulations and processes would ensure that the Project and subsequent projects resulting from the Project would not create a significant public or environmental hazard by siting future projects on hazardous materials sites. Impacts would be **less than significant**.

Impact HAZ -5 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 for people residing or working in the Project Area?

There are several public and private airports located within Santa Clara County, including the San Martin Airport, which is located within the unincorporated County. As such, it is possible that subsequent projects resulting from the Project could have the potential to be located within the boundaries of an existing airport land use plan or within two miles of existing airports.

As previously discussed above, future/subsequent projects resulting from the Project would be required to comply with existing federal, State, and local regulations, programs, and County General Plan policies that would prevent and/or reduce potential safety hazards associated with development in an airport land use plan or within proximity to an existing airport. For example, General Plan Policies R-HS 9, R-HS 10, R-HS 11, and R-HS 12 include requirements for assessing hazards as well as design measures for development in airport safety zones and areas that could increase hazard potential. Additionally, General Plan Policies R-HS 37, R-HS 38, and R-HS 39 include requirements and restrictions for certain developments in ALUC Airport Influence Areas as well as compliance with applicable ALUC height restrictions. In addition to local General Plan requirements, Federal and State regulations exist that prevent hazards to the public and environment near public airports. These include FAA regulations, which establish safety standards for civil aviation, and the State Aeronautics Act, which establishes air safety standards.

Small scale agriculture-supportive uses of the kind encouraged by the Project, and agriculture in general, are generally consistent with most airport operations. Taller structures such as silos, must comply with existing County zoning and FAA regulations. Uses that may encourage larger assemblages of people are not subject to the streamlining provisions of the Project, and several such uses within the Exclusive Agriculture zoning district either require additional discretionary review or have been removed altogether from that zoning district. Compliance with applicable federal, State, and local regulations would further ensure that the Project and subsequent projects resulting from the Project would not result in safety hazards associated with proximity to existing private and public airports or airport land use plans. Impacts would be **less thansignificant**.

Impact HAZ -6 Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

As described above under Section 3.9.2, Regulatory Setting, the County of Santa Clara OEM maintains readiness to support disaster response, recovery, and mitigation. Additionally, the County EOP and Operational Hazard Mitigation Plan support emergency and hazardous response within the County.

Implementation of the Project does not propose any changes or amendments to existing emergency response and operations plans and requirements within the County. The Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards and thereby implement existing County General Plan policies to prevent sprawl and preserve agricultural land. Existing emergency plans would continue to serve the County. Further, actions resulting from future development projects facilitated by the Project would be required to comply with existing County emergency plans and emergency requirements, including maintaining adequate access for fire/emergency vehicles (General Plan Policy R-HS 22). Because the Project would not change or amend existing emergency plans and would comply with County requirements outlined in adopted plans, the Project would not impair implementation nor physically interfere with adopted plans governing emergency response and evacuation within the County. Impacts would be **less than significant**.

Impact HAZ -7 Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to the urbanized areas or where residences are intermixed with wildlands?

As previously described, Very High FHSZs are particularly evident within the project area, along the eastern side of Santa Clara County, as well as the southwestern portion from Los Gatos to Gilroy. Refer to Figure 3.18-1 in Section 3.18, *Wildfire*, for an overview of fire hazard severity zones within the County.

Increased wildfire risk, including exposure to people or structures to significant risk of loss, injury, or death, is generally associated with increased development of housing and/or occupiable structures within moderate to high fire risk areas. As discussed throughout this PEIR, implementation of the Project is not considered to be growth inducing, but rather would streamline certain agriculture-supportive uses (which are already allowed under the existing Zoning Ordinance) and establish a threshold of significance to evaluate a project's agricultural impacts under CEQA. As a result, future development projects facilitated by the Project are not expected to result in exposure of people or structures to significant wildfire risk. The rural zoning districts would continue to be served by existing fire protection services within the County. Additionally, compliance with regulations related to fire protection and safety, including the Title 24 of the CBC, would ensure that new development would include fire protection features (e.g., fire protection and flow requirements, fire hydrants, etc.). Further, compliance with County General Plan policies related to project siting, design, building materials, and development density (Policies R-HS 5, R-HS 10, R-HS 22, R-HS 27, and R-HS 28) would ensure that future development facilitated by the Project would not expose people or structures to wildfire risks. Compliance with State and local regulations and policies intended to reduce fire-related risks, would ensure that future development would not expose people or structures to wildfire risks within the County. As a result, impacts would be **less than significant**.

3.9.6 Cumulative Impacts

The cumulative context for hazards and hazardous materials is generally site-specific. For the purposes of this analysis, the cumulative context includes the project area, the rural zoning districts of unincorporated Santa Clara County. A cumulative impact would occur if subsequent projects resulting from the Project, in combination with past, present, and future projects in the County (as listed in Section 3.0, Introduction to the Analysis) would result in a significant hazards/hazardous materials impact.

Implementation of the Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards and thereby implement existing County General Plan policies to prevent sprawl and preserve agricultural land. The County further proposes the adoption of a threshold of significance to evaluate a project's agricultural impacts under CEQA. As such, the Project itself would not be growth inducing, however, the Project could allow for development of agriculture-supportive uses. As described above, Project impacts with respect to transport, use, disposal of hazardous materials; upset and accident conditions resulting in the release of hazardous materials; emission or handling of hazardous materials within 0.25 mile of existing or proposed schools; hazardous materials sites; safety hazards within an airport land use plan or public airport; emergency response and evacuation plans; and wildfire risk would be less than significant. As a result, the Project would not contribute to cumulative hazards or hazardous material condition within the County.

Reasonably foreseeable future development would be subject to existing federal, state, and local regulations/requirements, including County General Plan goals, policies, and regulations that reduce potential impacts related to hazards and hazardous materials. Compliance with these regulations would ensure that potential impacts resulting from future projects would be less than significant. As a result, and based on the analysis provided above, the Project would not be considered cumulatively considerable, and cumulative impacts would be **less than significant** with respect to hazards and hazardous materials.

3.9.7 Mitigation Measures

No mitigation measures are required.

3.9.8 Level of Significance After Mitigation

No significant unavoidable adverse impacts relating to hazards and hazardous materials have been identified.

3.9.9 References

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3.10 Hydrology and Water Quality

This section of the Program Environmental Impact Report (PEIR) evaluates the potential impacts related to hydrology and water-quality from implementation of the proposed County of Santa Clara (County) Rural Zoning Amendments and Agricultural Impact Threshold (Project). The following describes the hydrologic and water quality setting of the project area, followed by the regulatory setting as applicable to hydrology and water quality, then identifies potential impacts associated with implementation of the Project, and recommends mitigation measures to reduce the significance of impacts, where applicable.

3.10.1 Environmental Setting

In Santa Clara County, there are five major watershed areas covering over 779 square miles that include Coyote, Guadalupe, Lower Peninsula, Uvas-Llaga, and West Valley Watershed (Santa Clara Valley Water District {Valley Water} 2022). Water resources, both surface waters and groundwater, are overseen by the Valley Water, an independent special district that provides wholesale water supply, groundwater management, flood protection and stream stewardship, including oversight of water quality, throughout the County. Most of the water use in Santa Clara County occurs on the highly urbanized valley floor between the Santa Cruz Mountains to the west and the Diablo Range to the east. Southern Santa Clara County has some urban development but holds much more rural and agricultural land use than is found in the northern valley floor. Valley Water was initially formed in 1929 in response to observed groundwater overdraft and associated subsidence (Valley Water 2021). Valley Water is also the Groundwater Sustainability Agency (GSA) for the Santa Clara and Llagas Groundwater Subbasins in accordance with the requirements of the Groundwater Sustainable Management Act.

Valley Water manages 10 dams and surface water reservoirs, three water treatment plants, an advanced recycled water purification center, 142 miles of raw and treated water pipelines, 101 groundwater recharge ponds covering 276 acres, and more than 275 miles of jurisdictional streams, including 91 miles suitable for in-stream recharge (Valley Water 2021). The project area is located within the jurisdiction of the San Francisco Regional Water Quality Control Board (RWQCB) which adopted the most recent version of its basin plan in May of 2017 with amendments that were made in November 2019 (RWQCB 2017). The Basin Plans designate beneficial uses for inland and coastal surface waters, establish water quality objectives and implementation programs and policies to protect those uses.

The National Pollutant Discharge Elimination System (NPDES) is a permitting program that establishes a framework for regulating municipal, industrial, and construction stormwater discharges into surface water bodies, including stormwater channels. The RWQCB is responsible for implementing the federally mandated NPDES program in Santa Clara County. Consequently, the County implements the NPDES requirements through its development review process to ensure that local waterways meet pollution prevention and flow management requirements. Stormwater discharges within Santa Clara County are regulated by two regional NPDES permits, the San Francisco Regional Municipal Permit (MS4) and the Phase II NPDES Permit for Central Coast because the County falls within both the San Francisco Bay Watershed and the Central Coast Watershed. The MS4 Permit imposes basic programs in order to maintain a level of acceptable runoff conditions through the implementation of best management practices (BMPs) that mitigate stormwater quality problems.

Climate

Santa Clara County has a semi-arid, Mediterranean climate which is characterized by relatively warm and dry weather from late spring to early fall and wet mild winters. Average annual precipitation ranges from about 15 inches on the valley floor to about 45 inches along the crest of the Santa Cruz Mountains. The average annual precipitation in Santa Clara County was 23.2 inches during the period of 1950-2020 (Valley Water 2021). Rainfall in Santa Clara County has a relative high variability from year to year with historic ranges from 5.1 inches in 2013 to 46.7 inches in 1983.

Hydrologic Regions

California is divided into 10 hydrologic regions by the California Department of Conservation. A hydrologic region is the area drained by a river system or a segment of a river system, a closed basin(s), or a group of streams forming a coastal drainage area. As noted above, Santa Clara County spans parts of two hydrologic regions: the San Francisco Bay Region and the Central Coast Region. The majority of Santa Clara County lies within the San Francisco Bay Region but the southern portions of Santa Clara County that includes Morgan Hill and Gilroy and surrounding areas are located within the Central Coast Region.

Watersheds

A watershed is the area of land that channels rainfall and snowmelt to creeks, streams, and rivers that eventually outflow to reservoirs, bays, or oceans. The areas affected by the Project's proposed amendments are part of the following watersheds:

Coyote Watershed

The Coyote Watershed is the largest of the five and drains a total of 322 square miles of the valley floor. The watershed is drained by Coyote Creek, the main waterway, and its numerous tributaries, and is the longest creek in the county (Valley Water 2022). The watershed extends from the urbanized valley floor upward to the vast natural areas of the Mount Hamilton range in the southeastern portion of the county. The watershed includes Morgan Hill, San Jose, and Milpitas as well as the Coyote, Anderson, and Lake Cunningham reservoirs.

Guadalupe Watershed

The Guadalupe Watershed spans 170 square miles of a mostly western portion of the County, extending from the Santa Cruz mountains down through downtown San Jose and emptying into the southern San Francisco Bay. The primary drainage is the Guadalupe River. Other surface waters include Los Gatos, Ross, Alamitos, and Canoas creeks. In addition, the Lexington, Vasona, Guadalupe, Almaden, Calero, and Lake Elsman reservoirs are located within the watershed. Cities within the watershed include San Jose, Los Gatos, Monte Sereno, Campbell, and Santa Clara.

Lower Peninsula Watershed

The Lower Peninsula Watershed is located in the northwestern most portion of Santa Clara County and spans just 98 square miles. The watershed includes many small creek sub-watersheds that feed the tidal wetlands along the San Francisco Bay's southwest shoreline including San Francisquito and Stevens creeks which are among the last remaining viable steelhead trout runs in Santa Clara County (Valley Water 2022). Other creeks include Matadero, Deer, Barron, Adobe, and Permanente. Reservoirs in the watershed include Stevens Creek and Felt Lake.

Uvas-Llagas Watershed

The Uvas-Llagas Watershed is a 104-square-mile region which is distinguished by its agricultural lands and natural areas (Valley Water 2022). Part of the larger Pajaro River Watershed, the creeks in this watershed are the only waterways in Santa Clara County that flow southward. Cities in the watershed include parts of San Jose, Morgan Hill, and Gilroy. The watershed includes many different surface waters as well as the Chesbro and Uvas reservoirs.

West Valley Watershed

The smallest of the five at 85 square miles, the West Valley Watershed is made up of multiple small creek sub-watersheds (Valley Water 2022). Located on the western portion of Santa Clara County, south of the Lower Peninsula watershed, the West Vally Watershed is characterized by the contrast between the channelized urbanized creeks of the valley floor and its more natural streams of the upland areas in the hillsides of the Santa Cruz mountains. No reservoirs are located within this watershed that intersects the cities of Sunnyvale, Cupertino, San Jose, Santa Clara, Campbell, Saratoga, Monte Sereno, and Los Gatos.

Surface Water Quality

The 2018 Section 303(d) List of Water Quality Limited Segments lists 25 water bodies in Santa Clara County that meet the criteria to be considered impaired. Total maximum daily loads, that is, the maximum amount of a pollutant that a water body can receive and still safely meet water-quality standards, have either been completed, or are under preparation or are planned, for each of the listed water bodies. The impaired bodies include the lower San Francisco Bay, the Guadalupe Slough, Almaden Lake, 14 different creeks, the Olger Quarry Ponds, and 7 different reservoirs within Santa Clara County (SFRWQCB 2018). The identified impairments include mercury, PCBs (polychlorinated biphenols), Diazinon (an insecticide), trash, toxicity, selenium, and temperature (RWQCB 2018).

Groundwater Basins

Santa Clara County lies within portions of two groundwater basins as defined by the California Department of Water Resources (DWR): the Santa Clara Valley and the Gilroy-Hollister Valley Basins. The groundwater subbasins within Santa Clara County managed by Valley Water are the Santa Clara Subbasin and the Llagas Subbasin, which are both part of the Santa Clara Valley Groundwater Basin.

Santa Clara Subbasin

The Santa Clara Subbasin occupies a structural trough that runs parallel to the northwest treading Coast Ranges. The subbasin is further delineated into the Santa Clara Plain and Coyote Valley due to the differences in land uses and management characteristics. The dominant geologic feature is a large inland valley that drains toward the San Francisco Bay including Coyote Creek, the Guadalupe River, and Los Gatos Creek (DWR 2004). The subbasin spans about 297 square miles and the water bearing formations include continental deposits of unconsolidated and semi-consolidated gravels, sands, silts, and clays (Valley Water 2021b). Natural recharge occurs principally as infiltration from streambeds and direct percolation of precipitation along the margins and southern portion of the subbasin where coarse-grained sediments predominate (Valley Water 2021b). Valley Water also facilitates recharge of locally conserved or imported surface water to in-stream and off-stream facilities for water supply and groundwater storage management purposes. The Santa Clara Plain has two hydrogeologic areas, the recharge (unconfined) and confined areas. The confined area is located in the central portion where a laterally extensive,

low permeability aquitard restricts the vertical flow of groundwater and contaminants. There is no laterally extensive aquitard in the Coyote Valley, with generally high lateral and vertical permeability throughout the area.

Historically, groundwater levels suffered from over-pumping during the early half of the 20th century but have generally increased since the mid-1960s due to increased management (e.g., importing water, augmenting groundwater recharge and in-lieu recharge) by Valley Water. The operational storage capacity of the subbasin is estimated to be 350,000 acre-feet (DWR 2004).

Llagas Subbasin

The Llagas Subbasin is part of the larger Gilroy-Hollister Valley Groundwater Basin which extends further south into San Benito County. The subbasin covers an area of approximately 88 square miles and underlies a relatively flat alluvial valley that consists primarily of unconsolidated alluvial sediments (Valley Water 2021b). Like the Santa Clara Subbasin, the Llagas Subbasin has two hydrogeologic areas, the recharge area where groundwater is generally unconfined and a confined area. The recharge area is generally located at the edges of the subbasin where there is high lateral and vertical permeability. Fine-grained materials are not laterally continuous in the recharge area, though localized confined conditions can occur. In the southern and central portion of the subbasin, clays and silts become more vertically and laterally extensive creating confined artesian conditions, especially in the southern portion near the Pajaro River. Within the confined area, low permeability units restrict the vertical flow of groundwater and divide the subbasin into shallow and principal aquifer zones.

Groundwater elevations are generally highest near Cochrane Road in Morgan Hill, while the lowest elevation is typically found in the southernmost part of the subbasin near the Pajaro River. Long-term groundwater levels are stable and demonstrate sustainable groundwater conditions with relatively recent 2019 water levels showing that levels were not significantly affected by the drought (Valley Water 2021b).

Groundwater Quality

Most wells in Santa Clara County produce high-quality water that meets drinking water standards without any treatment (Valley Water 2021a). However, elevated nitrate and perchlorate are found in some South County wells (primarily domestic wells). Valley Water continues to work to protect groundwater quality and to advocate for effective remediation. Leaking underground tanks, industrial spills, septic systems, inefficient agriculture, and other sources can pollute groundwater, making it costly to treat or even unusable. Though not currently regulated in drinking water standards, per- and polyfluoroalkyl substances (PFAS) are causing increased interest and prompting greater scrutiny among regulators. For Santa Clara County, regional testing does not indicate widespread PFAS concentrations, but one water retailer has removed ten wells from service out of caution (Valley Water 2021a). In general, remediation of areas with groundwater contamination from releases of hazardous materials can take decades or longer.

Flood Hazards

Flooding due to stormwater has been a long and continuing problem for much of Santa Clara County ever since permanent settlement of the valley floor began. In the rural unincorporated areas, the most extensive flood problems occur in south Santa Clara County, where well over half of the valley floor would be inundated by a 100-year, or 1% flood, including much of San Martin. Flood waters do not have to resemble torrential flows to produce great economic losses. The damage to utilities, roads, building foundations, crops and other properties can be significant from even a foot of standing water. Generally poor drainage in local areas has also been a

major issue over time. Drainage and flood control facilities for south Santa Clara County continue to be constructed by the Santa Clara Valley Water District as funding permits, but many areas still experience persistent drainage problems

Part of north Santa Clara County is also subject to saltwater flooding from the Bay. Tidal flooding may occur due to levee failure or overtopping as a result of exceptionally high tides, and/or excessive precipitation. Its severity may be increased in areas that have subsided due to overdrafting of groundwater basins. The levees used to create salt evaporation ponds provide some protection from tidal flooding, and historically, there has been little impact from tidal flooding as far inland as Alviso or the San Jose/Santa Clara Water Pollution Control Plant. Over the long term, were sea levels to rise due to global warming, the potential for tidal flooding could become more significant.

Inundation from Dam Failure

Dam failure occurs when a dam is damaged severely enough that it partially or completely loses its ability to hold back water. In these events, some or all of the water impounded by the dam is suddenly released, causing a very fast-moving flood downstream of the dam. These floodwaters can damage or destroy property, cause injury or loss of life, and displace large numbers of people in the flood's path. Dam failure can also damage regional infrastructure such as transportation and energy networks. If the failed dam is part of a water supply network, there may also be local and regional disruptions to water service if an alternative source of water is not available. There are multiple scenarios that may result in dam failure. Earthquakes or landslides may damage the dam structure or its foundations, intense rainfall can erode away the dam or the surrounding rock, or the dam itself may be poorly sited, designed, or maintained.

There are 42 dams in Santa Clara County according to state records: 12 owned by Valley Water, 16 owned by other public agencies (e.g., the San Jose Water Company or the City of Palo Alto), and 14 owned by private organizations (Valley Water 2017).

Most of the dams in Santa Clara County are located in the mountainous areas east and west of the Highway 101 corridor, and along the southern and eastern border of the Santa Clara Valley. Overall, the dam hazard area covers much of the Highway 101 corridor, as well as large sections of San Jose and neighboring cities near Los Gatos Creek, the Guadalupe River, San Thomas Aquinas Creek, and Coyote Creek. Southwest Sunnyvale, northern Palo Alto, and various canyon areas are also within the dam inundation hazard area. There have been no dam failure events in Santa Clara County but within the state there were two failures (1928 St. Francis Dam and 1963 Baldwin Hills Dam failures) as well as overtopping events (1916 San Diego County and 2017 Oroville) that caused substantive damage (Valley Water 2017).

Seiches

A seiche is a surface wave created when an inland enclosed or semi-enclosed water body is shaken, usually by an earthquake. Reservoirs and aboveground water storage tanks can generate seiches posing substantial flood hazards. Flooding can also occur if strong ground shaking causes structural damage to aboveground water tanks. Sloshing water can lift a water tank off its foundation or break the pipes leading to the tank. Standards for steel and reinforced concrete tank design are issued by the American Water Works Association and the California Department of Public Health.

The potential for seiches is considered higher on dams with upstream concrete facing construction (Almaden, Calero Main and Auxiliary Dams, Guadalupe Dam, Vasona Dam, and Stevens Creek Dam), and less on those

without rock faces (Valley Water 2017). The largest seiche that was ever measured in the San Francisco Bay, following the 1906 earthquake, was 4 inches high (Valley Water 2017). According to a U. S. Army Corps of Engineers report, the Bay Area has not been adversely affected by seiches to date (Valley Water 2017).

Tsunamis

A tsunami is a sea wave caused by a sudden displacement of the ocean floor, most often due to earthquakes but also sub-aquatic landslides. The West Coast and Alaska Tsunami Warning Center, part of the National Oceanic and Atmospheric Administration issues tsunami warnings and tsunami watches for the Pacific. A Tsunami Warning Bulletin is a warning message issued throughout the Pacific based on confirmation that a tsunami has been generated that poses a threat to the population in part or all of the Pacific Coast regions. While tsunami waves can enter the San Francisco Bay through the Golden Gate, they generally attenuate as they enter the Bay. According to the Local Hazard Mitigation Plan for the County, there are no areas considered to be at risk of a tsunami event (Valley Water 2017).

3.10.2 Relevant Plans, Policies, and Ordinances

Federal

The following federal regulations pertaining to hydrology and water quality would apply to the Project.

Safe Drinking Water Act

The Federal Safe Drinking Water Act provides regulations on drinking water quality in San Bernardino. The Safe Drinking Water Act gives the U.S. Environmental Protection Agency (EPA) the authority to set drinking water standards, such as the National Primary Drinking Water regulations, which protect drinking water quality by limiting the levels of specific contaminants that are known to occur or have the potential to occur in water and can adversely affect public health. All public water systems that provide service to 25 or more individuals are required to satisfy these legally enforceable standards. Water purveyors must monitor for these contaminants on fixed schedules and report to the EPA when a Maximum Contaminant Level (MCL) has been exceeded. MCL is the maximum permissible level of a contaminant in water that is delivered to any user of a public water system. Drinking water supplies are tested for a variety of contaminants, including organic and inorganic chemicals (e.g., minerals), substances that are known to cause cancer (e.g., carcinogens), radionuclide (e.g., uranium and radon), and microbial contaminants (e.g., coliform and Escherichia coli). Changes to the MCL list are typically made every three years, as the EPA adds new contaminants or, based on new research or new case studies, revised MCLs for some contaminants are issued. The California Department of Health Services, Division of Drinking Water and Environmental Management, is responsible for implementation of the Safe Drinking Water Act in California.

Clean Water Act

Increasing public awareness and concern for controlling water pollution led to enactment of the Federal Water Pollution Control Act Amendments of 1972. As amended in 1977, this law became commonly known as the Clean Water Act (CWA) (33 USC 1251 et seq.). The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. The CWA established basic guidelines for regulating discharges of pollutants into the waters of the United States. The CWA requires that states adopt water quality

standards to protect public health, enhance the quality of water resources, and ensure implementation of the CWA.

Section 303 of the CWA (Beneficial Use and Water Quality Objectives)

The San Francisco RWQCB is responsible for the protection of the beneficial uses of waters within the project area in Santa Clara County. The RWQCB uses its planning, permitting, and enforcement authority to meet its responsibilities adopted in the Basin Plan to implement plans, policies, and provisions for water quality management.

In accordance with state policy for water quality control, the RWQCB employs a range of beneficial use definitions for surface waters, groundwater basins, marshes, and mudflats that serve as the basis for establishing water quality objectives and discharge conditions and prohibitions. The Basin Plan for the Santa Ana Region has identified existing and potential beneficial uses supported by the key surface water drainages throughout its jurisdiction. Under CWA Section 303(d), the State of California is required to develop a list of impaired water bodies that do not meet water quality standards and objectives. A Total Maximum Daily Load (TMDL) defines how much of a specific pollutant/stressor a given water body can tolerate and still meet relevant water quality standards. The RWQCB has developed TMDLs for select reaches of water bodies.

Section 401 of the CWA (Water Quality Certification)

Section 401 of the CWA requires that an applicant for any federal permit (e.g., a U.S. Army Corps of Engineers [ACOE] Section 404 permit) obtain certification from the state, requiring that discharge to waters of the United States would comply with provisions of the CWA and with state water quality standards. For example, an applicant for a permit under Section 404 of the CWA must also obtain water quality certification per Section 401 of the CWA. Section 404 of the CWA requires a permit from the ACOE prior to discharging dredged or fill material into waters of the United States, unless such a discharge is exempt from CWA Section 404. For the project area, the Santa Ana RWQCB must provide the water quality certification required under Section 401 of the CWA.

Section 402 of the CWA (National Pollutant Discharge Elimination System)

The CWA was amended in 1972 to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with a NPDES permit. The NPDES permit program, as authorized by Section 402 of the CWA, was established to control water pollution by regulating point sources that discharge pollutants into waters of the United States (33 USC 1342). In the state of California, the EPA has authorized the State Water Resources Control Board (SWRCB) permitting authority to implement the NPDES program.

Regulations (Phase II Rule) that became final on December 8, 1999, expanded the existing NPDES Program to address stormwater discharges from construction sites that disturb land equal to or greater than 1.0 acre and less than 5.0 acres (small construction activity). The regulations also require that stormwater discharges from small MS4s be regulated by an NPDES General Permit for Storm Water Discharges Associated with Construction Activity, Order No. 99-08-DWQ. The Construction General Permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP), which describes BMPs the discharger would use to protect stormwater runoff. The SWPPP must contain a visual monitoring program, a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs, and a sediment-monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Routine inspection of all BMPs is

required under the provisions of the Construction General Permit. On September 2, 2009, the SWRCB issued a new NPDES General Permit for Storm Water Associated with Construction Activities (Order No. 2009-0009-DWQ, NPDES No. CAS000002 and amended by 2010-0014-DWQ and 2012-0006-DWQ), that became effective July 1, 2010.

Section 404 of the Clean Water Act

Section 404 of the CWA established a permitting program to regulate the discharge of dredged or filled material into waters of the United States, which include wetlands adjacent to national waters (33 USC 1344). This permitting program is administered by the ACOE and enforced by the EPA. For more information on Section 404 of the CWA, see Section 3.3, Biological Resources, of this PEIR.

National Flood Insurance Program

The National Flood Insurance Act of 1968 established the National Flood Insurance Program in order to provide flood insurance within communities that were willing to adopt floodplain management programs to mitigate future flood losses. The Act also required the identification of all floodplain areas within the U.S. and the establishment of flood-risk zones within those areas. The Federal Emergency Management Agency (FEMA) is the primary agency responsible for administering programs and coordinating with communities to establish effective floodplain management standards. FEMA is responsible for preparing Flood Insurance Rate Maps that delineate the areas of known special flood hazards and their risk applicable to the community. The program encourages the adoption and enforcement by local communities of floodplain management ordinances that reduce flood risks. In support of the program, FEMA identifies flood hazard areas throughout the United States on FEMA flood hazard boundary maps.

Federal Antidegradation Policy

The Federal Antidegradation Policy (40 CFR 131.12) requires states to develop statewide antidegradation policies and identify methods for implementing them. Pursuant to the Code of Federal Regulations (CFR), state antidegradation policies and implementation methods shall, at a minimum, protect and maintain: (1) existing in-stream water uses; (2) existing water quality where the quality of the waters exceeds levels necessary to support existing beneficial uses, unless the state finds that allowing lower water quality is necessary to accommodate economic and social development in the area; and (3) water quality in waters considered an outstanding national resource.

Federal Guidelines for Emergency Action, FEMA Publication No. 64

These guidelines provide guidance to help dam owners, in coordination with emergency management authorities, effectively develop and exercise Emergency Action Plans for dams. The guidelines encourage (1) the development of comprehensive and consistent emergency action planning to protect lives and reduce property damage and (2) the participation of emergency management authorities and dam owners in emergency action planning.

Federal Guidelines for Dam Safety Risk Management, FEMA Publication No. 1025

These guidelines enable federal agencies to use the general principles of risk management to make risk-informed decisions. The agencies work to develop and maintain consistent application of risk analysis, risk assessment, risk management, and risk communication, using equivalent procedures and tools. Risk estimates typically reflect

the risk at a given dam at the snapshot in time when the risk analysis is performed. Risk management includes structural and nonstructural actions on a given dam, as well as activities such as routine and special inspections, instrumented monitoring, structural analyses, site investigations, development and testing of emergency action plans, and many other activities.

State

The following state regulations pertaining to hydrology and water quality would apply to the Project.

Sustainable Groundwater Management Act

On September 16, 2014, Governor Jerry Brown signed into law a three-bill legislative package—Assembly Bill 1739 (Dickinson), Senate Bill 1168 (Pavley), and Senate Bill 1319 (Pavley)—collectively known as SGMA, which requires governments and water agencies of high- and medium-priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically over-drafted basins, sustainability should be achieved by 2040. For the remaining high- and medium-priority basins, 2042 is the deadline. Through SGMA, the California Department of Water Resources provides ongoing support to local agencies through guidance, financial assistance, and technical assistance. SGMA empowers local agencies to form Groundwater Sustainability Agencies (GSA) to manage basins sustainably, and requires those Groundwater Sustainability Agencies to adopt Groundwater Sustainability Plans for crucial (i.e., medium to high priority) groundwater basins in California. Valley Water is the GSA for Santa Clara County.

California Water Code, Division 3. Dams and Reservoirs, Sections 6101–6102

These regulations require dam owners to maintain records of, and to report on, maintenance, operation, staffing, and engineering and geologic investigations and to issue orders as necessary to secure maintenance and operations to safeguard life and property. The owner of a dam, or his agent, shall fully and promptly advise the Department of Water Resources of any sudden or unprecedented flood or unusual or alarming circumstance or occurrence affecting the dam or reservoir. These regulations require the Department of Water Resources to periodically inspect dams and reservoirs for the purpose of determining their safety. If required, the dam owner shall perform work necessary to secure maintenance and operation that will safeguard life and property.

Governor's Office of Emergency Services, California Code of Regulations, Title 19 - Public Safety, Division 2 – Office of Emergency Services, Chapter 2 – Emergencies and Major Disaster, Subchapter 4 – Dam Inundation Mapping Procedures

These regulations were adopted to implement the provisions of Government Code Section 8589.5, which provide the standards for producing and submitting an inundation map, acquiring a waiver from the inundation mapping requirement, and administering the program. These regulations are not applicable to those structures identified as Debris Basins in Department of Water Resources Division of Safety and Dams Bulletin 17-00, dated July 2000. However, these regulations are not intended to limit the authority of the Governor's Office of Emergency Services, or any appropriate public agency, to act under the police power of the state, when necessary, to protect life and property from a threatened or actual dam failure.

California Porter-Cologne Water Quality Control Act

Since 1973, the California SWRCB and its nine RWQCBs have been delegated the responsibility for administering permitted discharge into the waters of California. The project area falls within the jurisdiction of the San Francisco RWCQB. The Porter-Cologne Water Quality Act (California Water Code Section 13000 et seq.; California Code of Regulations, Title 23, Chapter 3, Chapter 15) provides a comprehensive water-quality management system for the protection of California waters. Under the Act, "any person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state" must file a report of the discharge with the appropriate RWQCB. Pursuant to the Act, the RWQCB may then prescribe "waste discharge requirements" that add conditions related to control of the discharge. Porter-Cologne defines "waste" broadly, and the term has been applied to a diverse array of materials, including non-point source pollution. When regulating discharges that are included in the Federal Clean Water Act, the state essentially treats Waste Discharge Requirements and NPDES as a single permitting vehicle. In April 1991, the State Water Resources Control Board and other state environmental agencies were incorporated into the California EPA.

The RWQCB regulates urban runoff discharges under the NPDES permit regulations. NPDES permitting requirements cover runoff discharged from point (e.g., industrial outfall discharges) and nonpoint (e.g., stormwater runoff) sources. The RWQCB implements the NPDES program by issuing construction and industrial discharge permits.

Under the NPDES permit regulations, BMPs are required as part of a SWPPP. The EPA defines BMPs as "schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of Waters of the United States." BMPs include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage" (40 CFR 122.2).

California Antidegradation Policy

The California Antidegradation Policy, otherwise known as the Statement of Policy with Respect to Maintaining High Quality Water in California, was adopted by the SWRCB (State Board Resolution No. 68-16) in 1968. Unlike the Federal Antidegradation Policy, the California Antidegradation Policy applies to all waters of the state (e.g., isolated wetlands and groundwater), not just surface waters. The policy states that whenever the existing quality of a water body is better than the quality established in individual Basin Plans, such high quality shall be maintained, and discharges to that water body shall not unreasonably affect present or anticipated beneficial use of such water resource.

California Toxics Rule

The U.S. EPA has established water quality criteria for certain toxic substances via the California Toxics Rule. The California Toxics Rule established acute (i.e., short-term) and chronic (i.e., long-term) standards for bodies of water, such as inland surface waters and enclosed bays and estuaries, that are designated by each RWQCB as having beneficial uses protective of aquatic life or human health.

California Water Code

The California Water Code includes 22 kinds of districts or local agencies with specific statutory provisions to manage surface water. Many of these agencies have statutory authority to exercise some forms of groundwater

management. For example, a Water Replenishment District (Water Code Section 60000 et seq.) is authorized to establish groundwater replenishment programs and collect fees for that service, while a Water Conservation District (Water Code Section 75500 et seq.) can levy groundwater extraction fees. Through special acts of the Legislature, 13 local agencies have been granted greater authority to manage groundwater. Most of these agencies, formed since 1980, have the authority to limit export and control some in-basin extraction upon evidence of overdraft or the threat of an overdraft condition. These agencies can also generally levy fees for groundwater management activities and for water supply replenishment.

Assembly Bill 3030 - Groundwater Management Act

In 1992, Assembly Bill 3030 was passed, which increased the number of local agencies authorized to develop a groundwater management plan and set forth a common framework for management by local agencies throughout California. These agencies could possess the same authority as a water replenishment district to "fix and collect fees and assessments for groundwater management" (Water Code Section 10754), provided they receive a majority of votes in favor of the proposal in a local election (Water Code Section 10754.3).

Local

The following local/regional regulations pertaining to hydrology and water quality would apply to the Project.

NPDES Regional MRP Permit

Development projects are required by the NPDES program to manage stormwater (rainwater) runoff to protect local waterways during construction and after construction through the Municipal Separate Storm Sewer Systems (MS4). Municipalities with populations greater than 100,000 are covered under a Phase I Permit Program and Phase II Permit Program for those under 100,000). The County implements the NPDES requirements through its development review process to ensure local waterways meet pollution prevention and flow management requirements. Stormwater discharges within Santa Clara County are regulated by two regional NPDES permits:

- San Francisco Bay Phase I NPDES MS4 Regional Permit- for areas that drain toward the San Francisco Bay
- Phase II NPDES MS4 Permit– for areas that drain into the Central Coast region

Municipalities covered by the MS4 Permit are required to implement post-construction stormwater controls on development projects as part of their obligations under Provision C.3 of the MS4 permit. The Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) consists of an association of the County, Valley Water and 13 cities and towns in the Santa Clara Valley. Each member agency is individually responsible for implementing the MS4 permit requirements that include pollution prevention, source control, monitoring and outreach programs aimed at reducing pollution in stormwater runoff, protecting water quality and beneficial uses of receiving waters.

Santa Clara County General Plan

The 1995-2010 Santa Clara County General Plan includes Book A for Countywide Issues & Policies and also Book B which contains Rural Unincorporated Area Issues & Policies. The following goals and policies potentially relevant to the Project include (County of Santa Clara 1994):

Book A – Resource Conservation – Water Supply Resources

Policy C-RC 5. An adequate, high quality water supply for Santa Clara County should be considered essential to the needs of households, business and industry.

Policy C-RC 6. A comprehensive strategy for meeting long term projected demand for water should at a minimum include the following:

A. Continued conservation and increased reclamation;
B. Securing additional sources as supplemental supply;
C. System and local storage capacity improvements; and
D. Drought contingency planning and groundwater basin management programs.

Policy C-RC 7. Countywide land use and growth management planning should be coordinated with overall water supply planning by the SCVWD in order to maximize dependability of long term water supply resources.

Policy C-RC 8. Environmental impacts of all state and local water supply planning and decision-making should be taken into full consideration.

Policy C-RC 9. Conservation should continue to be considered an integral component of local water "supply" resources, effectively minimizing the amount of supplemental supplies which must be obtained from other sources.

Policy C-RC 12. More efficient use of water for agricultural irrigation and industrial processes should be promoted through improved technology and practices.

Policy C-RC 13. Use of reclaimed wastewater for landscaping and other uses, including groundwater recharge if adequately treated, should be encouraged and developed to the maximum extent possible.

Policy C-RC 18. Water quality countywide should be maintained and improved where necessary to ensure the safety of water supply resources for the population and the preservation of important water environments and habitat areas.

Policy C-RC 19. The strategies for maintaining and improving water quality on a countywide basis, in addition to ongoing point source regulation, should include:

A. effective non-point source pollution control;
B. restoration of wetlands, riparian areas, and other habitats which serve to improve Bay water quality; and

C. comprehensive Watershed Management Plans and "best management practices" (BMPs).

Policy C-RC 20. Adequate safeguards for water resources and habitats should be developed and enforced to avoid or minimize water pollution of various kinds, including:

A. erosion and sedimentation;
B. organic matter and wastes;
C. pesticides and herbicides;
D. effluent from inadequately functioning septic systems;
E. effluent from municipal wastewater treatment plants;
F. chemicals used in industrial and commercial activities and processes;
G. industrial wastewater discharges;
H. hazardous wastes; and
I. non-point source pollution.

Policy C-RC 22. Countywide, compliance should be achieved with the requirements of the National Pollution Discharge Elimination System (NPDES) permit for discharges into S.F. Bay, and to that end, the Countywide Nonpoint Source Pollution Control Program should receive the full support and participation of each member jurisdiction.

Book B – Rural Unincorporated Area Issues & Policies – Water Supply, Quality, and Watershed Management

Policy R-RC 1. Natural and heritage resources shall be protected and conserved for their ecological, functional, economic, aesthetic, and recreational values.

1. Rural open lands not suitable or intended for urbanization should not be included cities' current Urban Service Areas or long term urban growth plans. Urban open lands intended for open space uses, such as parks or conservation, should be protected from adverse environmental impacts.
2. Heritage resources shall be preserved to the maximum extent possible for their scientific, cultural, and "sense of place" values.

Policy R-RC 4. For both public and private lands in rural unincorporated areas, the overall strategy for resource management and conservation shall be to:

A. Improve and update current knowledge of resources;
B. Emphasize pro-active, preventive measures;
C. Minimize or compensate for adverse human impacts;
D. Restore resources where possible; and,
E. Monitor the effectiveness of required mitigations.

Policy R-RC 5. Public and private development projects shall be evaluated and conditioned to assure they are environmentally sound, do not degrade natural resources, and that reasonable steps are taken to mitigate potentially adverse impacts.

Policy R-RC 6. Public and private efforts to acquire open space lands shall be supported for the protection of the natural environment.

Policy R-RC 7. Planning and decision-making regarding resource management and conservation in rural areas of the county, when they occur, should be undertaken with the participation of rural property owners and other who may be most directly affected by policies and actions.

Policy R-RC 8. The strategies for assuring water quantity and quality for the rural unincorporated areas shall include:

1. Require adequate water quantity and quality as a pre-condition of development approval.
2. Reduce the water quality impacts of rural land use and development.
3. Develop comprehensive watershed management plans.

Policy R-RC-9. Development in rural unincorporated areas shall be required to demonstrate adequate quantity and quality of water supply prior to receiving development approval.

Policy R-RC-10. For lands designated as Resource Conservation Areas (Hillsides, Ranchlands, Agriculture, and Baylands) and for Rural Residential areas, water resources shall be protected by encouraging land uses compatible and consistent with maintenance of surface and ground water quality.

1. Uses that pose a significant potential hazard to water quality should not be allowed unless the potential impacts can be adequately mitigated.
2. The amounts of impervious surfaces in the immediate vicinity of water courses or reservoirs should be minimized.

Policy R-RC 11. Areas with prime percolation capabilities shall be protected to the maximum extent possible, and placement of significant pollution sources within such areas shall be avoided.

Policy R-RC 12. Excessive concentrations of septic systems shall be avoided, especially in areas vulnerable to groundwater contamination or in which normal functioning may be impaired by hydrologic constraints.

Policy R-RC 13. Sedimentation and erosion shall be minimized through controls over development, including grading, quarrying, vegetation removal, road and bridge construction, and other uses which pose such a threat to water quality.

Policy R-RC 14. Use and disposal of agricultural chemicals, such as fertilizers, pesticides and herbicides, shall be managed to minimize the threat of water pollution.

Policy R-RC 15. Commercial and industrial uses such automobile dismantlers, waste transfer disposal facilities, light industries, uses requiring septic systems, and other uses that have the greatest

potential for pollution shall not be located within the vicinity of streams, reservoirs, or percolation facilities where contaminants could easily come in contact with flood waters, high groundwater, flowing streams, or reservoirs. Such uses shall be required to reduce any threat of contamination to an insignificant level as a condition of approval.

Policy R-RC 16. New or expanded solid waste disposal sites shall be located, designed and managed to prevent leachates from conveying pollutants to groundwater basins.

Policy R-RC 17. Dry wells should be located and effectively sealed to prevent pollutants in surface runoff from easily infiltrating groundwater basins.

Policy S 2.5. Ensure that the mitigation of flood related property damage and loss limits impacts to biological and other resources.

Policy S 2.6. Work cooperatively with public agencies with responsibility for flood protection, and with stakeholders in planning for flood and inundation hazards.

County of Santa Clara Grading and Drainage Ordinance

Minimum requirements for all grading and drainage alteration work are set forth in Title C Division C12 Chapter III Article 1 of the County Code (Ordinance No. NS-1203.120). For all project that involve grading consisting of a cuts or fills greater than 150 cubic yards, or cut or fill that is greater than five feet in vertical depth, or work that alters, diverts, or impairs the flow of water in a watercourse, is requirement to obtain a grading permit from the County.

Issuance of a grading approval is required prior to the issuance of a grading permit and Complete sets of preliminary plans, including profiles, cross-sections, specifications, and erosion prevention and sediment control measures, must be submitted to the County Planning Office with each application for a grading permit, and when otherwise required by the Grading Official, for the enforcement of any provisions of this chapter. Prior to the issuance of a grading permit, the applicant must furnish final grading plans. When the final plans have been approved and ordinance requirements have been met, a grading permit will be issued by the Grading Official. The work must be performed according to the approved plans and specifications, which shall not be modified except as provided in Section C12-499 or C12-524.

Santa Clara County Flood Control Ordinance

All development within the areas mapped as the 100-year floodplain (or Special Flood Hazard Area) is subject to floodplain development regulations. “Development” is defined as “any man-made change to improved or unimproved real estate” and includes (but is not limited to):

- the construction, reconstruction, renovation, repair, expansion, or alteration of buildings, accessory structures, or other structures;
- the placement of manufactured homes;
- mining;
- dredging;
- bridges, streets, and other paving;
- docks;

- utilities;
- filling, grading, and excavation;
- drilling operations;
- storage of equipment or materials; and
- installation of manufactured home, recreational vehicle, or trailer parks.

Minimum standards for floodplain development have been established by the federal government as a condition for the sale of federally subsidized flood insurance and eligibility for federal flood recovery assistance. Some states and communities have chosen to provide an extra margin of safety by exceeding the minimum federal standards.

The specific requirements for a floodplain development project depend on the flood zone and the type of development. The basic standards that must be met by any floodplain development are:

- Proposed development must be reasonably safe from flood damage, which for most buildings means elevated above the height of floodwaters.
- Proposed development shall not result in physical damage to any other property. Technical analysis may be required if there is potential for increased flood heights, diversion of flow, flotation of materials, or release of pollutants.

Applicant shall obtain any other required permits. Note that obtaining state or federal permits does not mean that floodplain requirements have been met – a project in the floodplain also requires a local floodplain development permit.

3.10.3 Thresholds of Significance

According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, a project would normally have a significant effect on the environment with respect to hydrology and water quality if the project would:

HYD-1: Violate and water-quality standards or waste-discharge requirements or otherwise substantially degrade surface or ground water quality.

HYD-2: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

HYD-3: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site.

HYD-4: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.

HYD-5: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

HYD-6: Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would impede or redirect flood flows.

HYD-7: In a flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.

HYD-8: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

3.10.4 Methodology

The hydrology and water quality analysis considers if implementation of the Project would result in significant impacts regarding water quality, flooding hazards, potential pollutant runoff, increased surface water runoff that could flood storm drains, and more. These impacts are considered when looking at the potential increase in agriculture-supportive development as a result of the Project. The location of Project development relative to flood hazard zones is an important consideration in this analysis. Compliance with federal, state, and local water quality and standards would likely reduce potential impacts. If the Project has the potential to result in potential hydrology or water quality impacts, mitigation measures can be provided to reduce potential impacts.

3.10.5 Environmental Impacts

Impact HYD-1 Would the project violate and water-quality standards or waste-discharge requirements?

The Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. More details on the Project can be found in Chapter 2, Project Description. While the Project would not directly result in new construction, it would allow and facilitate agriculture-supportive uses that would involve ground disturbing activities and changes to drainage patterns. Construction activities would involve soil disturbance and grading activities that could generate pollutants affecting stormwater.

Construction

Implementation of future development within the project area would adhere to local, state, and federal regulations pertaining to water quality standards. This includes adherence to the Construction General Permit that requires future projects over an acre to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) for construction activities. The SWPPP is required to identify BMPs that protect stormwater runoff and ensure avoidance of substantial degradation of water quality. All demolition and construction activities associated with future individual development projects facilitated by the Project , including installation and realignment of utilities, would be subject to existing regulatory requirements. Future individual development projects facilitated by the Project would file a Notice of Intent with the RWQCB to comply with the requirements of the Construction General Permit. This process would include preparation of a SWPPP and incorporation and implementation of BMPs to control construction-related erosion and sedimentation in dry weather and stormwater runoff. Typical BMPs that could be incorporated into the SWPPP to protect water quality include the following:

- Diverting off-site runoff away from the construction site
- Vegetating landscaped/vegetated swale areas as soon as feasible following grading activities
- Placing perimeter straw wattles to prevent off-site transport of sediment
- Using drop inlet protection (filters and sandbags or straw wattles), with sandbag check dams within paved areas
- Regular watering of exposed soils to control dust during demolition and construction
- Implementing specifications for demolition/construction waste handling and disposal
- Using contained equipment wash-out and vehicle maintenance areas
- Maintaining erosion and sedimentation control measures throughout the construction period
- Stabilizing construction entrances to avoid trucks from imprinting soil and debris onto SPA and adjoining roadways
- Training, including for subcontractors, on general site housekeeping

Incorporation of required BMPs for materials and waste storage and handling, and equipment and vehicle maintenance and fueling would reduce potential discharge of polluted runoff from construction sites, consistent with the Construction General Permit. Compliance with existing regulations would prevent violation of water quality standards and minimize the potential for contributing sources of polluted runoff from future development resulting from the Project. Therefore, all water quality standards in relation to demolition and construction activities in the project area would comply with relevant existing regulations and impacts would be **less than significant**.

Operation

Implementation of the Project would not directly authorize new construction, but could indirectly result in development of new structures or improvements that would result in increases in impervious surfaces or otherwise include potential sources of stormwater pollutants. As a result, the Project could adversely affect water quality from incidental spills of petroleum products associated with vehicles/machinery, oils and other chemicals that can be conveyed by storm and landscape irrigation flows. New or additional impermeable surfaces could prevent stormwater from infiltrating on site and discharging polluted runoff to receiving waters if not managed appropriately.

The proposed Zoning Ordinance amendments would limit the size, scale, and intensity of development within the rural zoning districts, and, thus, limit the adverse effects on stormwater runoff. Furthermore, any qualifying (e.g., new or replaced impervious surfaces that exceed 10,000 square feet or 5,000 square feet depending on the type of project and whether part of the San Francisco regional MS4 or Central Coast MS4 permit) development would be required to adhere to the applicable regional NPDES MS4 permit[1] and SCVURPPP stormwater requirements, which sets limits on pollutants being discharged into waterways and requires all new development and significant redevelopment to incorporate low-impact design (LID) features to the maximum extent practicable to reduce the discharge of pollutants into receiving waters.

Implementation of BMPs would address water quality concerns during operations of future development facilitated by the Project, such as inadvertent release of pollutants (e.g., hydraulic fluids and petroleum); improper management of hazardous materials; trash and debris; and improper management of portable restroom facilities (e.g., regular service). In accordance with NPDES MS4 permit and SCVURPPP requirements, source controls to improve water quality would be provided for outdoor material storage areas, outdoor trash storage/waste handling areas, outdoor loading/unloading dock areas, and building materials areas. Source controls would also include storm drain messages and signage and beneficial landscape irrigation practices.

Compliance with existing NPDES and MS4 Permits as well as successful implementation of a site-specific SWPPP, which includes LID features consistent with the SCVURPPP, would ensure that degradation of water quality (surface and ground) would be minimized and that future development within the project area would meet all waste discharge requirements. Thus, the Project would not violate any water quality standards and impacts would be **less than significant**.

Impact HYD-2 Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Groundwater Supplies

Groundwater resources in the County are managed by Valley Water and the two underlying groundwater subbasins, Santa Clara and Llagas, are both considered sustainable, with managed and in-lieu recharge programs maintaining adequate storage to meet annual water supply needs and provide a buffer against drought or other shortages (Valley Water 2021). According to Valley Water's 2020 Urban Water Management Plan, projected water supplies would be sufficient to meet average, single dry, and multiple dry year scenarios out to the year 2045 (Valley Water 2021). This supply demand reliability analysis considers projected demand that was developed through a statistical based Demand Model in 2020 using recently available water use data and new housing and economic development forecasts (Valley Water 2021). For agricultural water use from groundwater pumping, the demand has been generally constant over the last 20 years (Valley Water 2021). While prior to the 2000s there had been substantial

[1] Santa Clara County is covered by two different regional MS4 permits – the San Francisco Bay Phase I Regional MS4 permit and the Central Coast Phase II MS4 permit.

declines in the amount harvested acres and agricultural water use largely from increased urban development, the amount of harvested acreage is now considered to be in a relatively stable state. The Project would promote agricultural viability and preserve farmland, but would not necessarily cause any substantive increases in harvested acreages. The Project would also encourage smaller scale ("Limited") agriculture-supportive uses within the rural zoning districts.

As discussed in Section 3.14, *Population and Housing*, the Project does not result in growth inducement or conflict with the Association of Bay Area Governments' (ABAG's) growth assumptions for Santa Clara County. Therefore, considering the sustainable groundwater management of the underlying subbasins and the projected reliability of the groundwater resources, impacts to groundwater supplies are anticipated to be minimal as any increases in water demands associated with the Project are not expected to exceed forecasts consistent with the 2020 Urban Water Management Plan. Therefore, the Project itself would not interfere with groundwater supplies and impacts would be **less than significant.**

Groundwater Recharge

Generally, the Project would encourage more limited development (and associated impervious surfaces) within the rural zoning districts. The Project would also encourage the preservation of farmland. This would have a beneficial impact on groundwater recharge. Development associated with the Project would be required to adhere to NPDES MS4 permit and SCVURPPP requirements which include LID requirements that would encourage as much on site infiltration of stormwater runoff as feasible. Thus, even if development associated with the Project results in increases in impervious surfaces, developments and redevelopments would result in relatively minor increases in impervious areas. Consequent impacts on groundwater recharge would be **less than significant**.

Impact HYD-3 Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site.

As noted above, the Project would not directly result in development. While the Project would allow and facilitate agriculture-supportive uses, it would also limit the size of such development, by streamlining projects of a certain limited size, and developing overall development standards for the rural zoning districts. Implementation of the Project would not authorize altering the course of a stream or river and overall would not likely result in a substantial change in drainage patterns. Furthermore, under existing regulations, construction projects of 1 acre or more must implement a SWPPP with BMPs for erosion control and sediment control pursuant to the NPDES General Construction Permit. Under the MS4 Permit and SCVURPPP requirements, development and redevelopment projects that create or replace 10,000 square feet or more of impervious surfaces are required to mimic predevelopment hydrology through infiltration, evapotranspiration, and rainfall harvest and use. Projects are required to limit post-development peak stormwater-runoff discharge rates to no greater than the estimated predevelopment rate for developments where the increased peak, stormwater discharge rate will result in increased potential for downstream erosion. Alteration of a stream or river would be subject to additional regulatory requirements including Section 404 of the Clean Water Act, and Section 1602 of the California Fish and Game Code (described in Chapter 3.4, *Biological Resources*).

Therefore, with adherence to these existing regulatory requirements the potential impacts related to erosion or siltation would be **less than significant.**

Impact HYD-4 Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

As discussed in Impact HYD-3, implementation of the Project would not substantially change drainage patterns in the County watersheds. Adherence to the existing MS4 Permits and SCVURPPP requirements, would require projects that create or replace 10,000 square feet (or even 5,000 square feet depending on the project and location) of impervious surfaces to mimic predevelopment hydrology through infiltration, evapotranspiration, and rainfall harvest and use. Development projects are also required to limit post-development peak stormwater runoff discharge rates to no greater than the estimated pre-development rate for developments. With compliance with these drainage control requirements, development allowable under the Project would not substantially increase runoff rates or volumes and impacts related to flood hazards on- or off-site would be **less than significant**.

Impact HYD-5 Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

As discussed above in Impacts HYD-3 and HYD-4, implementation of the Project would not alter the course of a stream or river and would not substantively change drainage patterns in Santa Clara County. Development and redevelopment projects that create or replace 10,000 square feet of impervious surfaces would be required to mimic predevelopment hydrology through drainage control features that promote on site infiltration and include stormwater retention/detention basins that are adequately sized to meet minimum peak stormflow thresholds. The MS4 permit and SCVURPPP requirements also include hydromodification requirements where post-development peak stormwater runoff discharge rates cannot be greater than the estimated pre-development rates.

Therefore, future development allowable under the Project would not substantially increase runoff rates nor exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Impacts would be **less than significant**.

Threshold HYD-6 Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would impede or redirect flood flows?

As discussed in Impact HYD-5, any development indirectly resulting from the Project would be subject to all relevant drainage control requirements and applicable hydromodification requirements to ensure that peak stormwater runoff volumes are managed in a way that does not substantially increase the rate or amount of surface runoff that is discharged offsite. In fact, post-development peak stormwater flows cannot be greater than the estimated pre-development rates. Therefore, the Project would not alter drainage patterns or substantially increase the rate or amount of runoff that would impede or redirect flood flows and impacts would be **less than significant**.

Threshold HYD-7 Would the project be in a flood hazard, tsunami, or seiche zones, and risk release of pollutants due to project inundation?

Flood

Throughout Santa Clara County there are existing areas that are identified as within the 100-year floodzone. According to the 2017 Local Hazard Mitigation Plan, the most frequent type of disaster in Santa Clara County is flooding (Valley Water 2017). Major events have occurred in 1964, 1967, 1978, 1980, 1982, 1983, 1986, 1995, 1997, 1998, 2000, 2012, and 2017. These floods have affected different parts of Santa Clara County but Morgan Hill, Gilroy, and the communities in the eastern parts of the Santa Clara Valley are generally considered more susceptible than other areas. Valley Water is the flood protection authority for the County and implements the flood protection program for the County. In the case that any development associated with the Project does occur in a 100-year flood zone, any storage and handling of hazardous materials that would be associated with any of these projects would be subject to existing regulatory requirements that includes ensuring that storage is made in appropriate containers and protected from inadvertent releases (discussed more in detail in Section 3.9, *Hazards and Hazardous Materials*). Agriculture-supportive uses that would be streamlined by the Project are limited in size and do not include projects that would include storage and handling of hazardous pollutants. Therefore, buildout of the Project would not have a substantial risk of release of pollutants from project inundation, and the impact would be **less than significant.**

Seiche

Seiche hazards are relatively localized to areas within close proximity to enclosed or semi-enclosed water bodies such as the Bay, reservoirs, and lakes. There have been no recorded substantive seiche incidents in the Bay to date although due to the presence of local seismic sources, there is a potential for seiche wave hazards to occur in the future. Most development in the project area would likely be located outside of any seiche hazard areas as most of Santa Clara County is not considered susceptible to seiche waves. In addition, as mentioned above, future development projects allowable under the Zoning Ordinance amendments would be required to adhere to existing regulatory requirements regarding hazardous materials storage and handling such that releases would be minimized. As a result, the potential impacts related to release of pollutants due to project inundations would be **less than significant**.

Tsunami

As discussed in Section 3.10.1, *Environmental Setting*, although Santa Clara County includes Bay shoreline areas, the risk of tsunami wave hazards is not considered to be present in Santa Clara County (Valley Water 2017). Therefore, the potential impact related to release of pollutants due to project area inundation would be **less than significant**.

Threshold HYD-8 Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

As discussed in response to Impact HYD-1, all future development within the project area would be required to adhere to existing regulatory requirements including the NPDES Construction General Permit, the MS4 permit, and local SCVURPPP requirements which are all consistent with the RWQCB Water Quality Control Plan (Basin Plan).

The changes in water demands that may be associated with agriculture-supportive uses are speculative. However, as discussed above in Impact HYD-2, Valley Water oversees groundwater resources which is part of their supply considered in the 2020 Urban Water Management Plan. This plan has projected that water supplies would be sufficient to meet average, single dry, and multiple dry year scenarios out to the year 2045 (Valley Water 2021). The supply demand reliability analysis considers projected demand that was developed through a statistical based Demand Model that incorporates projected growth that likely includes growth that would be associated with the proposed rezoning amendments (Valley Water 2021). As discussed in this PEIR, the Project would not induce additional growth in the project area. Therefore, the Project would not conflict with or obstruct a water quality control plan or Valley Water's sustainable management of groundwater resources and the impact would be **less than significant**.

3.10.6 Cumulative Impacts

Cumulative projects include the Santa Clara County Housing Element Update, Agricultural Employee Housing Zoning Ordinance Amendments, and Senate Bill 9 (refer to Section 3.0.1 of this EIR, *Cumulative Analysis*, for detailed descriptions of these projects). These projects would accommodate projected demand for housing. Planned housing would generally be directed to unincorporated communities with residential or commercial zoning designations, rather than the rural zoning districts. Agricultural employee housing is located within the rural zoning districts, including the Exclusive Agriculture zoning district, and would be subject to development controls proposed by this project.

Additional development indirectly resulting from the cumulative projects could result in significant cumulative impacts if they would:

- Substantially degrade water quality.
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge.
- Substantially alter the existing drainage pattern of the project area.
- Result in significant pollutants arising from dam inundation, seiche, tsunami, or mudflow.
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

The cumulative projects would not significantly increase development within the project area. Any development indirectly resulting from the cumulative projects overlapping the project area would be required to comply with the above-listed water-quality, drainage, and flood- safety requirements, significant cumulative impacts would not occur. Therefore, the Project would not considerably contribute to a cumulative impact, and cumulative impacts would be **less than significant**.

3.10.7 Mitigation Measures

No mitigation measures are required.

3.10.8 Level of Significance After Mitigation

No significant unavoidable adverse impacts relating to hydrology and water quality have been identified.

3.10.9 References

California Department of Water Resources (DWR), 2004. Santa Clara Valley Groundwater Basin, Santa Clara Subbasin, February 27, 2004.

County of Santa Clara. 1994. Santa Clara County General Plan, 1995-2010, adopted December 20, 1994.

Regional Water Quality Control Board (RWQCB), San Francisco Region. 2017. Water Quality Control Plan for the San Francisco Bay Region (Basin Plan), 2017.

Santa Clara Valley Water District (Valley Water), 2017. *Local Hazard Mitigation Plan, Santa Clara Valley Water District*. October 2017.

Santa Clara Valley Water District (Valley Water), 2021a. *2020 Urban Water Management Plan, Santa Clara Valley Water District*. June 2021.

Santa Clara Valley Water District (Valley Water), 2021b. *2021 Groundwater Management Plan for the Santa Clara and Llagas Subbasins*. November 2021.

Santa Clara Valley Water District (Valley Water), 2022. *Watersheds of Santa Clara Valley*. https://www.valleywater.org/learning-center/watersheds-santa-clara-valley, accessed July 26, 2022.

3.11 Land Use and Planning

This section of the Program Environmental Impact Report (PEIR) evaluates potential impacts to land use from implementation of the County of Santa Clara (County) Rural Zoning Amendments and Agricultural Impact Threshold (Project). This section is based on the Project as described in detail in Chapter 3, Project Description. In addition, compatibility of proposed land use changes with existing land uses in the surrounding area is discussed in this section.

Land use impacts can be direct or indirect. Direct impacts result in land use incompatibilities, the division of neighborhoods or communities, or interference with other land use plans, including habitat and/or wildlife conservation plans. This section focuses on direct land use impacts. Indirect impacts are secondary effects resulting from land use policy implementation, such as an increase in demand for public utilities or services, or increased traffic on roadways. Indirect impacts are addressed in other topical sections of this PEIR.

3.11.1 Environmental Setting

Santa Clara County encompasses approximately 1,312 square miles and spans the southern boundary of the San Francisco Bay to the north, Diablo Range to the east, and Santa Cruz Mountains to the west. The Santa Clara County is bordered by Alameda County to the north, San Joaquin to the northeast, Stanislaus County to the east, Merced County to the southeast, San Benito County to the south, Santa Cruz County to the west, and San Mateo County to the northwest. The regional location of the Santa Clara County is shown in Figure 2-1, Regional Context.

The project area consists of the four rural base zoning districts (Exclusive Agriculture, Agricultural Ranchlands, Hillsides, and Rural Residential), as shown on Figure 2-1. All overlay zoning districts within the four base zoning districts are included.

These lands are generally located in the eastern and southwestern reaches of the Santa Clara County. In addition to these large contiguous areas, there are unincorporated areas with rural base zoning designations in the northern/central portion of Santa Clara County within more urbanized areas, such as San Jose, Los Gatos, and Saratoga. As discussed in Chapter 3.2 of this PEIR and shown on Figure 3.2-1, approximately 4% of Santa Clara County is covered by farmland according to the State's Farmland Mapping and Monitoring Program (FMMP). The majority of farmland primarily located and is primarily located around the southern/central portion of Santa Clara County, in proximity to the Cities of Morgan Hill and Gilroy

Existing Land Uses in Santa Clara County

Overall, approximately 23% of Santa Clara County is classified as urban or built-up land (California Department of Conservation 2020). Most of the urbanized land is concentrated in the 15 incorporated cities of Campbell, Cupertino, Gilroy, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Palo Alto, San Jose, Santa Clara, Saratoga, and Sunnyvale. In general, developed rural residential land in Santa Clara County is concentrated in the Santa Clara Valley, in the central and southern portion of Santa Clara County in the vicinity of the unincorporated community of San Martin and the Cities of Morgan Hill and Gilroy. In addition to San Martin, unincorporated communities include Loyola and Lexington Hills, in addition to several unincorporated places that are part of the San Jose metropolitan area. The Stanford University Campus is also in the unincorporated area in the northwest portion of Santa Clara County, but is not subject to Zoning Ordinance updates under the Project.

Santa Clara County General Plan Land Use Policies

Resource Conservation Areas

The County's General Plan establishes broad land use policies for the unincorporated areas of Santa Clara County that apply to general categories of land uses. (General Plan, Book B, Part 3: Rural Unincorporated Area Issues & Policies.) This includes policies for the following Resource Conservation Areas: Baylands, Agriculture, Hillsides, Ranchlands, Open Space Preserves, Existing Regional Parks, and Other Public Lands. The intent of these areas is to encourage land uses and densities appropriate to the rural unincorporated lands in Santa Clara County that also:

A. help preserve rural character;
B. conserve natural, scenic, and cultural resources;
C. protect public health and safety form natural and man-made hazards;
D. preserve agriculture and prime agricultural soils;
E. protect watersheds and water quality;
F. enhance air quality; and
G. minimize the demand for a cost of public services and facilities. (General Plan policy R-LU 3.)

The project area includes all of the Resource Conservation Areas except Baylands. These Resource Conservation Areas are further described below. Relevant land use policies for each respective Resource Conservation Area are detailed in Section 4.11.2 under General Plan.

Agriculture

This Resource Conservation Area is characterized by the General Plan as having favorable soils, growing conditions, and water supply. Land use policies in the General Plan prioritize preservation of these lands for agricultural uses. The intent of this designation is to encourage productive use of lands not currently planned for development. Lands with this designation are most prevalent in the southern portion of Santa Clara County in proximity to the Cities of Morgan Hill and Gilroy. The General Plan establishes different densities for areas designated Agriculture-Large Scale (40-acre minimum parcel size) and Agriculture-Medium Scale (20-acre minimum parcel size). (General Plan policies R-LU 14, R-LU 15.)

Hillsides

The Hillsides Resource Conservation Area is defined as mountainous lands and foothills unsuitable for annexation and urban development. The General Plan states that these lands shall be preserved largely in natural resource related and/or open space uses in order to support rural character, protect and promote natural resources, avoid risks with natural hazards, and protect the quality of reservoir watersheds. Lands with this designation are throughout Santa Clara County; the western portion of Santa Clara County, including the Santa Cruz foothills, are largely comprised of lands designated under the Hillsides Resource Conservation Area.

Ranchlands

This Resource Conservation Area is defined as lands predominantly used as ranches in rural unincorporated areas of Santa Clara County, remote from urbanized areas and generally less accessible than other mountain lands. Important resources include reservoir watersheds for regional water supply, grazing lands, mineral resources,

forests and wildlife habitat, rare or locally unique plant and animal communities, historic and archeological sites, and recreational and scenic areas of importance that also serve to define the setting for the urban areas. The general intent of the Ranchlands designation is to maintain the existing conditions of very low intensity uses, rural lifestyle, and limited public access. Development policies shall protect and enhance the continued use of the land for ranching. Lands with this designation are primarily located along the eastern and southern portion of Santa Clara County.

Open Space Reserves

This Resource Conservation Area includes rural lands in unincorporated areas contiguous to city urban service areas (USAs) for which no permanent land use designation has been applied pending future joint studies by affected jurisdictions. (General Plan, p. Q-10.)

Existing Regional Parks

The Regional Parks designation is applied to park lands of Santa Clara County, Cities, State of California, and United States government agencies which serve a region-wide population. The largest regional parks in Santa Clara County include Henry Coe State Park, Joseph D. Grant County Park, Coyote Lake County Park, Sanborn-Skyline County Park, Almaden Quicksilver County Park, and Mt. Madonna County Park.

Other Public Open Lands

This Resource Conservation Area is applied to lands that are owned by various public agencies for purposes other than public parks and general recreational use. The lands are owned by such agencies and entities as the United States, the State of California, City and County of San Francisco, Regents of the University of California, Santa Clara Valley Water District, City of Palo Alto, and others. Lands with this designation are throughout Santa Clara County, particularly in the western portion of the County, including the Santa Cruz foothills.

Rural Residential Areas

Rural Residential Areas are defined as lands outside of the Urban Service Area, where:

A. there is an established pattern of small, primarily developed parcels assembled in aggregations large enough to be considered more than simple clusters of rural development;
B. residential density generally exceeds one dwelling unit in ten acres;
C. the use of the land is primarily for residential purposes; and
D. the land is not planned by cities for future inclusion in Urban Service Areas. (General Plan policy R-LU 56.)

Primary uses within the Rural Residential Areas land use designation are residential, agricultural, and open space. Commercial, industrial, and institutional uses are also allowed where they are sized to be local-serving in nature. (General Plan policy R-LU 57.) The project area contains Rural Residential Areas in the southern/central portion of Santa Clara County, surrounding the unincorporated community of San Martin. There are also Rural Residential Areas in the eastern portion of Santa Clara County in between the foothills of the Diablo Range and downtown San Jose.

General Plan Areas with Special Land Use Policies

The County's General Plan Land Use policies identify eight rural areas that would benefit from more detailed policies and implementation measures. (General Plan Book B., Part 3.) Special land use policies and areas intended to address particular land use or development issues of concern primarily to County government. The Mapped Areas that are included within the project area are further described below. Relevant land use policies for each respective area are detailed in Section 4.11.2 under General Plan.

New Almaden Historical Area

This land use area is a nationally registered historic site which is required to be preserved under the provisions of the special Historical Conservation Zoning District. This area is located primarily within Almaden-Quicksilver County Park in the central portion of Santa Clara County.

Los Gatos Watershed Area

This special land use area includes all land in Santa Clara County which drain into Lexington Reservoir, below Lake Elsman. Development standards for this area restrict new buildings and the creation of new building sites or new lots except with the strictest adherence to County standards and criteria. The intent of this special land use area is to manage issues related to fire protection, domestic water supply and quality, general watershed quality, erosion, road maintenance, circulation and road safety, and geological hazards.

Guadalupe Watershed Area of Critical Environmental Concern

This special land use area includes lands between the Los Gatos Watershed and New Almaden Historical Area special land use areas. This area contains the Guadalupe Reservoir and is considered a critical component of the region's water supply system. The area has a variety of environmental factor and constraints such as geologic and seismic concerns, limited fire protection, critical wildlife habitat, and high erosion potential. Land use applications in the area are required to be reviewed for potential cumulative impacts in order to preserve the integrity of natural resources in the area.

San Martin Planning Area

San Martin is a rural unincorporated community governed by the County Board of Supervisors. Furthermore, San Martin should be viewed as a distinct geographic entity, unique within the rural unincorporated areas of Santa Clara County and having a unique rural identity and character within the South County area. The intent of this planning area designation is to prevent premature commitment of land for uses which would restrict future options for the community. The San Martin Planning Area boundary encompasses the area between Maple Avenue on the North; Masten Avenue on the South; the East Foothills and West Foothills (excluding those areas annexed to Morgan Hill). It excludes that part of the current study area which lies west of Monterey Road and between the hill crest north and paralleling California Avenue and West Middle Avenue.

Santa Clara County Rural Zoning Districts

The Santa Clara County Zoning Ordinance divides unincorporated Santa Clara County into geographical districts designated as zoning districts. Some of these districts are designated for rural uses, resource conservation, open space and environmental protection, while the remainder are designated for urban uses. The Zoning Ordinance establishes regulations limiting the use of land and structures, the location, height and bulk of structures, the open

space around buildings, and principal uses, and provides for such other measures that will accomplish the purposes of the Zoning Ordinance and General Plan.

The Zoning Ordinance establishes four rural base zoning districts that would be affected by the Project: A "Exclusive Agriculture," AR "Agricultural Ranchlands," HS "Hillsides," and RR "Rural Residential." The intent of the rural base districts is to maintain and preserve the predominantly rural character of lands to which they are applied. The base districts further regulate the type of land uses and intensity of development permitted in rural areas in a manner that implements the General Plan and which protects natural resources and maintains compatibility between uses. These rural base zone districts, as defined in the current Zoning Ordinance, are further described below.

A – Exclusive Agriculture

The purpose of this zoning district is to preserve and encourage the long-term viability of agriculture and agricultural lands and to reserve those lands most suitable for agricultural production. This district is intended to retain, in open space uses, lands which may be suitable for future urbanization until such time as they are included within a city's urban service area and public facilities and services can be economically provided. This Exclusive Agriculture district is meant to apply to all portions of the County designated as Agriculture: Large-Scale, Agriculture: Medium-Scale, and Open Space Reserve in the General Plan. As depicted in Figure 2-1, many of the County's lands assigned this base zoning district are located in the southern portion of Santa Clara County around the Cities of Morgan Hill and Gilroy.

AR – Agricultural Ranchlands

The purpose of this zoning district is to preserve ranching and the rural character of the areas it applies to. The district allows ranching, agriculture, mineral extraction as permitted uses. It also allows low-intensity recreation and very-low-intensity residential, commercial, industrial and institutional uses if they are determined to be of appropriate size and local-serving in nature. This district is meant to apply to all parcels designated as Ranchlands in the General Plan. As depicted in Figure 2-1, many of Santa Clara County's lands assigned this base zoning district are located along the eastern half of Santa Clara County, abutting the Diablo Mountain range.

HS – Hillsides

The purpose of this zoning district is to preserve mountainous lands unsuited for urban development primarily in open space and to promote uses which support and enhance rural character, protection of natural resources, and avoidance of risks imposed by natural hazards. The zoning district limits development to avoid the need for public services and facilities within the zoning district. Permitted uses in the HS district include agriculture and grazing, very-low-density residential, low-intensity recreation, and mineral extraction. Low-intensity commercial, industrial, and institutional uses are also allowed if they are determined to be of appropriate size and local-serving in nature. The district is meant to apply to all parcels designated as Hillside in the General Plan. As depicted in Figure 2-1, many of Santa Clara County's lands assigned this base zoning district are located along the western portion of Santa Clara County, including the Santa Cruz foothills.

RR – Rural Residential

The purpose of this zoning district is to permit rural residential development in certain limited unincorporated areas of Santa Clara County. The primary uses intended within the district include residential, agricultural, and open space. Agricultural uses may be permitted in this zoning district through discretionary review processes.

Furthermore, commercial, industrial, and institutional uses are allowed if they are determined to be of appropriate size and local-serving in nature. The district is meant to apply to all parcels designated as Rural Residential in the General Plan. As depicted in Figure 2-1, many of Santa Clara County's lands assigned this base zoning district are located in the southern/central portion of the County, surrounding the unincorporated community of San Martin and in proximity to the Cities of Morgan Hill and Gilroy. There are also Rural Residential lands in the eastern portion of Santa Clara County in between the foothills of the Diablo Range and downtown San Jose.

Coyote Valley Climate Resilience (-cv) Combining District

In accordance with California Public Resources Code section 35186(b), Coyote Valley, the area shown in Figure 3.11-1, between the cities of San Jose and Morgan Hill, is an area of statewide significance. As acknowledged by the State Legislature, Coyote Valley is a unique landscape providing agricultural, wildlife, recreational, climate, and other natural infrastructure benefits. The purpose of the combining district is to protect this agricultural greenbelt area as a means of increasing regional climate resilience. The predominantly agricultural lands of Coyote Valley are unique in their combination of natural characteristics, which are well-suited to providing ecological and public benefits, including flood attenuation as a result of sustaining wetland health, maintaining water supply as a result of protecting groundwater recharge potential, and carbon sequestration made available from natural and working lands. This combining district is intended to minimize the impacts of new development through supplemental development standards and use requirements, in order to preserve Coyote Valley as a greenbelt area intended for long-term agricultural uses and climate resilience.

3.11.2 Relevant Plans, Policies, and Ordinances

Federal

There are no federal regulations related to land use and planning relevant to the Project.

State

The following state regulations pertaining to land use in unincorporated areas would apply to the Project.

State Planning Law

The State Planning and Zoning Law (Government Code Section 65000 et seq.) requires every city and county in California to adopt a comprehensive, long-term general plan for the physical development of the jurisdiction and of any land outside its boundaries that, in the planning agency's judgment, bears relation to its planning (sphere of influence). A general plan should consist of an integrated and internally consistent set of goals and policies grouped by topic into a set of elements and guided by a jurisdiction-wide vision. State law requires that a general plan address seven elements or topics (land use, circulation, housing, conservation, open space, noise, and safety), but allows some discretion on the arrangement and content. Additionally, each of the specific and applicable requirements in the state planning law should be examined to determine if there are environmental issues within the community that the general plan should address, such as hazards or flooding.

State planning law also provides for the adoption and administration of zoning ordinances (Government Code Section 65800 et seq.). It is required that county or city zoning ordinances be consistent with the adopted general plan (Government Code Section 65860).

Regional/Local

The following regional and local regulations pertaining to existing land uses would apply to the Project.

Association of Bay Area Governments (ABAG)

The County of Santa Clara is a member of the Association of Bay Area Governments (ABAG), which is the designated as the official comprehensive planning agency for the Bay Area. ABAG allocates the regional housing needs allocation (RHNA) among the cities and counties in the Bay Area and reviews projects of regional significance for consistency with regional plans. ABAG prepared Plan Bay Area 2040, which is the long-range integrated transportation and land-use/housing sustainable community strategy (SCS) for the San Francisco Bay Area. This document provides a strategy for the region to meet 80% of its future housing needs in neighborhoods that are within walking distance to frequent transit service, offer a variety of housing options, and feature amenities such as grocery stores, community centers, and restaurants.

Santa Clara County Local Agency Formation Commission

Under State law, each county must have local agency formation commission (LAFCO), which is the responsible agency to create orderly local government boundaries, with the goals of encouraging orderly formation of local government agencies and the preservation of open space lands, and discouraging urban sprawl. While the Santa Clara LAFCO has no direct authority to regulate land use, its actions determine which local government is responsible for planning and regulating development in new areas. It also oversees a wide range of boundary actions, including the creation of count-wide sphere of influence, adjustments to boundaries of special districts, annexations, and incorporations of new cities.

Santa Clara Valley Habitat Plan

The County of Santa Clara, along with the cities of San Jose, Morgan Hill and Gilroy, Santa Clara Valley Transportation Authority, and Santa Clara Valley Water District, have initiated a collaborative process to prepare and manage a Habitat Conservation Plan/Natural Communities Conservation Plan, named "Santa Clara Valley Habitat Plan." The goal of this plan is to provide for the conservation of endangered and threatened species, thereby contributing to their recovery while allowing for compatible and appropriate development to occur. If successfully implemented, the outcome of the Habitat Plan will be the conservation of 18 covered species (9 wildlife and 9 plants) and the natural communities on which these species rely for habitat. The Habitat Plan's *permit area* covers approximately 510,000 acres from the Santa Clara/Alameda County border south to the Santa Clara/San Benito County border and from the western edge of San Jose east to the eastern edge of the Coyote Creek watershed or Santa Clara County boundary. Further details regarding the Habitat Plan can be found in Section 3.4, Biological Resources.

County of Santa Clara General Plan

Under Part 3 of the General Plan, "Rural Unincorporated Areas Issues & Polices" provides the following land use policies potentially relevant to the land use areas that would be affected by the Project (County of Santa Clara 1994):

Land Use Policies

Agriculture

Policy R-LU 11. Allowable land uses shall be limited to:

A. agriculture and ancillary uses;
B. uses necessary to directly support local agriculture;
C. and other uses compatible with agriculture which clearly enhance the long-term viability of local agriculture and agricultural lands.

Policy R-LU 12. No use permit or other application may be approved for the purpose of establishing a golf course/country club with the "agricultural preserve," consisting of those lands designated "Agriculture-Large Scale" south and east of the city of Gilroy.

Policy R-LU 13. Prior to making a decision as to whether to approve any golf course that might be proposed on lands designated "Agriculture" outside of the "agricultural preserve," the County shall conduct a study to establish specific policies and criteria for the development of golf courses within agricultural areas. The study should evaluate environmental and land use impacts including but not limited to:

A. compatibility with agriculture;
B. effects on prime soils;
C. water supply and quality issues;
D. public service and infrastructure demands; and
E. growth-inducing potential.

Policy R-LU 14. For areas designated 'Agriculture-Large Scale' minimum parcel sizes shall be no less than 40 acres.

Policy R-LU 15. For areas designated 'Agriculture-Medium Scale' minimum parcel sizes shall be no less than 20 acres.

Policy R-RC 61. Allowable land uses in exclusive agricultural areas shall be limited to

A. agricultural and ancillary uses,
B. uses necessary to directly support local agriculture, and
C. other uses compatible with agriculture which clearly enhance the long term viability of local agriculture and agricultural lands.

Policy R-RC 62. Residential uses in agricultural areas may be allowed for persons directly involved in on-site agricultural operations as an ancillary or supportive use of agriculture.

Policy R-RC 63. Farm worker housing shall be an allowable use in the zoning districts governing agricultural areas.

Hillsides

Policy R-LU 18. All allowable uses must be consistent with the basic intent of the 'Hillside' designation. The range of allowable uses shall be limited to: (a) agriculture and grazing; (b) mineral extraction; (c) parks and low-density recreational uses and facilities; (d) land in its natural state; (e) wildlife refuges; (f) very low density residential development; and (g) commercial, industrial, or institutional uses, which by their nature 1. require remote, rural settings; or 2. which support the recreational or productive use, study or appreciation of the natural environment.

Policy R-LU 19. The standard allowable density of residential development shall be that of one dwelling unit per 160 acres, unless the development is proposed as a "cluster development." If development is proposed as a residential cluster, the allowable density shall be as determined by the "20-160 acre variable slope-density formula." Residential development proposals must be designed as a cluster in order to utilize the 20- 160 acre variable slope-density formula. (see illustration of 20-160 slope-density formula) (a) If the average slope of the parcel is 10% or less, the average area per dwelling unit shall be 20 acres. (b) If the average slope of the parcel is 50% or above, the average area per dwelling unit shall be 160 acres.

Policy R-LU 20. Proposed cluster residential developments shall adhere to the following:

1. **Developed Area:** the building envelopes for all residences and the locations of all other permitted uses proposed as accessory structures shall be specified in the design, the combined area of which shall not exceed 10% of the gross acreage of the site:
    a. if the property is under Land Conservation (Williamson Act) contract, the contract must be canceled or modified to exclude the portion of the site that is to be developed;
    b. no individual parcel created for residential development shall be less than 2 acres in size;
2. **Open Space:** it is mandatory that no less than 90% of the land area shall be preserved permanently as open space through dedication of an open space or conservation easement precluding any future development:
    a. those portions of the land permanently preserved as open space shall be configured as large, contiguous and usable areas;
    b. the open space may be dedicated through easements over portions of individually-owned parcels or may be configured as separate parcels owned in common or individually;
    c. the open space area shall be privately controlled and not accessible to the public unless the area is deeded to a public agency or entity willing to undertake responsibilities of ownership, maintenance, and public access [designated trail corridors may traverse such areas if proposed as part of the Regional Parks, Trails, and Scenic Highways Plan]; and
    d. land uses allowed within the area dedicated as permanent open space shall be limited to agricultural or other limited resource-related uses, and to non-commercial recreational facilities of an ancillary nature to the cluster residential development and for use by residents only.

Policy R-LU 21. Design of the cluster development shall incorporate the following basic principles:

1. Site layout shall demonstrate efficiency in the location and length of roadways, driveways, and other basic infrastructure improvements or extensions.
2. Roads shall be of adequate design, capacity, and construction to accommodate traffic associated with the development safely, efficiently, and with minimal long term maintenance needs.
3. The locations of roads, building sites, septic system leach fields, or other major features of development must be accurately identified on the proposed subdivision map, and they shall:
    a. avoid areas of natural hazards and avoid adverse impacts upon natural and heritage resources.
    b. be required to mitigate or reduce potentially significant adverse environmental impacts to an insignificant level, particularly regarding water quality, through such means as adequate setbacks from water resources, avoidance of areas with high percolation rates and/or high ground water tables.
4. Building sites and access roads should be located such that areas of the site which pose a significant hazard, such as landslides, very steep slopes, fault traces, or floodways, are placed within the portion of the site that is dedicated as permanent open space.
5. Roads, building sites, and other facilities shall not be allowed to create major, lasting visible scars on the landscape.
6. Structures on or near ridgelines shall be located, constructed, and/or landscaped so that they do not create a significant adverse visual impact as seen from the Valley floor.

Policy R-LU 22. Two Lot Subdivisions: For any two-lot subdivision of land, the average area per dwelling unit shall be as determined by the variable slope-density formula, and neither a cluster permit nor dedication of permanent open space shall be required, provided that:

A. the parcel in question was not itself created after 1980; and
B. any subsequent subdivision of the two lots so created shall adhere fully to the density and development requirements of the General Plan and all applicable County ordinances.

Policy R-LU 23. Los Gatos Watershed: Significant portions of the area within the Los Gatos (Lexington Reservoir) Watershed are divided into patterns of small, non-conforming parcels.

1. These lands are not and shall not be designated “Rural Residential” or other similar designation of increased density, on account of the multitude of existing, severely substandard development conditions and the prevalence of many unresolvable development constraints.
2. All portions of the Los Gatos Watershed shall be designated ‘Hillsides’ and development on existing parcels shall be required to meet the standards and policies of the County General Plan and the provisions of applicable County ordinances.
3. Further policy guidance is provided by means of the Los Gatos Watershed Land Use Policies (see Special Areas Policies section).

Policy R-LU 24. New development, whether through subdivision or on existing, legal parcels ("single- site development") shall not be allowed on building sites in excess of 30% average slope unless:

A. the proposed site is a more feasible, suitable location for development than alternative locations on the parcel proposed for development; and
B. technical feasibility and environmental impact have been assessed and demonstrated through required studies, tests, and analyses of site conditions and characteristics.

Policy R-LU 25. Non-residential land uses allowed in 'Hillsides' areas shall be of a generally low density or low intensity nature, depending on the use, as is consistent with the basic intent of the Hillsides designation to preserve the resources and rural character of the land. Non-residential uses shall:

A. avoid or minimize any potentially significant adverse environmental impacts;
B. provide adequate access to safely accommodate potential traffic without significantly impacting local transportation routes;
C. demonstrate no significantly increased risks associated with natural hazards;
D. not create adverse visual impacts as viewed from the Valley floor or from adjacent public recreational areas; and
E. cause no significant increase in the demand for public services or infrastructure, including potential impacts on school districts.

Policy R-LU 26. For recreational, commercial, or other uses which permit or involve overnight accommodations for temporary guests, allowable densities and the design of development shall also adhere to the following principles:

A. proposed densities must be consistent with the scale of the allowed recreational or commercial use, if applicable;
B. design and appearance shall blend harmoniously with the natural setting; and
C. development shall be located, and if possible, clustered within the minimum area necessary to accommodate it, in order to avoid or reduce the need for improvements and minimize any potential environmental impacts

Policy R-LU 27. Land uses proposed for inclusion within the Hillside zoning ordinance may be evaluated for conformity with the intent of this land use designation by various measures of land use intensity, including but not limited to:

A. waste water generation rates;
B. traffic generation rates;
C. extent of grading, vegetation removal, drainage modifications, or other alteration of the natural environment;
D. noise or other nuisance potential; and
E. growth-inducing potential.

Policy R-LU 28. For all uses allowed in Hillsides areas other than agricultural and single-family residential land uses, open space preservation by means of easement dedication may be required in order to:

A. protect the public health, safety and general welfare;
B. prevent or mitigate potentially significant adverse environmental impacts; and/or
C. to create perimeter areas that adequately buffer neighboring properties from adverse off-site impacts of the proposed land use.

Policy R-LU 29. The nature and duration of an open space or conservation easement shall be commensurate with: a. the nature of the land use; b. the duration to which that use has been entitled through County permitting procedures; and c. the extent of alterations made to the natural landscape.

Policy R-LU 30. Land uses which do not receive a permanent entitlement should not be required to dedicate open space or conservation easements of permanent nature, unless required as a mitigation for alterations made to the natural landscape.

Policy R-LU 33. Recreational vehicle park development should conform to the adopted policies, ordinances and design guidelines of the County of Santa Clara.

Ranchlands

Policy R-LU 37. Population shall be held to a minimum, and land uses shall be of a nature and intensity which do not require higher levels of public services than those presently provided.

Policy R-LU 38. Subdivision and parcel creation data, including the issuance of certificates of compliance, shall be collected and monitored. If subdivision activity reaches the thresholds established by the policies of the General Plan, Ranchlands policies shall be evaluated for possible revision.

Policy R-LU 39. The primary use shall be ranching. Other allowable uses shall be: (a) agriculture; (b) low intensity recreational uses; (c) mineral extraction; (d) land in its natural state; (e) hunting; (f) wildlife refuges; (g) very low density residential development; and (h) very low intensity commercial, industrial, or institutional uses, provided that they primarily support ranching activities or the enhancement, protection, study or appreciation of the natural resources of the area.

Policy R-LU 40. General principles governing development and land division in Ranchlands areas shall be as follows: 1. No large ranches shall be allowed to fully divide into small parcels. 2. The function of allowed subdivisions shall be for the following, provided that very little population is added to Ranchlands areas: (a) help ranchers trade land; (b) raise capital in times of need; (c) help settle estates; and (d) provide for family divisions. 3. The right of ranchers to build residences and to divide “Williamson Act” property under the terms of existing Land Conservation contracts is affirmed. 4. There shall be a limit to the number of parcels created within the Ranchlands area. 5. The rural character of the area shall not be changed, and land use decisions shall prevent an influx of people into the Ranchlands area

Policy R-LU 41. Density of development in areas designated 'Ranchlands' shall be determined by application of the "20-160 acre variable slope-density formula," or, if not employed, 160 acres per dwelling unit.

1. Clustering of development in Ranchlands shall not be allowed.
2. The minimum parcel size shall in no case be less than 20 acres.

Policy R-LU 42. Individual subdivision proposals in Ranchlands areas shall be subject to the following limitations:

1. At the time of the application, the entire area of contiguous land holdings owned by the applicant shall be included in the application, even though the proposed subdivision may only affect a portion of that area.
2. Major subdivisions of 5 lots or more shall be discouraged.
3. No subdivision of land into parcels less than 160 acres shall be approved for a land holding where the division would result in the approval of more than four lots within the holding during any three year period.

Policy R-LU 43. Cumulative land division activity shall be limited for areas designated Ranchlands, according the following provisions:

1. The 'Ranchlands' shall be separated into two geographic areas, Area A to the north of Coe State Park, and Area B to include the remainder of the 'Ranchlands'.
2. Within Area A:
    a. no more than 40 parcels that are less than 160 acres each may be created in any calendar year;
    b. no more than 75 parcels that are less than 160 acres each may be created in any three consecutive years; and
    c. no more than 20 parcels may be created which are greater than 160 acres each in any calendar year.
3. Within Area B:
    a. no more than 20 parcels may be created that are less than 160 acres each in any calendar year;
    b. no more than 38 parcels may be created that are less than 160 acres each in any consecutive three years; and
    c. no more than 10 parcels greater than 160 acres each may be created in any calendar year.
4. Parcels created without obtaining building site approval are restricted from use as building sites, as indicated on the approved subdivision map, and shall count towards the total of the number of parcels which may be created according the aforementioned limitations, subsections (b) and (c).

Policy R-LU 44. Ranch roads serving the internal needs of the ranches may be of gravel or hard dirt surface, and of widths suitable for ranching uses. Such roads shall not be considered acceptable for the purpose of subdivision approval unless they meet all applicable County standards regarding access

for the Ranchlands areas. Routine maintenance of ranch roads shall not require grading permits provided that road alignments are not changed.

Rural Residential

Policy R-LU 57. Residential, agricultural and open space uses are the primary uses. Commercial, industrial and institutional uses may be established only where they are sized to be local-serving in nature.

Policy R-LU 58. The allowable density of development shall be 5–20 acres per dwelling, depending upon the average slope of the land, as based upon the County's "-5-20s" slope density formula (see table below). Minimum parcel size shall be 5 acres, unless development is proposed as a cluster subdivision.

Policy R-LU 59. Residential development may be clustered, provided that the open space portions of the development are protected as permanent open space.

Policy R-LU 60. The minimum parcel size within a Rural Residential cluster subdivision shall be no less than 1 acre (density to be determined by 5–20 acre variable slope density formula).

Policy R-LU 61. The creation of new Rural Residential areas and the outward expansion of existing areas shall not be allowed.

Policy R-LU 62. Parcels may be considered for redesignation to Rural Residential only for the purposes of "infilling" existing Rural Residential areas, provided that they:

A. are substantially surrounded on three sides by existing Rural Residential areas;
B. have minimal long term viability for agricultural uses;
C. are suitable for development on septic systems; and
D. are reasonably free from natural hazards, constructed hazards, and valuable environmental resources (e.g., hillsides, riparian areas, wetlands).

Special Area Policies

New Almaden Historical Area

Policy R-LU 97. The New Almaden Historical Area, a nationally registered historic site, shall be preserved under the provisions of the special Historical Conservation Zoning District (H1) applied to the area

Los Gatos Watershed Area

Policy R-LU 99. The Los Gatos Watershed is designated 'Hillsides.'

Policy R-LU 100. Given the severe problems of fire protection, including water supply and pressure, access and service; domestic water supply and quality; general watershed quality; erosion; road maintenance; circulation and road safety; geological hazards; and protection of the natural environment; in the portions of the Los Gatos Watershed with lots of 10 acres or less, no new

building shall be permitted and no building sites created or new lots created except with the strictest adherence to County standards and criteria.

San Martin Planning Area

Policy R-LU 114. San Martin is a rural unincorporated community governed by the County Board of Supervisors. Furthermore, San Martin should be viewed as a distinct geographic entity, unique within the rural unincorporated areas of Santa Clara County and having a unique rural identity and character within the South County area. Care should be taken to prevent premature commitment of land for uses which would restrict future options for the community. In order to best preserve future options for the San Martin community and environs, San Martin shall remain a rural community, predominantly nonurban and residential in nature.

R-LU 114.1. Policies, permit decision-making, and other matters subject to the discretion of the County and Board of Supervisors shall also take into consideration the desire and intent of the community to preserve and enhance the character, identity, and importance of the village core area of San Martin, being that area most central to the distinct identity of San Martin.

R-LU 114.2. In keeping with the general policies governing San Martin, no further introduction of Roadside Services land use designations within the San Martin Planning Area shall be permitted, unless through subsequent amendment to this policy or subsequent to and in conformance with the adoption of a master land use and infrastructure plan referred to in policy R-LU 117. Limited modification of the Industrial and/or Commercial Use Permit Area boundaries may be considered through the General Plan amendment process, if consistent with the following principles and criteria:

A. Proposed modifications would not conflict with residential uses or be inconsistent with the primarily rural residential and agricultural land use patterns of San Martin;
B. Proposed modifications to expand a Use Permit Area boundary would be limited to parcels immediately adjacent to the existing boundaries; and
C. Proposed modifications would not likely cause significantly increased traffic from outside the community or other objectionable impacts to the area or surrounding properties

R-LU 114.3. The intent of policy R-LU 114.2 is to limit the extent of possible expansion of the Use Permit Area boundaries. Future expansion proposals, whether through successive incremental applications for General Plan amendments or through proposals for a significant number of boundary expansions in any given yearly application filing period, may indicate a need to re-evaluate policy enabling limited expansion through privately initiated applications. The County may at any time suspend acceptance of such applications, or require additional planning analysis and recommendations regarding the long term implications and cumulative impacts of such boundary modification proposals, or both. The County may refuse to accept for processing a privately- initiated application for a General Plan amendment not deemed substantially consistent with fundamental or

applicable goals and policies of the General Plan, including those for the San Martin Planning Area, and Policies R- LU 114.2 and R-LU 114.3, in particular.

Policy R-LU 119. Non-residential development in the San Martin Planning Area shall conform to adopted development and design guidelines for the San Martin Community contained within the "San Martin Integrated Design Guidelines."

Policy R-LU 120. The intent of the Industrial Use Permit Area is to make provision for the maintenance and development of such light industrial uses as are of benefit to the community and environs through the appropriate discretionary permitting procedures. Such uses are allowed in addition to any of those uses which may be allowed within the applicable General Plan designation and zoning district. (a) Light industrial uses may be located only within the Industrial Use Permit Area Boundary. (b) New or significantly expanded uses may be established and conducted only upon issuance of a use permit and architecture and site approval. (c) Heavy industrial uses shall not be allowed.

Policy R-LU 124. The intent of the Commercial Use Permit Area is to make provision for the maintenance and development of such commercial uses as are of benefit to the community and environs through the appropriate discretionary permitting procedures. Such uses are allowed in addition to any of those uses which may be allowed within the applicable General Plan designation and zoning district. New or significantly expanded uses may be permitted only on property within the boundary of the San Martin Commercial Use Permit Area and upon issuance of a use permit and architecture and site approval.

Policy R-LU 126. Eligibility of certain properties for commercial development should be based on consideration of their location, traffic flow, and proximity to residential and other commercial uses, among other factors. Proposed uses which contribute to the enhancement of the commercial village core area shall be encouraged.

Policy R-LU 127. New commercial land uses within the commercial or industrial use permit areas shall be sized to be of a local-serving nature, with the exception of properties immediately adjacent to the San Martin Avenue / Highway 101 freeway interchange that are east of Murphy Avenue, where uses may be allowed which are not necessarily of a local-serving nature. Local-serving uses shall be defined as only those uses which provide support services for agriculture or commercial needs of the residents of San Martin.

Policy R-LU 128. All development in freeway interchange areas shall rigorously comply with the San Martin Non-Residential Development and Design Guidelines, and shall be designed to enhance the scenic quality of Highway 101.

Policy R-LU 129. Those types of commercial uses which generate high volumes of sanitary waste waters, for example motels and restaurants, should not be allowed to develop on septic tanks, unless provision can be made for special treatment devices in conjunction with and compliance with County septic tank regulations and specific approval by the Regional Water Quality Control Board officials. No new septic systems should be developed in the highly permeable soils of Llagas Creek.

Policy R-LU 130. New or significantly expanded commercial uses may be allowed only if they can be served by an adequate storm drainage system.

Policy R-LU 131. Prior to establishment or expansion of a commercial use, an assured, dependable, and adequate water supply both in volume and pressure for fire suppression shall be demonstrated for the specific use.

Policy R-LU 132. Future extensive development of commercial land uses should only occur when the full range of service infrastructure has been provided. The standards and guidelines for the amount of commercial land use would be established in conjunction with an urban density land use and development plan for the area.

Policy R-LU 136. Residential land use and development patterns shall remain the preferred and predominant use pattern in the San Martin Planning Area. Establishment of allowed non-residential uses in areas of existing or planned rural residential land use should be allowed only with the utmost consideration for the potential adverse impact of such uses upon the residential character and quality of life of the community.

Policy R-LU 137. Within the established commercial/industrial use permit areas a residential use may be continued or developed on the same parcel as an industrial or commercial use so long as there is adequate area for construction and maintenance of separate septic systems for each use on the parcel.

Policy R-LU 138. The density of development for lands designated 'Rural Residential' within the San Martin Area shall be as determined by the "5-20 acre variable slope density formula," unless such lands have been determined to be of less than 10% average slope and officially zoned "RR-5Ac." accordingly.

Policy R-LU 139. The density of development for lands designated other than 'Rural Residential' within the San Martin Planning Area shall be determined by the allowable densities of their base General Plan land use designation

Policy R-LU 140. Residential development within the Rural Residential Areas of San Martin shall be allowed to cluster, provided that the open space portions of the development are protected as permanent open space. The minimum parcel size within a rural residential cluster subdivision shall be no less than 1 acre.

Policy R-LU 141. Agricultural uses should be encouraged to continue.

Policy R-LU 142. New development should be compatible with existing agricultural uses.

Policy R-LU 143. New and expanded intensive agricultural uses which have the potential for generating significant volumes of organic waste discharges may be permitted subject to use permit (i.e., mushroom farms, dairies, animal feed lots, poultry farms).

Guadalupe Watershed Area of Critical Environmental Concern

Policy R-LU 166. The Guadalupe Reservoir and its watershed lands are a critical component of the region's water supply system. Given the variety of environmental factors and constraints common to the area, such as geologic and seismic concerns, limited fire protection, critical wildlife habitat, high erosion potential, steep slopes, and septic system limitations, among others, all applications shall

be reviewed for potential adverse cumulative impacts upon the environment, in order to preserve the integrity of natural resources and to minimize long term financial liability to the public of maintaining various services and facilities, including costs associated with reservoir maintenance and water supply treatment.

County of Santa Clara Zoning Ordinance

As describe above in Section 3.11.1, the Zoning Ordinance establishes four rural base zone districts that would be affected by the Project, including: A "Exclusive Agriculture," AR "Agricultural Ranchlands," HS "Hillsides," and RR "Rural Residential" districts. The intent of the rural base districts is to maintain and preserve the predominantly rural character of lands to which they are applied. The base districts further regulate the type of land uses and intensity of development permitted in rural areas in a manner that implements the General Plan and which protects natural resources and maintains compatibility between uses. The use regulations, development standards, density requirements, and establishment of local-serving uses for rural base zone districts defined in the current Zoning Ordinance are generally described below.

Use Regulations - § 2.20.020

This section of the Zoning Ordinance establishes allowable land uses for rural base districts listed by use classifications. Uses are regulated for each district by six different classifications depending on the base zoning and use classification. According to Section 2.20.020 of the Zoning Ordinance, uses are either allowed by right, require planning clearance, special permit, architecture and site approval, or are not allowed.

Development Standards - § 2.20.030

This section of the Zoning Ordinance establishes property development standards for rural base districts. These standards regulate the location and size of structures of proposed development projects. Development standards set minimum lot area, setbacks (for front, side, rear, and scenic roads), and building height. The development standards references additional standards and criteria specific to each rural base district listed in Sections 2.20.050 through 2.20.080, as described below.

Slope-Density Requirements - § 2.20.040

This section of the Zoning Ordinance describes the required land per dwelling unit (density) as well as the minimum lot sizes for AR, HS, and RR districts with application of slope-density requirements. Depending on the average slope of the property, density and minimum parcel size of development is regulated.

Exclusive Agriculture (A) Districts: Agricultural Preservation Criteria - § 2.20.050

This section of the Zoning Ordinance requires that any new uses in an A district must be found to be compliance with certain criteria relating to the preservation of existing and future agricultural uses.

Agricultural Ranchlands (AR) Districts: Specific Subdivision and Road Provisions - § 2.20.060

This section of the Zoning Ordinance establishes limitations on the proposed creation of new lots in AR districts on a County-wide level. It also provides property-level regulations for proposed subdivisions and roads serving ranches.

Hillsides (HS) Districts: Supplemental Development Standards - § 2.20.070

This section of the Zoning Ordinance provides supplemental development standards for substandard subdivision lots and outlines when special permitting is needed for subdivisions. The section also details land use regulations applicable to HS subdivisions on lands dedicated as permanent private open space.

Rural Residential (RR) Districts: Supplemental Development Standards - § 2.20.080

This section of the Zoning Ordinance provides special subdivision regulations for RR district lots. It describes applicable minimum lot sizes, dedication of development rights, and land use regulations for lands dedicated as permanent private open space.

Local-Serving Uses - § 2.20.090

This section of the Zoning Ordinance describes the intent and regulations associated with "local-serving uses." The section defines local-serving uses as certain institutional and commercial uses that may be allowed in rural districts if their size, scale, and intensity is typical of local-serving uses in a rural community. The section establishes development requirements and application procedures for new local-serving uses, which include evaluation of in accordance with the County's local-serving data document. Uses determined to be an appropriate size, scale, and intensity if their proposed building square footage and maximum number of people are each less than the 75 percentile values listed in the Local-Serving Data document which is maintained by the County. For proposed uses exceeding the 75 percentile values, the size, scale, and intensity impact to be evaluated are required to evaluate the following: aesthetics, open space and habitat, agricultural production, watersheds, traffic, and noise.

Supplemental Use Regulations – Chapter 4.10

The purpose of this chapter is to provide specific supplemental requirements for certain uses whose nature and potential impacts require additional and more specialized findings, over and above the standard use permit or special permit findings per the provisions of Article 2.

Retail Sales & Services: Local-Serving – § 4.10.310

This section refers to uses classified as Retail Sales & Services: Local-Serving as described in § 2.10.040. This section describes unique provisions that such uses are subject to. Specifically, this use is required to be sized and designed to be consistent with rural character and the environment when located in rural districts. This section requires that retail sales and services be located conveniently to the community and not exceed a maximum publicly accessible floor space of 1,200 square feet. Finally, the section states that any proposed retail sales and service, combined with existing similar uses in the area, must be able to be supported by the local community.

3.11.3 Thresholds of Significance

According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, a project would normally have a significant effect on the environment with respect to land use and planning if the project would:

LU-1: Physically divide an established community.

LU-2: Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

LU-3: Conflict with any applicable habitat conservation plan or natural community conservation plan.

3.11.4 Methodology

To evaluate the Project's impacts related to land use and planning, this analysis examines the project's consistency with both regional and local plans, policies, and regulations that regulate uses within the project area.

CEQA Guidelines Section 15125(d) requires that an EIR include a discussion of any inconsistencies with applicable land use policies and ordinances that were adopted to mitigate or avoid an environmental effect. Additionally, a conflict between a project and an applicable plan is not necessarily a significant impact under CEQA unless the inconsistency will result in an adverse physical change to the environment that is a "significant environmental effect" as defined by CEQA Guidelines Section 15382.

Analysis of conflicts and consistency with applicable plans is included in this impact section. Under State Planning and Zoning law (Government Code Section 65000 et seq.) strict conformity with all aspects of a plan is not required. Generally, plans reflect a range of competing interests and agencies are given great deference to determine consistency with their own plans. A project should be considered consistent with a general plan or elements of a general plan if it furthers one or more policies and does not obstruct other policies according to the Office of Planning and Research, State of California General Plan Guidelines (OPR 2017). Generally, given that land use plans reflect a range of competing interests, a project should be compatible with a plan's overall goals and objectives but need not be in perfect conformity with every plan policy.

As stated, the following analysis examines the Project's consistency with both regional and local plans, policies, and regulations governing uses within the project area.

3.11.5 Environmental Impacts

Impact LU-1 Would the Project physically divide an established community?

The Project involves the adoption of Zoning Ordinance amendments that would make changes to the type and amount of development allowed on property subject to rural zoning designations in unincorporated Santa Clara County. The Project would not lead to direct physical impacts on the environment, as it does not directly authorize new development or propose changes in land use. The Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA to promote consistency in the environmental review process and protect farmland within the County.

These project components and objectives would not result in physical division of communities within Santa Clara County. The Project would encourage smaller, agriculture-supportive development, which would make the division of unincorporated communities less likely. The Project would not affect residential (other than rural residential), commercial, or industrial zoning in the unincorporated areas.

The proposed zoning amendments would not introduce new land uses in the rural area that could result in the division of established communities. Therefore, implementation of the Project with respect to physically dividing an established community would be **less than significant**.

Impact LU-2 Would the Project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No actual physical development is proposed as part of the project. One of the purpose of the Project is to update how development is regulated in rural zoning districts within unincorporated Santa Clara County. Specifically, the Project is intended to: clarify, simplify, and standardize the permit process for uses directly supportive of agriculture; align future development in the Exclusive Agriculture zoning district with existing County General Plan policies; and replace "local-serving" provisions with objective development standards. A primary objective of the Project is to preserve Santa Clara County's rural and agricultural areas by limiting uses not compatible with agricultural uses. Therefore, the proposed amendments do not include components that would amend or conflict with the implementation of this General Plan policies related to agricultural preservation, and instead would facilitate those existing policies.

Table 3.11-1 provides an evaluation of the Project's consistency with relevant policies contained in the County's General Plan. Per this evaluation, the Project would protect agricultural land and provide for compatible land uses which would further the implementation of relevant County's General Plan policies. Furthermore, any future development facilitated by the Project would be subject to future discretionary permits and CEQA evaluation that would assess if the future development would conflict with applicable land use plans, policies, or regulations. Future development would also be subject to the significance threshold that addresses potential agricultural impacts, which is a component of the Project. For these reasons, impacts related to compatibility between the Project and applicable plans adopted for the purpose of avoiding or mitigating environmental effects would be **less than significant**.

Table 3.11-1. Consistency with Applicable County of Santa Clara General Plan Policies

Santa Clara County General Plan (1994)	
Land Use Policies	
Agriculture	
Policy R-LU 11. Allowable land uses shall be limited to: A. agriculture and ancillary uses; B. uses necessary to directly support local agriculture; C. and other uses compatible with agriculture which clearly enhance the long-term viability of local agriculture and agricultural lands.	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not allow for additional land uses that would conflict with the implementation of this General Plan policy. A primary objective of the Project is to align future development in agricultural areas with existing County General Plan policies by limiting uses in the Exclusive Agriculture zoning district that are not supportive of agriculture. The Project does not propose to increase residential densities that could increase population in agricultural areas and require higher levels of public services. The Project would not allow for additional non-agricultural land uses in Agriculture Resource Conservation Areas.
Policy R-LU 12. No use permit or other application may be approved for the purpose of establishing a golf course/country club with the "agricultural preserve," consisting of those lands designated "Agriculture-Large Scale" south and east of the city of Gilroy.	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not allow for additional land uses that would conflict with the implementation of this General Plan policy related to golf courses and country clubs. The Zoning Ordinance amendments no longer allow development of Golf Courses and Country Club uses in the Exclusive Agriculture zoning district.
Policy R-LU 13. Prior to making a decision as to whether to approve any golf course that might be proposed on lands designated "Agriculture" outside of the "agricultural preserve," the County shall conduct a study to establish specific policies and criteria for the development of golf courses within agricultural areas. The study should evaluate environmental and land use impacts including but not limited to:	**Consistent.** See response to Policy R-LU 12 above.

Table 3.11-1. Consistency with Applicable County of Santa Clara General Plan Policies

Santa Clara County General Plan (1994)	
A. compatibility with agriculture; B. effects on prime soils; C. water supply and quality issues; D. public service and infrastructure demands; and E. growth-inducing potential.	
Policy R-LU 14. For areas designated 'Agriculture-Large Scale' minimum parcel sizes shall be no less than 40 acres.	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project does not include components that would amend or conflict with the implementation of this General Plan policy related to minimum parcel size requirements.
Policy R-LU 15. For areas designated 'Agriculture-Medium Scale' minimum parcel sizes shall be no less than 20 acres.	**Consistent.** See response to Policy R-LU 14 above.
Hillsides	
Policy R-LU 18. All allowable uses must be consistent with the basic intent of the 'Hillsides' designation. The range of allowable uses shall be limited to: A. agriculture and grazing; B. mineral extraction; C. parks and low-density recreational uses and facilities; D. land in its natural state; E. wildlife refuges; F. very low density residential development; and G. commercial, industrial, or institutional uses, which by their nature I. require remote, rural settings; or II. which support the recreational or productive use, study or appreciation of the natural environment.	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not allow for additional land uses that would conflict with the implementation of this General Plan policy related to the allowed uses within Hillsides areas.

Table 3.11-1. Consistency with Applicable County of Santa Clara General Plan Policies

Santa Clara County General Plan (1994)	
Policy R-LU 19. The standard allowable density of residential development shall be that of one dwelling unit per 160 acres, unless the development is proposed as a "cluster development." If development is proposed as a residential cluster, the allowable density shall be as determined by the "20-160 acre variable slope-density formula." Residential development proposals must be designed as a cluster in order to utilize the 20- 160 acre variable slope-density formula. (see illustration of 20-160 slope-density formula) (a) If the average slope of the parcel is 10% or less, the average area per dwelling unit shall be 20 acres. (b) If the average slope of the parcel is 50% or above, the average area per dwelling unit shall be 160 acres.	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project does not propose to increase residential densities. The Project would not allow for additional land uses that would conflict with the implementation of this General Plan policy related to residential density or clustering requirements.
Policy R-LU 20. Proposed cluster residential developments shall adhere to the following: A. Developed Area: the building envelopes for all residences and the locations of all other permitted uses proposed as accessory structures shall be specified in the design, the combined area of which shall not exceed 10% of the gross acreage of the site: I. if the property is under Land Conservation (Williamson Act) contract, the contract must be canceled or modified to exclude the portion of the site that is to be developed; II. no individual parcel created for residential development shall be less than 2 acres in size; B. Open Space: it is mandatory that no less than 90% of the land area shall be preserved permanently as open space through dedication of an open space or conservation easement precluding any future development: I. those portions of the land permanently preserved as open space shall be configured as large, contiguous and usable areas; II. the open space may be dedicated through easements over portions of individually-owned parcels or may be configured as separate parcels owned in common or individually;	**Consistent**. See response to Policy R-LU 19 above.

Table 3.11-1. Consistency with Applicable County of Santa Clara General Plan Policies

Santa Clara County General Plan (1994)	
III. the open space area shall be privately controlled and not accessible to the public unless the area is deeded to a public agency or entity willing to undertake responsibilities of ownership, maintenance, and public access [designated trail corridors may traverse such areas if proposed as part of the Regional Parks, Trails, and Scenic Highways Plan]; and IV. land uses allowed within the area dedicated as permanent open space shall be limited to agricultural or other limited resource-related uses, and to non-commercial recreational facilities of an ancillary nature to the cluster residential development and for use by residents only.	
Policy R-LU 21. Design of the cluster development shall incorporate the following basic principles: A. Site layout shall demonstrate efficiency in the location and length of roadways, driveways, and other basic infrastructure improvements or extensions. B. Roads shall be of adequate design, capacity, and construction to accommodate traffic associated with the development safely, efficiently, and with minimal long term maintenance needs. C. The locations of roads, building sites, septic system leach fields, or other major features of development must be accurately identified on the proposed subdivision map, and they shall: I. avoid areas of natural hazards and avoid adverse impacts upon natural and heritage resources. II. be required to mitigate or reduce potentially significant adverse environmental impacts to an insignificant level, particularly regarding water quality, through such means as adequate setbacks from water resources, avoidance of areas with high percolation rates and/or high ground water tables. D. Building sites and access roads should be located such that areas of the site which pose a significant hazard, such as landslides, very steep slopes, fault traces, or floodways, are placed within the portion of the site that is dedicated as permanent open space.	**Consistent**. See response to Policy R-LU 19 above.

Table 3.11-1. Consistency with Applicable County of Santa Clara General Plan Policies

Santa Clara County General Plan (1994)	
E. Roads, building sites, and other facilities shall not be allowed to create major, lasting visible scars on the landscape. F. Structures on or near ridgelines shall be located, constructed, and/or landscaped so that they do not create a significant adverse visual impact as seen from the Valley floor.	
Policy R-LU 22. Two Lot Subdivisions: For any two-lot subdivision of land, the average area per dwelling unit shall be as determined by the variable slope-density formula, and neither a cluster permit nor dedication of permanent open space shall be required, provided that: A. the parcel in question was not itself created after 1980; and B. any subsequent subdivision of the two lots so created shall adhere fully to the density and development requirements of the General Plan and all applicable County ordinances.	**Consistent**. See response to Policy R-LU 19 above.
Policy R-LU 23. Los Gatos Watershed: Significant portions of the area within the Los Gatos (Lexington Reservoir) Watershed are divided into patterns of small, non-conforming parcels. A. These lands are not and shall not be designated "Rural Residential" or other similar designation of increased density, on account of the multitude of existing, severely substandard development conditions and the prevalence of many unresolvable development constraints. B. All portions of the Los Gatos Watershed shall be designated 'Hillsides' and development on existing parcels shall be required to meet the standards and policies of the County General Plan and the provisions of applicable County ordinances. C. Further policy guidance is provided by means of the Los Gatos Watershed Land Use Policies (see Special Areas Policies section).	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not allow for additional land uses that would conflict with the implementation of this General Plan policy related to the zoning designation or development density of lands within the Los Gatos Watershed. The Project would not rezone or increase the allowed development density of lands within the Los Gatos Watershed.

Table 3.11-1. Consistency with Applicable County of Santa Clara General Plan Policies

Santa Clara County General Plan (1994)	
Policy R-LU 24. New development, whether through subdivision or on existing, legal parcels ("single- site development") shall not be allowed on building sites in excess of 30% average slope unless: A. the proposed site is a more feasible, suitable location for development than alternative locations on the parcel proposed for development; and B. technical feasibility and environmental impact have been assessed and demonstrated through required studies, tests, and analyses of site conditions and characteristics.	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not allow for additional land uses that would conflict with the implementation of this General Plan policy related to development of sites with average slopes greater than 30%.
Policy R-LU 25. Non-residential land uses allowed in 'Hillsides' areas shall be of a generally low density or low intensity nature, depending on the use, as is consistent with the basic intent of the Hillsides designation to preserve the resources and rural character of the land. Non-residential uses shall: A. avoid or minimize any potentially significant adverse environmental impacts; B. provide adequate access to safely accommodate potential traffic without significantly impacting local transportation routes; C. demonstrate no significantly increased risks associated with natural hazards; D. not create adverse visual impacts as viewed from the Valley floor or from adjacent public recreational areas; and E. cause no significant increase in the demand for public services or infrastructure, including potential impacts on school districts.	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not allow for additional land uses that would conflict with the implementation of this General Plan policy. A primary objective of this Project is to preserve Santa Clara County's agricultural areas by limiting non-compatible uses. The Project would not increase allowed development densities in the Hillsides areas.

Table 3.11-1. Consistency with Applicable County of Santa Clara General Plan Policies

Santa Clara County General Plan (1994)	
Policy R-LU 26. For recreational, commercial, or other uses which permit or involve overnight accommodations for temporary guests, allowable densities and the design of development shall also adhere to the following principles: A. proposed densities must be consistent with the scale of the allowed recreational or commercial use, if applicable; B. design and appearance shall blend harmoniously with the natural setting; and C. development shall be located, and if possible, clustered within the minimum area necessary to accommodate it, in order to avoid or reduce the need for improvements and minimize any potential environmental impacts.	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not allow for additional land uses that would conflict with the implementation of this General Plan policy. An objective of this Project is to preserve Santa Clara County's agricultural areas by limiting non-compatible uses. The Project would remove "Camps and Retreats" as an allowed use within the Exclusive Agriculture zone.
Policy R-LU 27. Land uses proposed for inclusion within the Hillside zoning ordinance may be evaluated for conformity with the intent of this land use designation by various measures of land use intensity, including but not limited to: A. waste water generation rates; B. traffic generation rates; C. extent of grading, vegetation removal, drainage modifications, or other alteration of the natural environment; D. noise or other nuisance potential; and E. growth-inducing potential.	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not allow for additional land uses that would conflict with the implementation of this General Plan policy. The Project does not affect how land uses would be evaluated within the Hillsides area related to waste water generation, traffic, grading, vegetation removal, drainage modification, noise, and/or growth-inducing potential.

Table 3.11-1. Consistency with Applicable County of Santa Clara General Plan Policies

Santa Clara County General Plan (1994)	
Policy R-LU 28. For all uses allowed in Hillsides areas other than agricultural and single-family residential land uses, open space preservation by means of easement dedication may be required in order to: A. protect the public health, safety and general welfare; B. prevent or mitigate potentially significant adverse environmental impacts; and/or C. to create perimeter areas that adequately buffer neighboring properties from adverse off-site impacts of the proposed land use.	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not allow for additional land uses that would conflict with the implementation of this General Plan policy. The Project does not preclude future open space preservation in Hillsides areas or change open space easement considerations that Santa Clara County would take. Rather, the proposed Zoning Ordinance amendments would discourage larger, incompatible developments, which could support future open space preservation.
Policy R-LU 29. The nature and duration of an open space or conservation easement shall be commensurate with: a. the nature of the land use; b. the duration to which that use has been entitled through County permitting procedures; and c. the extent of alterations made to the natural landscape.	**Consistent**. See response to Policy R-LU 28 above.
Policy R-LU 30. Land uses which do not receive a permanent entitlement should not be required to dedicate open space or conservation easements of permanent nature, unless required as a mitigation for alterations made to the natural landscape.	**Consistent**. See response to Policy R-LU 28 above.
Ranchlands	
Policy R-LU 37. Population shall be held to a minimum, and land uses shall be of a nature and intensity which do not require higher levels of public services than those presently provided.	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not allow for additional land uses that would conflict with the implementation of this General Plan policy. Rather, a primary objective of the Project is to preserve Santa Clara County's agricultural areas by limiting non- compatible uses. The Project does not propose to increase residential densities that could increase population in Ranchland areas and require higher levels of public services.

Table 3.11-1. Consistency with Applicable County of Santa Clara General Plan Policies

Santa Clara County General Plan (1994)	
Policy R-LU 38. Subdivision and parcel creation data, including the issuance of certificates of compliance, shall be collected and monitored. If subdivision activity reaches the thresholds established by the policies of the General Plan, Ranchlands policies shall be evaluated for possible revision.	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not allow for additional land uses that would conflict with the implementation of this General Plan policy. The Project would not interfere with the County's ability to collect and monitor data related to subdivision creation activity.
Policy R-LU 39. The primary use shall be ranching. Other allowable uses shall be: (a) agriculture; (b) low intensity recreational uses; (c) mineral extraction; (d) land in its natural state; (e) hunting; (f) wildlife refuges; (g) very low density residential development; and (h) very low intensity commercial, industrial, or institutional uses, provided that they primarily support ranching activities or the enhancement, protection, study or appreciation of the natural resources of the area.	**Consistent**. See response to Policy R-LU 37 above.
Policy R-LU 40. General principles governing development and land division in Ranchlands areas shall be as follows: A. No large ranches shall be allowed to fully divide into small parcels. B. The function of allowed subdivisions shall be for the following, provided that very little population is added to Ranchlands areas: I. help ranchers trade land; II. raise capital in times of need; III. help settle estates; and IV. provide for family divisions. C. The right of ranchers to build residences and to divide "Williamson Act" property under the terms of existing Land Conservation contracts is affirmed. D. There shall be a limit to the number of parcels created within the Ranchlands area.	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not allow for additional land uses that would conflict with the implementation of this General Plan policy related to the general principles governing development and land division in Ranchland areas. The Project would not interfere with or preclude the subdivision of large ranches or interfere with ranchers' rights to construct residences. See response to Policy R-LU 37 above; the Project would not increase populations within Ranchland areas preserve the area's rural areas by limiting non-compatible uses.

Table 3.11-1. Consistency with Applicable County of Santa Clara General Plan Policies

Santa Clara County General Plan (1994)	
E. The rural character of the area shall not be changed, and land use decisions shall prevent an influx of people into the Ranchlands area	
Rural Residential Areas	
Policy R-LU 57. Residential, agricultural and open space uses are the primary uses. Commercial, industrial and institutional uses may be established only where they are sized to be local-serving in nature.	**Consistent.** The Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. Furthermore, the Project would: (1) replace subjective "local-serving" provisions with simple, objective development standards, applicable to all non-agricultural uses in rural zoning districts. This amendment would establish new limitations to the Cumulative Building Site Coverage per parcel regulating the size, scale, and intensity of development in rural zoning districts. The existing terminology of Lot Coverage would be replaced by Cumulative Building Site Coverage. (2) Replace the existing use classification of Religious Institutions with Places of Worship, categorize them according to size, either Limited or General, and streamline the processing of smaller-scale Places of Worship—Limited for the rural zoning districts. The Project is designed to maintain the residential, agricultural, and open space character of the Rural Residential Areas.
Policy R-LU 58. The allowable density of development shall be 5–20 acres per dwelling, depending upon the average slope of the land, as based upon the County's "-5-20s" slope density formula (see table below). Minimum parcel size shall be 5 acres, unless development is proposed as a cluster subdivision.	**Consistent.** See response to Policy R-LU 14 above.

Table 3.11-1. Consistency with Applicable County of Santa Clara General Plan Policies

Santa Clara County General Plan (1994)	
Policy R-LU 59. Residential development may be clustered, provided that the open space portions of the development are protected as permanent open space.	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not allow for additional land uses that would conflict with the implementation of this General Plan policy related to residential clustering and open space preservation.
Policy R-LU 60. The minimum parcel size within a Rural Residential cluster subdivision shall be no less than 1 acre (density to be determined by 5–20 acre variable slope density formula).	**Consistent.** See response to Policy R-LU 14 above.
Policy R-LU 61. The creation of new Rural Residential areas and the outward expansion of existing areas shall not be allowed.	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project does not include components that would amend or conflict with the implementation of this General Plan policy that prohibits the creation or outward expansion of Rural Residential areas. The Project does not include amendments that would expand or rezone Santa Clara County land.
Policy R-LU 62. Parcels may be considered for redesignation to Rural Residential only for the purposes of "infilling" existing Rural Residential areas, provided that they: A. are substantially surrounded on three sides by existing Rural Residential areas; B. have minimal long term viability for agricultural uses; C. are suitable for development on septic systems; and D. are reasonably free from natural hazards, constructed hazards, and valuable environmental resources (e.g., hillsides, riparian areas, wetlands).	**Consistent**. See response to Policy R-LU 61 above.

Table 3.11-1. Consistency with Applicable County of Santa Clara General Plan Policies

Santa Clara County General Plan (1994)	
Special Area Policies	
New Almaden Historical Area	
Policy R-LU 97. The New Almaden Historical Area, a nationally registered historic site, shall be preserved under the provisions of the special Historical Conservation Zoning District (H1) applied to the area.	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not allow for additional land uses that would conflict with the implementation of this General Plan policy related to the New Almaden Historical Area or H1 District.
Los Gatos Watershed Area	
Policy R-LU 99. The Los Gatos Watershed is designated 'Hillsides.'	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not allow for additional land uses that would conflict with the implementation of this General Plan policy related to the Los Gatos Watershed's designation as Hillsides.
Policy R-LU 100. Given the severe problems of fire protection, including water supply and pressure, access and service; domestic water supply and quality; general watershed quality; erosion; road maintenance; circulation and road safety; geological hazards; and protection of the natural environment; in the portions of the Los Gatos Watershed with lots of 10 acres or less, no new building shall be permitted and no building sites created or new lots created except with the strictest adherence to County standards and criteria.	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not allow for additional land uses that would conflict with the implementation of this General Plan policy related to development restrictions on Los Gatos Watershed Area lands smaller than 10 acres in size.

Table 3.11-1. Consistency with Applicable County of Santa Clara General Plan Policies

Santa Clara County General Plan (1994)	
San Martin Planning Area	
Policy R-LU 114. San Martin is a rural unincorporated community governed by the County Board of Supervisors. Furthermore, San Martin should be viewed as a distinct geographic entity, unique within the rural unincorporated areas of Santa Clara County and having a unique rural identity and character within the South County area. Care should be taken to prevent premature commitment of land for uses which would restrict future options for the community. In order to best preserve future options for the San Martin community and environs, San Martin shall remain a rural community, predominantly nonurban and residential in nature.	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not allow for additional land uses that would conflict with the implementation of this General Plan policy. Rather, a primary objective of the Project is to preserve Santa Clara County's agricultural areas by limiting uses non-compatible uses. The Project components are intended promote and preserve agricultural land. The Project does not propose to increase residential densities that could increase population in the San Martin Planning Area.
R-LU 114.1. Policies, permit decision-making, and other matters subject to the discretion of the County and Board of Supervisors shall also take into consideration the desire and intent of the community to preserve and enhance the character, identity, and importance of the village core area of San Martin, being that area most central to the distinct identity of San Martin.	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not allow for additional land uses that would conflict character, identity, and importance of the village core area of San Martin.
R-LU 114.2. In keeping with the general policies governing San Martin, no further introduction of Roadside Services land use designations within the San Martin Planning Area shall be permitted, unless through subsequent amendment to this policy or subsequent to and in conformance with the adoption of a master land use and infrastructure plan referred to in policy R-LU 117. Limited modification of the Industrial and/or Commercial Use Permit Area boundaries may be considered through the General Plan amendment process, if consistent with the following principles and criteria: A. Proposed modifications would not conflict with residential uses or be inconsistent with the primarily rural residential and agricultural land use patterns of San Martin;	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not allow for additional land uses that would conflict with the implementation of this General Plan policy related to roadside service land uses. Furthermore, the Project does not involve modification of the Industrial and/or Commercial Use Permit Area boundaries within the San Martin Planning Area.

Table 3.11-1. Consistency with Applicable County of Santa Clara General Plan Policies

Santa Clara County General Plan (1994)	
B. Proposed modifications to expand a Use Permit Area boundary would be limited to parcels immediately adjacent to the existing boundaries; and C. Proposed modifications would not likely cause significantly increased traffic from outside the community or other objectionable impacts to the area or surrounding properties	
R-LU 114.3. The intent of policy R-LU 114.2 is to limit the extent of possible expansion of the Use Permit Area boundaries. Future expansion proposals, whether through successive incremental applications for General Plan amendments or through proposals for a significant number of boundary expansions in any given yearly application filing period, may indicate a need to re-evaluate policy enabling limited expansion through privately initiated applications. The County may at any time suspend acceptance of such applications, or require additional planning analysis and recommendations regarding the long term implications and cumulative impacts of such boundary modification proposals, or both. The County may refuse to accept for processing a privately- initiated application for a General Plan amendment not deemed substantially consistent with fundamental or applicable goals and policies of the General Plan, including those for the San Martin Planning Area, and Policies R- LU 114.2 and R-LU 114.3, in particular.	**Consistent**. See response to Policy R-LU 114.2 above.
Policy R-LU 119. Non-residential development in the San Martin Planning Area shall conform to adopted development and design guidelines for the San Martin Community contained within the "San Martin Integrated Design Guidelines."	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not allow for additional land uses that would conflict with the implementation of this General Plan policy related to adopted development and design guidelines within the San Martin Integrated Design Guidelines.
Policy R-LU 120. The intent of the Industrial Use Permit Area is to make provision for the maintenance and development of such light industrial uses as are of benefit to the community and environs	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing

Table 3.11-1. Consistency with Applicable County of Santa Clara General Plan Policies

Santa Clara County General Plan (1994)	
through the appropriate discretionary permitting procedures. Such uses are allowed in addition to any of those uses which may be allowed within the applicable General Plan designation and zoning district. (a) Light industrial uses may be located only within the Industrial Use Permit Area Boundary. (b) New or significantly expanded uses may be established and conducted only upon issuance of a use permit and architecture and site approval. (c) Heavy industrial uses shall not be allowed.	County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not allow for additional land uses that would conflict with the implementation of this General Plan policy related to the intent of the Industrial Use Permit Area of the San Martin Planning Area. The Project would not prohibit the maintenance and/or development industrial land uses within this area boundary.
Policy R-LU 124. The intent of the Commercial Use Permit Area is to make provision for the maintenance and development of such commercial uses as are of benefit to the community and environs through the appropriate discretionary permitting procedures. Such uses are allowed in addition to any of those uses which may be allowed within the applicable General Plan designation and zoning district. New or significantly expanded uses may be permitted only on property within the boundary of the San Martin Commercial Use Permit Area and upon issuance of a use permit and architecture and site approval.	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project does not include components that would amend or conflict with the implementation of this General Plan policy related to the intent of the Commercial Use Permit Area of the San Martin Planning Area. The Project would not prohibit the maintenance and/or development commercial land uses within this area boundary. The Project would not interfere with the existing evaluation criteria for commercial development within this area.
Policy R-LU 126. Eligibility of certain properties for commercial development should be based on consideration of their location, traffic flow, and proximity to residential and other commercial uses, among other factors. Proposed uses which contribute to the enhancement of the commercial village core area shall be encouraged.	**Consistent**. See response to Policy R-LU 124 above.
Policy R-LU 127. New commercial land uses within the commercial or industrial use permit areas shall be sized to be of a local-serving nature, with the exception of properties immediately adjacent to the San Martin Avenue / Highway 101 freeway interchange that are east of Murphy Avenue, where uses may be allowed which are not necessarily of a local-serving nature. Local-serving uses shall be defined as only those uses which provide support services for agriculture or commercial needs of the residents of San Martin.	**Consistent.** The Project would not affect existing commercial or industrial land uses.

Table 3.11-1. Consistency with Applicable County of Santa Clara General Plan Policies

Santa Clara County General Plan (1994)	
Policy R-LU 128. All development in freeway interchange areas shall rigorously comply with the San Martin Non-Residential Development and Design Guidelines, and shall be designed to enhance the scenic quality of Highway 101.	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not allow for additional land uses that would conflict with the implementation of this General Plan policy related development within freeway interchange areas.
Policy R-LU 129. Those types of commercial uses which generate high volumes of sanitary waste waters, for example motels and restaurants, should not be allowed to develop on septic tanks, unless provision can be made for special treatment devices in conjunction with and compliance with County septic tank regulations and specific approval by the Regional Water Quality Control Board officials. No new septic systems should be developed in the highly permeable soils of Llagas Creek.	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not allow for additional land uses that would conflict with the implementation of this General Plan policy regarding commercial use types as they related to infrastructure, water supply, and waste generation. The Project would no longer allow the development of new uses in Exclusive Agriculture zoning that are inconsistent with the Zoning Ordinance requirement that they "clearly enhance the long-term viability of local agriculture and agricultural lands."
Policy R-LU 130. New or significantly expanded commercial uses may be allowed only if they can be served by an adequate storm drainage system.	**Consistent**. See response to Policy R-LU 129 above.
Policy R-LU 131. Prior to establishment or expansion of a commercial use, an assured, dependable, and adequate water supply both in volume and pressure for fire suppression shall be demonstrated for the specific use.	**Consistent**. See response to Policy R-LU 129 above.
Policy R-LU 132. Future extensive development of commercial land uses should only occur when the full range of service infrastructure has been provided. The standards and guidelines for the amount of commercial land use would be established in conjunction with an urban density land use and development plan for the area.	**Consistent**. See response to Policy R-LU 129 above.

Table 3.11-1. Consistency with Applicable County of Santa Clara General Plan Policies

Santa Clara County General Plan (1994)	
Policy R-LU 136. Residential land use and development patterns shall remain the preferred and predominant use pattern in the San Martin Planning Area. Establishment of allowed non-residential uses in areas of existing or planned rural residential land use should be allowed only with the utmost consideration for the potential adverse impact of such uses upon the residential character and quality of life of the community.	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not allow for additional land uses that would conflict with the implementation of this General Plan policy related to existing or planned rural residential land use areas within the San Martin Planning Area. The Project would not encourage non-residential uses in planned or existing rural residential areas within the San Martin Planning Area. Furthermore, evaluation criteria for allowing residential uses would not change.
Policy R-LU 137. Within the established commercial/industrial use permit areas a residential use may be continued or developed on the same parcel as an industrial or commercial use so long as there is adequate area for construction and maintenance of separate septic systems for each use on the parcel.	**Consistent**. See response to Policy R-LU 136 above.
Policy R-LU 138. The density of development for lands designated 'Rural Residential' within the San Martin Area shall be as determined by the "5-20 acre variable slope density formula," unless such lands have been determined to be of less than 10% average slope and officially zoned "RR- 5Ac." accordingly.	**Consistent**. See response to Policy R-LU 19 above.
Policy R-LU 139. The density of development for lands designated other than 'Rural Residential' within the San Martin Planning Area shall be determined by the allowable densities of their base General Plan land use designation.	**Consistent**. See response to Policy R-LU 19 above.
Policy R-LU 140. Residential development within the Rural Residential Areas of San Martin shall be allowed to cluster, provided that the open space portions of the development are protected as permanent open space. The minimum parcel size within a rural residential cluster subdivision shall be no less than 1 acre.	**Consistent**. See response to Policy R-LU 19 above.
Policy R-LU 141. Agricultural uses should be encouraged to continue.	**Consistent.** See response to Policy R-LU 11 above.

Table 3.11-1. Consistency with Applicable County of Santa Clara General Plan Policies

Santa Clara County General Plan (1994)	
Policy R-LU 142. New development should be compatible with existing agricultural uses.	**Consistent.** See response to Policy R-LU 11 above.
Policy R-LU 143. New and expanded intensive agricultural uses which have the potential for generating significant volumes of organic waste discharges may be permitted subject to use permit (i.e., mushroom farms, dairies, animal feed lots, poultry farms).	**Consistent.** See response to Policy R-LU 12 above.
Guadalupe Watershed Area of Critical Environmental Concern	
Policy R-LU 166. The Guadalupe Reservoir and its watershed lands are a critical component of the region's water supply system. Given the variety of environmental factors and constraints common to the area, such as geologic and seismic concerns, limited fire protection, critical wildlife habitat, high erosion potential, steep slopes, and septic system limitations, among others, all applications shall be reviewed for potential adverse cumulative impacts upon the environment, in order to preserve the integrity of natural resources and to minimize long term financial liability to the public of maintaining various services and facilities, including costs associated with reservoir maintenance and water supply treatment.	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not allow for additional land uses that would conflict with the implementation of this General Plan policy related to the review considerations of applications within the Guadalupe Watershed Area of Critical Environmental Concern.
Resource Conservation Policies	
Agriculture and Agricultural Resources	
Policy R-RC 61. Allowable land uses in exclusive agricultural areas shall be limited to: A. agricultural and ancillary uses, B. uses necessary to directly support local agriculture, and C. other uses compatible with agriculture which clearly enhance the long term viability of local agriculture and agricultural lands.	**Consistent.** The Project includes Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not allow for additional land uses that would conflict with the implementation of this General Plan policy; rather, the amendments would be consistent with this policy because one of the proposed amendments includes preventing the development of new in *Exclusive Agriculture* zoning that do not directly support agriculture. The establishment of a threshold of significance for the conversion of agricultural land would encourage continued agricultural activity on farmland.

Table 3.11-1. Consistency with Applicable County of Santa Clara General Plan Policies

Santa Clara County General Plan (1994)	
Policy R-RC 62. Residential uses in agricultural areas may be allowed for persons directly involved in on-site agricultural operations as an ancillary or supportive use of agriculture.	**Consistent.** See response to Policy R-RC 61 above.
Policy R-RC 63. Farm worker housing shall be an allowable use in the zoning districts governing agricultural areas.	**Consistent.** The Project would not prevent residential uses or housing for persons supporting agricultural operations, including farmworkers.

Impact LU-3 Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

As described in Impact LU-1, the Project involves the adoption of Zoning Ordinance amendments that would not lead to direct physical impacts on the environment. As discussed above in Section 3.11.2, the Santa Clara Valley Habitat Plan covers a significant portion of the lands within Santa Clara County (Santa Clara Valley Habitat Agency 2012). This plan is intended to provide for the conservation and recovery of endangered and threatened species and covers approximately 510,000 acres throughout incorporated and unincorporated lands within Santa Clara County. Compliance with the plan is further discussed in Section 3.4, *Biology*, of this PEIR. As noted in that section, future development projects facilitated by the Project that overlap with areas covered by the Habitat Plan would be required to incorporate relevant conditions on covered activities described in the plan, doing so would avoid or minimize impacts on covered species and natural communities. The Project would encourage the preservation of farmland and limit development of that land, which is consistent with the Habitat Plan. The potential impact of the Project would be **less than significant**.

3.11.6 Cumulative Impacts

Projects in the Santa Clara County region would have the potential to result in a cumulative impact if they would, in combination, conflict with existing land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental impact. Similar to the Project, cumulative projects in the Santa Clara County region would utilize regional planning documents during planning, and the general plans of cities would be consistent with the regional plans, to the extent that they are applicable. Cumulative projects in these jurisdictions would be required to comply with the applicable land use plan or they would not be approved without a general plan amendment. Projects listed in Section 3.0.1 of this EIR (Cumulative Analysis) would not amend the County's Zoning Ordinance and therefore would not contribute to cumulative impacts related to conflicts with land use plans and policies applicable to the County's rural zoning areas.

Furthermore, as discussed above, implementation of the Project would not conflict with existing land use plans, policies, or regulations of any other agencies with jurisdiction over the project area. For these reasons, there is no evidence to conclude that significant impacts will occur based on past project approvals or that the Project's impacts are cumulatively considerable when evaluating any cumulative impacts. Cumulative impacts would be **less than significant**.

3.11.7 Mitigation Measures

No mitigation is required.

3.11.8 Level of Significance After Mitigation

No impacts related to land use and planning have been identified.

3.11.9 References

California Department of Conservation. 2022. California 2020 Important Farmland Finder. Accessed September 16, 2024. https://maps.conservation.ca.gov/DLRP/CIFF/

County of Santa Clara. 1994. *Santa Clara County General Plan*. Adopted December 20, 1994. https://plandev.sccgov.org/ordinances-codes/general-plan.

OPR (Governor's Office of Planning and Research). 2017. State of California General Plan Guidelines, Updated 2017. https://opr.ca.gov/docs/OPR_COMPLETE_7.31.17.pdf.

Santa Clara Valley Habitat Agency. 2012. Final Santa Clara Valley Habitat Plan. https://scv-habitatagency.org/178/Santa-Clara-Valley-Habitat-Plan



SOURCE: ESRI 2024, Santa Clara County 2024

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FIGURE 3.11-1

Coyote Valley Climate Resilience Combining District

Santa Clara County Rural Zoning Ordinance Amendments EIR

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3.12 Mineral Resources

This section of the Program Environmental Impact Report (PEIR) evaluates potential impacts to mineral resources from implementation of the County of Santa Clara (County) Rural Zoning Amendments and Agricultural Impact Threshold (Project). This section describes the existing mineral resources of the project area, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures, if any, related to implementation of the Project. As part of the analysis, this section describes the potentially adverse impacts to loss of known mineral resources or locally important mineral resources recovery sites.

3.12.1 Environmental Setting

Minerals are defined as any naturally occurring chemical elements or compounds formed from inorganic processes and organic substances. Minable minerals or "ore deposits" are defined as a deposit of ore or mineral having a value materially in excess of the cost of developing, mining, and processing the mineral and reclaiming the area.

Mineral Resource Zones

Mineral resources areas are defined as one of the four Mineral Resources Zones (MRZs), Scientific Resource Zones (SZ), or Identified Resource Areas (IRAs), described below. For further details regarding mineral resources, refer to Section 3.12.2 Regulatory Setting.

- **MRZ-1:** Areas where available geologic information indicates that little likelihood exists for the presence of significant construction aggregate resources.
- **MRZ-2:** Areas where geologic information indicates the presence of significant construction aggregate resources.
- **MRZ-3:** Areas containing known or inferred construction aggregate resources of undetermined mineral resource significance.
- **MRZ-4:** Areas where available geologic information is inadequate to assign to any other mineral resource zone category.

Mineral resources of significance found and extracted in Santa Clara County include construction aggregate deposits, limestone, and, to a lesser extent, salts derived from evaporation ponds at the edge of San Francisco Bay. Primary issues regarding construction aggregates are those of ensuring their availability, minimizing environmental impacts, and reclamation of quarry sites and similar operations. Construction aggregates, such as sand, gravel, and crushed stone, have many purposes, including road and building construction. For a growing, highly urbanized area such as Santa Clara County, ensuring adequate supplies of such materials from local sources is of fundamental importance to the economy of the County and region (County of Santa Clara 1994b).

There are several mineral resource deposits in Santa Clara County which are of regional or state-wide significance, as determined by state agencies. The California Mineral Resources project designates Production-Consumption (P-C) regions for the purpose of classifying mineral land resources. There are two P-C regions located entirely or partly within Santa Clara County:

- Monterey Bay P-C Region
- San Francisco Bay P-C Region

The Monterey Bay P-C Region includes portions of Monterey, San Benito, Santa Cruz, and southern Santa Clara counties. There are 30 existing mines within the Monterey Bay P-C Region and 219 million tons of permitted construction aggregate resources. Within this region, MRZ-1, -2, -3, and -4 are concentrated around Santa Cruz, Watsonville, San Jose, Morgan Hill, Gilroy, Hollister, as well as along the Monterey Bay coastline. Santa Clara has six designated sectors and lands classified as MRZ-2, or areas where geologic information indicates the presence of significant construction aggregate resources. If no additional reserves become available within the Monterey Bay P-C Region, the 219 million tons of reserves are estimated to supply the demand of the region until the year 2051 (California Department of Conservation 2021).

The San Francisco Bay P-C Region includes portions of Alameda, Contra Costa, San Mateo, San Francisco, and northern Santa Clara counties. All lands in the South San Francisco Bay P-C Region containing extractable aggregate deposits were divided into 30 sectors, covering 19 square miles, which were designated by the SMGB in 1986. As described above, six sectors are within Santa Clara County (CDC. Division of Mines and Geology. DMG Open-File Report 96-03., 1996). These include:

- Sector Z - Greenstone deposit located in the Los Altos Hills southwest of the city of Los Altos in northwestern Santa Clara County.
- Sector BB - Limestone deposit located west of the City of Cupertino on Permanente Creek, Santa Clara County.
- Sector CC - Greenstone body located northwest of stevens Creek Reservoir west of the City of Cupertino, Santa Clara County.
- Sector DD - conglomerate deposit located northwest of stevens Creek Reservoir on the western edge of the City of Cupertino, Santa Clara County.
- Sector EE - Franciscan Complex melange and associated serpentinite and silica-carbonate rocks located west of the intersection of the Capitol Expressway and Monterey Road (Highway 82) in the City of San Jose, Santa Clara County.
- Sector II - Sandstone and siltstone deposit located in Limekiln Canyon east of Lexington Reservoir in southwestern Santa Clara County.

Aggregate Resource Areas

San Bruno Canyon greenstone deposit

This area consists of two MRZ-2 sites totaling about 110 acres on the eastern flanks of the Santa Cruz Mountains in southern Santa Clara County, about 4 miles northwest of Morgan Hill. The two sites are collectively referred to as the San Bruno Canyon greenstone deposit. The San Bruno Canyon greenstone deposits lie within northwest-trending, lenticular bodies of weakly metamorphosed mafic volcanic rocks (greenstone) belonging to the Late Jurassic to Cretaceous Franciscan Complex. Outcrops of greenstone at the two sites are weathered to a reddish-brown at the surface while fresh greenstone from drill cores is gray green to green-black with white stringers of calcite and quartz. The greenstone deposit was estimated to have an average minimum thickness of 140 feet. Aggregate test data provided by the petitioner and analyzed by DMG staff indicate that rock "from the deposit meets the California Department of Transportation's (CalTrans) specifications for asphaltic concrete, base, and subbase. The San Bruno Deposit has not previously been mined (CDC. Division of Mines and Geology. DMG Open-File Report 99-01, 2000).

Verne D. Freeman Sr. proposed quarry area

This MRZ-2 area covers roughly 60 acres, in Southern Santa Clara County about 3 miles south of the city of Gilroy. The area is underlain by brecciated greenstone belonging to the Late Jurassic to Cretaceous Franciscan Complex. The deposit has recently been drilled and tested for construction-grade aggregate by West Coast Aggregates, Inc. Test data given to DMG staff indicates that the rock meets CalTrans specifications for PCC aggregate. This newly classified area has never been mined. In September 1998, Santa Clara County issued a permit to West Coast Aggregates, Inc. to mine the property. Most of this rock will likely be shipped north to the San Jose metropolitan area in the adjacent South San Francisco Bay P-C Region (CDC. Division of Mines and Geology. DMG Open-File Report 99-01, 2000).

A.J. Raisch Company

A.J. Raisch Company operates the Azevedo and the Serpa quarries both located in Santa Clara County. The Azevedo Quarry lies near the eastern edge of a group of low isolated hills that are considered a northward continuation of the Santa Teresa Hills. The quarry has been operated almost continuously since 1971 by the A.J. Raisch Company, the original lessee of the property from M.T.A. Properties. Aggregate produced at the quarry is largely used for road base. Since 1986, the Azevedo Quarry operation has also been producing class II aggregate base from recycled asphalt and concrete. To date, the quarry has produced about 2 million tons of aggregate from recycled material. Operations at the Serpa Quarry began in early 1958 and continued on a limited basis for about the next 10 years. A.J. Raisch paving Company purchased the property in 1967. The quarry was mined almost continuously from 1968 until 1977. Little has been mined since then. The quarry chiefly produced aggregate subbase and fill. In May of 1995, a recycling operation was started at the Serpa Quarry site (CDC. Division of Mines and Geology. DMG Open-File Report 96-03., 1996).

Kaiser Cement corporation

Kaiser Cement corporation (owned by Hanson PLC) operates the Kaiser Permanente limestone quarry located on the west side of Santa Clara Valley in the eastern foothills of the Santa Cruz Mountains, Santa Clara County. The quarry largely produces limestone which is used for the manufacturing of cement; but the quarry is included in this aggregate study because roughly 25% of the rock mined at the quarry is used for aggregate. The first mining of the quarry is not known, but in 1930 the quarry was listed as being idle for some time. In 1938, Kaiser Cement purchased the quarry from the Santa Clara Holding Company. Most of the early mining of the rock at the quarry was used for lime purposes. Aggregate production from the site began in the mid-1950s. The main aggregate use for the crushed limestone is for PCC, asphaltic concrete, and road base (CDC. Division of Mines and Geology. DMG Open-File Report 96-03., 1996).

Oliver de Silva, Inc.

Oliver de silva, Inc. operates the Curtner Quarry located in Santa Clara County north of Colera Creek and directly south of Alameda-Santa Clara County line. Little is known about the quarry's history other than it has been mined since at least 1950. Most of the crushed rock produced at the Curtner Quarry has been used for fill (CDC. Division of Mines and Geology. DMG Open-File Report 96-03., 1996).

Stevens Creek Quarry. Inc.

Stevens Creek Quarry. Inc. operates the Stevens Creek Quarry located on the west side of Santa Clara Valley in the low eastern foothills of the Santa Cruz Mountains, Santa Clara County. The quarry was first opened in the late 1930s by A.J. Voss who later incorporated his business to become stevens Creek Quarry, Inc. The property has been mined continuously since its opening despite a few periods of low activity. The rock is used primarily for base, drain rock, fill, and some rip rap. A recycling plant was installed on the property in 1995 (CDC. Division of Mines and Geology. DMG Open-File Report 96-03., 1996).

3.12.2 Regulatory Setting

Federal

There are no applicable Federal regulations for this issue area.

State

The following state regulations pertaining to mineral resources would apply to the Project.

Surface Mining and Reclamation Act: California Public Resources Code Sections 2710 et seq.

The Surface Mining and Reclamation Act of 1975 (SMARA) is the primary regulator of onshore surface mining in the State. It delegates specific regulatory authority to local jurisdictions. The act requires the State geologist (California Geological Survey) to identify all mineral deposits within the State and to classify them as: (1) containing little or no mineral deposits; (2) significant deposits; or (3) deposits identified, but further evaluation is needed. Lands where such deposits are identified are designated MRZ 1, 2, 3, or 4, respectively. Local jurisdictions are required to enact specific procedures to guide mineral conservation and extraction at particular sites and to incorporate mineral resource management policies into their general plans. A particular concern of state legislators in enacting SMARA was the premature loss of minerals and protection of sites threatened by development practices that might preclude future mineral extraction.

Mineral Resource Classification

The California Geological (CGS) Survey Mineral Resources Project provides information about California's nonfuel mineral resources. The Mineral Resources Project classifies lands throughout the State that contain regionally significant mineral resources as mandated by the Surface Mining and Reclamation Act (SMARA) of 1975. Nonfuel mineral resources include metals such as gold, silver, iron, and copper; industrial metals such as boron compounds, rare-earth elements, clays, limestone, gypsum, salt and dimension stone; and construction aggregate including sand, gravel, and crushed stone. Development generally results in a demand for minerals, especially construction aggregate. Urban preemption of prime deposits and conflicts between mining and other uses throughout California led to passage of the SMARA, which requires all cities and counties to incorporate in their general plans the mapped designations approved by the State Mining and Geology Board.

The classification process involves the determination of P-C Region boundaries, based on identification of active aggregate operations (Production) and the market area served (Consumption). The P-C regional boundaries are modified to include only those portions of the region that are urbanized or urbanizing and are classified for their

aggregate content. An aggregate appraisal further evaluates the presence or absence of significant sand, gravel, or stone deposits that are suitable sources of aggregate. As previously noted, the classification of these mineral resources is a joint effort of the State and local governments and requires that the State Geologist classify the mineral resources area as one of the four MRZs SZs, or IRAs,

As part of the classification process, an analysis of site-specific conditions is utilized to calculate the total volume of aggregates within individually identified Resource Sectors. Resource Sectors are those MRZ-2 areas identified as having regional or statewide significance. Anticipated aggregate demand in the P-C Regions for the next 50 years is then estimated and compared to the total volume of aggregate reserves identified within the P-C Region.

Department of Conservation, Division of Oil, Gas & Geothermal Resources

The Geologic Energy Management Division (CalGEM), formerly the Division of Oil, Gas, and Geothermal Resources oversees the drilling, operation, maintenance, and plugging and abandonment of oil, natural gas, and geothermal wells, while working to help California achieve its climate change and clean energy goals. CalGEM publishes regular GIS data which includes updates to well locations and status, oil field boundaries, lease boundaries, and district boundaries. CalGEM also regulates the drilling, operation, and permanent closure of energy resource wells (CDC 2024).

Local

The following local/regional regulations pertaining to mineral resources would apply to the Project.

County of Santa Clara General Plan

The Resource Conservation Element of the General Plan contains the following policies relevant to the Project (County of Santa Clara. 1994-2010 *Santa Clara County General Plan*. *Book B,* 1994b*)*.

Policy R-RC 68. Current and future demand for mineral resources in Santa Clara County, particularly construction aggregates, should be ensured by the following means: a. inventorying existing sites, as well as identifying and properly designating potential sites for protection measures; b. preserving deposits and access routes; c. increased use of recycled material; and d. development of new quarry sites

Policy R-RC 69. Existing sites and access routes for regionally significant resources should be protected from incompatible land uses and development that would preclude or unnecessarily limit resource availability

Policy R-RC 70. When making land use decisions involving mineral resource areas of state or regional significance, decisions about alternative land uses should be carefully balanced against the importance of the mineral deposits to their market region as a whole.

3.12.3 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment with respect to mineral resources if the project would:

M-1: Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

M-2: Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

3.12.4 Methodology

Information regarding the existing mineral resources within the project area is based on County of Santa Clara General Plan documents, Draft Environmental Impact Report and available data and reports from the California Department of Conservation.

3.12.5 Environmental Impacts

Impact M-1 Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Impact M-2 Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

The Project consists of amendments to the County's Zoning Ordinance. The Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. Although the Project would not directly construct new development, it would allow and facilitate new agriculture-supportive uses.

As previously discussed, Santa Clara County includes aggregate resource areas including areas identified as MRZ-2. Though the County contains areas where mineral deposits, including construction aggregate resources, may exist, the Project is intended to streamline agriculture-supportive uses and implement development standards within rural zoning districts. Future individual projects facilitated by the Project would adhere to existing County policies (e.g., General Plan Policies R-RC-68, -69, -70) intended to protect and preserve known mineral resource areas, including aggregate sites. As a result, the Project would not include any activities that would impede on or impair the recovery of known or locally important mineral resources. Impacts related to the loss of availability of mineral resources would be **less than significant**.

3.12.6 Cumulative Impacts

The geographic scope for cumulative mineral resource impacts includes all of Santa Clara County. A cumulative mineral resource impact would occur if the Project, combined with other projects occurring within the County, would result in a loss of availability of a known mineral resource valuable to the region and the state or cause a loss of

availability of an important mining site delineated in a local general plan or other land use plan. As described above, implementation of the Project would result in less-than-significant mineral resource impacts because the Project would not include activities that would impede on or impair the recovery of known or locally important mineral resources. Cumulative projects, listed in Chapter 3, Introduction to the Environmental Analysis, consist of Countywide planning efforts such as the Santa Clara County Housing Element Update and the Agricultural Employee Housing Zoning Ordinance Amendments. These projects are not expected to contribute to cumulative impacts related to mineral resources, as these projects would not encourage development in areas where significant mineral resources are likely to occur. Further, cumulative projects, as well as future projects within the County, would also be required to comply with existing County policies (e.g., General Plan Policies R-RC-68, -69, -70) intended to protect and preserve known mineral resource areas such that adverse impacts would not occur. As such, the less-than-significant impacts of the Project would not cumulatively contribute to the loss of availability of a known mineral resource or locally important mineral resource recovery site and cumulative impacts would be **less than significant**.

3.12.7 Mitigation Measures

No mitigation is required.

3.12.8 Level of Significance After Mitigation

No significant unavoidable adverse impacts related to mineral resources have been identified. Impacts would be less than significant.

3.12.9 References

CDC (California Department of Conservation). 1996. Division of Mines and Geology. DMG Open-File Report 96-03. Update of Mineral Land Classification: Aggregate Materials in the San Francisco Bay Production-consumption Region. 1996. https://maps.conservation.ca.gov/cgs/.

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County of Santa Clara. 1994a. *Santa Clara County General Plan. Book B. Part 3: Rural Unincorporated Area Issues and Policies.* Adopted December 20, 1994. https://plandev.sccgov.org/sites/g/files/exjcpb941/files/GP_BookB_HealthElement.

County of Santa Clara. 1994b. General Plan Draft Environmental Impact Report. File No. 5722-00-00-94EIR. SCH No. 94023004. Resource Conservation. Minera Resources. September 1994. https://plandev.sccgov.org/ordinances-codes/general-plan

3.13 Noise and Vibration

This section of the Program Environmental Impact Report (PEIR) evaluates the potential impacts related to noise and vibration from implementation of the County of Santa Clara (County) Rural Zoning Amendments and Agricultural Impact Threshold (Project). The following section describes the environmental setting and existing ambient noise conditions, regulatory framework, potential short-term and long-term noise and vibration impacts, and proposed measures to mitigate any identified significant impacts.

3.13.1 Environmental Setting

Vibrations, traveling as waves through air from a source, exert a force perceived by the human ear as sound. Sound pressure level (referred to as sound level) is measured on a logarithmic scale in decibels (dB) that represent the fluctuation of air pressure above and below atmospheric pressure. Frequency, or pitch, is a physical characteristic of sound and is expressed in units of cycles per second or hertz. The normal frequency range of hearing for most people extends from about 20 to 20,000 hertz. The human ear is more sensitive to middle and high frequencies, especially when the noise levels are quieter. As noise levels get louder, the human ear starts to hear the frequency spectrum more evenly. To accommodate for this phenomenon, a weighting system to evaluate how loud a noise level is to a human was developed. The frequency weighting called "A" weighting de-emphasizes the low frequency components of the sound in a manner similar to the response of a human ear. This A-weighted sound level is called the "noise level" and is referenced in units of dBA. Table 3.13.1 provides examples of common sound levels expressed in dBA.

Table 3.13-1. Typical Noise Levels Associated with Common Activities

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
—	110	Rock Band
Jet Flyover at 1,000 feet	105	—
Gas Lawn Mower at three feet	95	—
Diesel Truck at 50 feet, 50 miles per hour	85	Food Blender at 3 feet
—	80	Garbage Disposal at 3 feet
Noisy Urban Area, Daytime	75	—
—	70	Vacuum Cleaner at 10 feet
Commercial Area	65	Normal speech at 3 feet
Heavy Traffic at 300 feet	60	—
—	55	Large Business Office
Quiet Urban Daytime	50	Dishwasher (in next room)
Quiet Urban Nighttime	40	Theater, Large Conference Room (background)
Quiet Suburban Nighttime	35	—
—	30	Library
Quiet Rural Nighttime	25	Bedroom at Night, Concert Hall (background)
—	15	Broadcast/Recording Studio
Lowest Threshold of Human Hearing (Healthy)	0	Lowest Threshold of Human Hearing (Healthy)

Source: Caltrans 2020
Notes: dBA = A-weighted decibel; mph = miles per hour.

Since sound is measured on a logarithmic scale, a doubling of sound energy results in a 3 dBA increase in the noise level. Changes in a community noise level of less than 3 dBA are not typically noticed by the human ear. Changes from 3 to 5 dBA may be noticed by some individuals who are extremely sensitive to changes in noise. A 5 dBA increase is readily noticeable (EPA 1973). The human ear perceives a 10 dBA increase in sound level as a doubling of the sound level (i.e., 65 dBA sounds twice as loud as 55 dBA to a human ear).

An individual's noise exposure occurs over a period of time; however, noise level is a measure of noise at a given instant in time. Community noise sources vary continuously, being the product of many noise sources at various distances, all of which constitute a relatively stable background or ambient noise environment. The background, or ambient, noise level gradually changes throughout a typical day, corresponding to distant noise sources, such as traffic volume, as well as changes in atmospheric conditions.

Noise levels are generally higher during the daytime and early evening when traffic (including airplanes), commercial, and industrial activity is the greatest. However, noise sources experienced during nighttime hours when background levels are generally lower can be potentially more conspicuous and irritating to the receiver. To evaluate noise in a way that considers periodic fluctuations experienced throughout the day and night, a concept termed "community noise equivalent level" (CNEL) was developed, wherein noise measurements are weighted, added, and averaged over a 24-hour period to reflect magnitude, duration, frequency, and time of occurrence. A complete definition of CNEL and other terminology used to describe noise is provided in Table 3.13-2.

Exterior Noise Distance Attenuation

Noise sources are classified in two forms: (1) point sources, such as stationary equipment or a group of construction vehicles and equipment working within a spatially limited area at a given time, and (2) line sources, such as a roadway with a large number of pass-by sources (motor vehicles). Sound generated by a point source typically diminishes (attenuates) at a rate of 6.0 dBA for each doubling of distance from the source to the receptor at acoustically "hard" sites and at a rate of 7.5 dBA for each doubling of distance from source to receptor at acoustically "soft" sites. Sound generated by a line source (i.e., a roadway) typically attenuates at a rate of 3 dBA and 4.5 dBA per doubling distance, for hard and soft sites, respectively. Sound levels can also be attenuated by man-made or natural barriers. For the purpose of the sound attenuation discussion, a "hard" or reflective site does not provide any excess ground-effect attenuation and is characteristic of asphalt or concrete ground surfaces, as well as very hard-packed soils. An acoustically "soft" or absorptive site is characteristic of unpaved loose soil or vegetated ground.

Health Effects of Noise

Excessively noisy conditions can affect an individual's quality of life, health, and well-being. The effects of noise can be organized into six broad categories: sleep disturbance, permanent hearing loss, human performance and behavior, social interaction or communication, extra-auditory health effects, and general annoyance. An individual's reaction to noise and its level of disturbance depends on many factors such as the source of the noise, its loudness relative to the background noise level, time of day, whether the noise is temporary or permanent, and subjective sensitivity.

Table 3.13-2. Definitions of Acoustical Terminology

Term	Definition
Decibel (dB)	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of two like quantities
Sound Pressure Level (SPL)	10 times the logarithm to the base 10 of the ratio between the square of the sound to the square of the reference sound pressure of 20 µPascals. Sound pressure level is the quantity that is directly measured by a sound level meter and expressed in dB.
Frequency (Hz)	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 hertz and 20,000 hertz.
A-Weighted Sound Level (dBA)	SPL in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de- emphasizes low and high frequency components of frequency components of sound in a manner similar to the frequency response of the human ear and correlates well with subjective response to sound. All sound levels in this report are A-weighted.
Noise	Unwanted sound.
Equivalent Sound Level (Leq)	The average A-weighted sound level during the measurement period. For this CEQA evaluation, Leq refers to a one-hour period unless otherwise stated.
Lmax, Lmin	The maximum and minimum A-weighted sound level during the measurement period.
L01, L10, L50, L90	The A-weighted sound levels that are exceeded l%, l0%, 50%, and 90% of the time during the measurement period.
Day/Night Noise Level (Ldn)	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured during the night between l0 pm and 7 am.
Community Noise Equivalent Level (CNEL)	The average A-weighted sound level during a 24-hour day, obtained after addition of S decibels in the evening from 7 p.m. to l0 p.m. and after addition of l0 decibels to sound levels during the night between l0 p.m. and 7 a.m.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Impulsive Noise	Noise loud enough to disrupt normal activities and usually lasting less than one second.

Source: Caltrans 2020.

Fundamentals of Vibration

Vibration is an oscillatory motion that can be described in terms of displacement, velocity, or acceleration. Vibration impacts to buildings are generally discussed in terms of inches per second (ips) peak particle velocity (PPV), which will be used herein to discuss vibration levels for ease of reading and comparison with relevant standards. Vibration can also be annoying and thereby impact occupants of structures, and vibration of sufficient amplitude can disrupt sensitive equipment and processes, such as those involving the use of electron microscopes and lithography equipment. Consequently, land uses that are considered to be vibration sensitive include residences (due to the potential for annoyance), medical and research (due to the potential for interference with surgical procedures or

high precision analytical equipment), and historic structures that are constructed of fragile materials (due to the potential for structural damage).

Common sources of vibration within communities include construction activities and railroads. Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack hammering, and demolition-related activities where sudden releases of subterranean energy or powerful impacts of tools on hard materials occur. Depending on their distances to a sensitive receptor, operation of large bulldozers, graders, loaded dump trucks, or other heavy construction equipment and vehicles on a construction site also have the potential to cause high vibration amplitudes. As with travel of sound waves through air, vibration waves traveling through the ground attenuate with increasing distance from the source.; however, the energy associated with a vibration wave in the ground dissipates more quickly with distance, as compared to sound waves in the air.

A conservative maximum vibration level standard is 0.2 ips PPV for the prevention of structural damage to typical residential buildings (Caltrans 2020). Very fragile historic structures would be subject to a damage threshold of 0.12 ips PPV, while new residential construction would be subject to a threshold of 0.5 ips PPV (Caltrans 2020). Regarding human annoyance from vibration, the Caltrans standard for continuous vibration is also 0.2 ips PPV, for transient vibration (which applies to construction activities), 0.24 ips PPV is identified as "distinctly perceptible." Consequently, the use of a 0.2 ips PPV vibration significance threshold addresses both the potential for human annoyance and damage to typical, older residential structures.

Sensitive Receptors

Noise- and vibration-sensitive receptors are locations where people reside or where the presence of unwanted sound or vibration could adversely affect the use of the land. Residences, hospitals, nursing care or assisted living facilities, guest lodging, and churches would be considered noise- and vibration-sensitive. In addition, vibration-sensitive land uses also include institutional uses such as laboratories where the activities within the building are particularly sensitive to vibration.

Within the rural unincorporated Santa Clara County lands where the proposed Zoning Ordinance amendments would apply, the primary noise- and vibration-sensitive land use of concern would be existing rural residences.

Existing Noise Conditions

Given the geographic scope the Project covers, the four rural zoning districts within unincorporated portions of Santa Clara County, it is not practical to complete sound level measurements to establish the existing noise environment where future actions resulting from project implementation may occur. This conclusion is strengthened in that locations where future actions by landowners may occur as a result of the Zoning Ordinance amendments are unknown. Future activities resulting from the Project could occur in various locations throughout the four rural zoning districts in Santa Clara County; therefore, the magnitude range (in dBA L_{eq} or dBA L_{dn}) of the existing ambient noise environment in areas where activities may occur as a result of the Project would vary and would depend heavily on community noise sources in proximity to a given location. In general, the ambient outdoor sound environment that may be measured or perceived at a given location represents an aggregate of possibly many distinct nearby stationary or mobile sources combined with a multitude of other distant sources.

A characterization of the existing ambient outdoor sound levels at a noise-sensitive receptor (expressed as dBA L_{dn} or L_{eq}) that may be exposed to noise from project implementation is important with respect to CEQA assessment

criteria. For reasonable comparisons appropriate in this analysis, Federal Transit Administration (FTA) noise assessment guidance provides two methodologies to estimate existing noise exposure throughout a given community:

- Proximity to transportation routes based on the perpendicular distances to highways, railroad lines, and other major roadways; and
- Population density when noise from major surface transportation routes is far enough away, and ambient urbanized noise is dominated by local street traffic, building operations (e.g., heating, ventilating, and air conditioning), and community activities.

Table 3.13-3 correlates distance ranges from major roadways, other roadways and rail-lines to estimated daytime, nighttime, and Day-Night Average Sound Level (L_{dn}) ambient sound levels. Table 3.13-3 also identifies community noise levels (ambient exterior noise levels) based on population density ranges that may be used for areas of a community or region that are far removed from transportation (i.e., road and rail facilities) noise sources.

Table 3.13-3. FTA Method Results for Estimating Existing Ambient Noise Levels (dBA)

FTA Method Based on Transportation	Distances from Major Transportation Sources (feet) [a]							
Interstate Highway	N/A		> 800	400 - 800	200 – 400	100 - 200	50 - 100	< 50
Rail			500 – 800	240 -500	120 – 240	60 - 120	30 - 60	10 - 30
Other Roadway			> 400	200 - 400	100 – 200	50 - 100	< 50	N/A
FTA Method Based on Population	People per Square Mile (ppsm)							
	<300	300 – 1,000	1,000 – 3,000	3,000 – 10,000	10,000 – 30,000	> 30,000	N/A	
Estimated Sound Level (A-weighted decibels)								
Nighttime L_{eq}	30	35	40	45	50	55	60	65
Daytime L_{eq}	40	45	50	55	60	65	70	75
Day-Night Avg. (L_{dn})	40	45	50	55	60	65	70	75

Source: FTA 2018

Notes:

[a] Distances do not include shielding from intervening rows of buildings. The general rule for estimating shielding attenuation in populated areas is as follows: assume one row of buildings every 100 feet provides a 4.5-decibel reduction for the first row and a 1.5 decibel reduction for every subsequent row.

[b] Roadways with four or more lanes that permit trucks, with traffic at 60 miles per hour (mph).

[c] Main line railroad corridors typically carry 5–10 trains per day at speeds of 30–40 miles per hour.

[d] These are parkways with traffic moving at 55 miles per hour, but without trucks, and city streets with the equivalent of 75 or more heavy trucks per hour and 300 or more medium trucks per hour at 30 mph.

3.13.2 Regulatory Setting

Federal

Federal Aviation Administration (FAA) Standards

Enforced by the Federal Aviation Administration, Code of Federal Regulations (CFR) Title 14, Part 150, prescribes the procedures, standards, and methodology governing the development, submission, and review of airport noise

exposure maps and airport noise compatibility programs, including the process for evaluating and approving or disapproving those programs. Title 14 also identifies those land uses that are normally compatible with various levels of exposure to noise by individuals. The Federal Aviation Administration has determined that interior sound levels up to 45 dBA L_{dn} (or CNEL) are acceptable within residential buildings. The Federal Aviation Administration also considers residential land uses to be compatible with exterior noise levels at or less than 65 dBA L_{dn} (or CNEL).

State

California Department of Transportation (Caltrans) Standards

The California Department of Transportation (Caltrans) conducted extensive research on human annoyance and damage to structures caused by vibration from short term construction activities and from long term highway operations. The criteria established by Caltrans are commonly used to assess vibration impacts from all types of projects and activities; where local jurisdiction have not adopted a numeric significance threshold for vibration, the Caltrans standards are typically employed. Caltrans uses a threshold of 0.2 inches per second (ips) PPV for annoyance to persons, where a continuous vibration source is involved; for transient sources (represented by construction activities), Caltrans uses a threshold of 0.24 ips PPV (which equates to a distinctly perceptible level). For residential structures employing concrete foundation and wood frame construction, Caltrans identifies a conservative damage threshold vibration level standard of 0.2 ips PPV (Caltrans 2020).

California Noise Control Act of 1973

Sections 46000 through 46080 of the California Health and Safety Code, known as the California Noise Control Act of 1973, declares that excessive noise is a serious hazard to the public health and welfare and that exposure to certain levels of noise can result in physiological, psychological, and economic damage. It also identifies a continuous and increasing bombardment of noise in the urban, suburban, and rural areas. The California Noise Control Act declares that the State of California has a responsibility to protect the health and welfare of its citizens by the control, prevention, and abatement of noise. It is the policy of the state to provide an environment for all Californians free from noise that jeopardizes their health or welfare.

California Noise Insulation Standards (CCR Title 24)

In 1974, the California Commission on Housing and Community Development adopted noise insulation standards for hotels, motels, dormitories, and multi-family residential buildings (CCR Title 24, Part 2). Title 24 establishes standards for interior room noise (attributable to outside noise sources). The regulations also specify that acoustical studies must be prepared whenever a multi-family residential building or structure is proposed to be located in an area with CNEL (or L_{dn}) of 60 dBA or greater. Such acoustical analysis must demonstrate that the residence has been designed to limit intruding noise to an interior CNEL (or L_{dn}) of at least 45 dBA (California's Title 24 Noise Standards, Chap. 2-35).

Local

Santa Clara County Airport Land Use Compatibility Plan (ALUCP)

Ensuring compatibility between aircraft noise and various types of land uses is one of the primary functions of the Airport Land Use Commission (ALUC). The ALUC's Land Use Plan for Areas Surrounding Santa Clara County Airports (ALUCP) includes a detailed discussion of the types of noise generated by aircraft, how the noise environment

around airports is measured, how noise compatibility standards were established, and the steps being taken to control airport noise. The CNEL contours have been mapped for each airport facility and are used to evaluate the compatibility of various types of land uses within the noise environment surrounding each airport. In general, the ALUCP establishes the 60-65 CNEL noise contour as the maximum recommended exterior noise level for residential and other noise-sensitive land uses.

Santa Clara County General Plan

The Santa Clara County General Plan provides two separate Safety and Noise Elements, one for countywide issues (Book A) and one for rural unincorporated areas (Book B). Although the Project would apply to rural areas of the County, both books are considered to provide a comprehensive understanding of the county's noise policies. Both noise elements recommend a maximum interior noise level for intermittent noise of 45 dBA for residential land uses (County of Santa Clara 1994). The General Plan includes the following noise policies that are applicable to the Project:

Policy R-HS-1 / C-HS-25. Significant noise impacts from either public or private projects should be mitigated.

Policy R-HS-2. The County should seek opportunities to minimize noise conflicts in the rural areas.

Policy R-HS-3 / C-HS-26. New development in areas of noise impact (areas subject to sound levels of 55 DNL or greater) should be approved, denied, or conditioned so as to achieve a satisfactory noise level for those who will use or occupy the facility (as defined in "Noise Compatibility Standards for Land Use" and "Maximum Interior Noise Levels For Intermittent Noise").

Policy R-HS-4 / C-HS-27. Land uses approved by the County and the cities shall be consistent with the adopted policies of the Santa Clara County Airport Land Use Commission Comprehensive Land Use Plans for specific airports.

Policy C-HS 24. Environments for all residents of Santa Clara County free from noises that jeopardize their health and well-being should be provided through measures which promote noise and land use compatibility.

Santa Clara County Code of Ordinances

Chapter 8 of the County of Santa Clara Code of Ordinances (County of Santa Clara2021) establishes exterior (Section B11-152) and interior (Section B11-153) standards for noise at residential receptors, as well as specific noise standards for mobile and stationary construction activities (Section B11-154[b][6]).

These standards are used as thresholds of significance in this PEIR since they represent noise and vibration levels acceptable to the local community, consistent with CEQA Guidelines Appendix G. The exterior standards for one- and two-family residential land uses are summarized below in Table 3.13-4.

Table 3.13-4. Santa Clara County Exterior Noise Standards for One- and Two-Family Residential Land Uses

Duration of Noise	Daytime Standard (7 a.m. to 10 p.m.)	Nighttime Standard (10 p.m. to 7 a.m.)
30 min/hour	55 dBA L_{50}	45 dBA L_{50}
15 min/hour	60 dBA L_{25}	50 dBA L_{25}
5 min/hour	65 dBA L_{08}	55 dBA L_{08}
1 min/hour	70 dBA L_{02}	60 dBA L_{02}
0 min/ hour	75 dBA L_{max}	65 dBA L_{max}

Source: Santa Clara County 2021
Notes: The above noise limits will be reduced by 5 dBA if the noise contains a steady tone such as a whine, screech, or hum or contains music, or speech. For any of the first four noise limit categories listed above, the noise limit will be increased by 5 dBA if the measured ambient level exceeds the permissible level. If the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level will be increased to reflect the maximum ambient noise level. If the noise measurement occurs on a property adjoining a different land use category, the noise level limit applicable to the lower land use category, plus 5 dBA, will apply.
Key: dBA = A-weighted decibel; Lmax = maximum instantaneous sound level; Lx = percentile exceeded sound level; min = minute.

A specific exemption for construction noise from the exterior noise standards illustrated in Table 3.13-4 (derived from Section B11-156.d.3) is granted under County Code Section B11-154(b)(6), which prohibits the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between the hours of 7:00 p.m. and 7:00 a.m. on weekdays and Saturdays, or at any time on Sundays or holidays, that would generate a noise disturbance across a residential or commercial real property line. Where technically and economically feasible, construction activities must be conducted in a manner such that the maximum noise levels at affected properties will not exceed those listed Table 3.13-5 and Table 3.13-6.

Table 3.13-5. Mobile Equipment – Maximum Noise Levels for Nonscheduled, Intermittent, Short-Term Operation (Less Than Ten Days)

Item	Single- and Two-Family Dwelling Residential Area (dBA)	Multifamily Residential Dwelling Area (dBA)	Commercial Area (dBA)
Daily, except Sundays and legal holidays 7:00 a.m.—7:00 p.m.	75	80	85
Daily, 7:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays	50	55	60

Source: Santa Clara County 2021
Key: dBA = A-weighted decibel.

Table 3.13-6. Stationary Equipment – Maximum Noise Levels for Repetitively Scheduled and Relatively Long-Term Operation (Periods of Ten Days or More)

Item	Single- and Two-Family Dwelling Residential Area (dBA)	Multifamily Residential Dwelling Area (dBA)	Commercial Area (dBA)
Daily, except Sundays and legal holidays 7:00 a.m.—7:00 p.m.	60	65	70

Table 3.13-6. Stationary Equipment – Maximum Noise Levels for Repetitively Scheduled and Relatively Long-Term Operation (Periods of Ten Days or More)

Item	Single- and Two-Family Dwelling Residential Area (dBA)	Multifamily Residential Dwelling Area (dBA)	Commercial Area (dBA)
Daily, 7:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays	50	55	60

Source: Santa Clara County 2021
Key: dBA = A-weighted decibel.

As shown above in Table 3.13-5 and 3.13-6, the County identifies one set of standards for short-term (i.e., less than 10 days) construction activities using mobile equipment and one set for period longer than 10 days using stationary equipment. Furthermore, the standards do not specify noise units (i.e., L_{max}, L_{eq}, etc.). Construction work that may be carried out for development activities that may result from the proposed ordinance amendments would likely occur for much longer than 10 days and both mobile and stationary equipment would be likely be utilized, so the lower thresholds (Table 3.13-6) are more applicable because as a temporary noise source occurs for longer periods of time, people may be more sensitive to it. Secondly, because construction occurs over multiple hours/day with activities and noise levels fluctuating during the day, the noise limits are interpreted to be applied as hourly averages (i.e., L_{eq}).

3.13.3 Thresholds of Significance

Consistent with Appendix G of the California Environmental Quality Act (CEQA) Guidelines, a significant impact would occur if development of the project would do any of the following:

NOI-1: 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.

NOI-2: Generation of excessive groundborne vibration or groundborne noise levels.

NOI-3: 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.

3.13.4 Methodology

The noise analysis evaluates the potential for the Project to expose noise-sensitive receivers to elevated noise levels from short-term construction activities and long-term operational sources. Qualitative assessment of construction noise impacts is based on generalized assumptions for equipment employed in routine construction activities and using the FHWA Roadway Construction Noise Model. Operational noise is qualitatively assessed based upon generalized assumptions regarding potential exterior mechanical equipment and standard equations for outdoor sound propagation. Potential vibration impacts are assessed using equations and guidance from the Caltrans (2020b).

3.13.5 Environmental Impacts

Impact NOI-1 Would the project result in a temporary (short-term) increase in community noise levels that would cause a substantial increase in ambient noise levels and exceed County standards?

The Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. More details on the Project can be found in Chapter 2, Project Description. While the Project would not directly result in new development, it would allow and facilitate agriculture-supportive uses that could indirectly lead to the construction of new buildings and other property improvements.

Construction of land improvements including agriculture-supportive uses, driveways or roadways, and infrastructure in the project area could expose nearby noise-sensitive receivers to elevated noise levels that may disrupt communication and routine activities. The magnitude of the impact would depend on the type of construction activity, equipment, duration of the construction phase, distance between the noise source and receiver, and intervening structures. The range of maximum noise levels for various types of construction equipment is depicted in Table 3.13-7. Typical operating cycles may involve 2 minutes of full power, followed by 3 or 4 minutes at lower levels.

Table 3.13-7. Construction Equipment Noise Emission Levels

Equipment	Typical Maximum Sound Level (L_{max} dBA) - 50 feet from Source
Air Compressor	81
Backhoe	80
Compactor	82
Concrete Mixer	85
Crane, Mobile	83
Dozer	85
Generator	81
Grader	85
Loader	85
Manlift / Forklift	75
Paver	89
Pneumatic Tool	85
Pump	76
Roller	74
Saw	76
Scraper	89
Truck	88
Welder	73

Source: FHWA 2008.
Notes: dB = decibel.

A typical construction effort employs a sub-set of the equipment listed in Table 3.13-7, which changes as the construction moves through various phases. Table 3.13-8 presents a typical equipment breakdown per phase that would be representative for construction of residential or small-scale agriculture-supportive (i.e., commercial grade) structures.

Table 3.13-8. Representative Typical Construction Equipment Per Phase

Phase	Equipment Needed
Site Preparation	Dozer
	Backhoe
Grading	Grader
	Dozer
	Scraper
	Excavator
	Backhoe
Building Construction	Forklift
	Crane
	Generator
	Welder / Torch
	Backhoe
Paving / Concrete Flatwork	Concrete Mixer Truck
	Roller
	Paver
Architectural Coating	Compressor

Based on the various equipment types per phase from Table 3.13-8 above, and assuming a quantity of one per equipment type, a noise analysis was performed using a model developed under the auspices of the Federal Highway Administration called the Roadway Construction Noise Model (RCNM) (FHWA 2011b). Input variables for RCNM consist of the receiver / land use types, the equipment type (i.e., backhoe, crane, truck, etc.), the number of equipment pieces, the duty cycle for each piece of equipment (i.e., percentage of hours the equipment typically works per day), and the distance from the construction equipment operation to an adjacent noise-sensitive receiver. Refer to Appendix C of this EIR for the inputs used in the RCNM model, as well as results.

RCNM was run based upon a series of standardized distances to noise-sensitive receivers, to determine a radius from project construction within which construction noise could exceed the daytime limit for single-family / duplex residences (the most stringent criteria) of 60 dBA L_{eq} (County Code Section B11-154.b.6) and nighttime limit of 50 dBA L_{eq}. Table 3.13-9 presents the results of the RCNM based construction noise analysis.

Table 3.13-9. Outdoor Construction Noise Levels by Phase and Distance

Construction Phase	50 Feet (dBA L_{eq})	100 Feet (dBA L_{eq})	200 Feet (dBA L_{eq})	500 Feet (dBA L_{eq})	1400 Feet (dBA L_{eq})	Daytime Standard (dBA L_{eq})	Nighttime Standard (dBA L_{eq})
Site Preparation	74	68	62	54	45	60	50

Table 3.13-9. Outdoor Construction Noise Levels by Phase and Distance

Construction Phase	50 Feet (dBA L_{eq})	100 Feet (dBA L_{eq})	200 Feet (dBA L_{eq})	500 Feet (dBA L_{eq})	1400 Feet (dBA L_{eq})	Daytime Standard (dBA L_{eq})	Nighttime Standard (dBA L_{eq})
Grading/Excavation	77	71	65	57	48		
Building Construction	78	72	66	58	49		
Paving	79	73	67	59	50		
Architectural Coatings	74	68	62	54	45		

Source: Roadway Construction Noise Model FHWA 2008, see Appendix C.
Notes: dBA = A-weighted decibel; L_{eq} = energy equivalent sound level.

As shown in Table 3.13-9, construction-related noise levels based upon the assumed standardized equipment inventory in Table 3.13-8 would exceed the daytime limit of 60 dBA L_{eq} at distances of less than 500 feet from the construction activity. If implementation of the Project would indirectly result in daytime construction of new structures that are located within 500 feet of an existing single-family residence, there would be a potentially significant impact**.** It should be noted that at a distance of only 50 feet, the worst-case construction noise could reach up to approximately 79 dBA $L_{eq.}$ With assumed attenuation of 25 dB provided from the exterior to interior of a residence, the interior noise level during construction would not be anticipated to exceed 54 dBA L_{eq}, which would not pose a health risk nor interfere with conversations or other daytime household activities. At distances of 500 feet or greater, construction noise levels would fall below the 60 dBA L_{eq} daytime limit, and therefore mitigation would not be required for daytime construction that occurs at 500 feet or greater from an existing residence.

The project area is not densely developed, and the Project would not directly construct new development. However, the Project would allow and facilitate the construction of new agriculture-supportive uses within the project area. New objective development standards would be established, namely a maximum Cumulative Building Site Coverage. These development standards would be consistent with the rural character of the project area. Given minimum lot areas and required setbacks from property lines and roads (see County Code Section 2.20.030), which would not be reduced by the Project, it is not likely that construction of new uses would occur as close as 500 feet to existing single-family residences. The County also may grant a variance permit if a new construction project would conflict with the provisions of the County's noise ordinance. Therefore, daytime construction noise impacts would be less than significant**.** As also shown in Table 3.13-9, construction-related noise levels based upon the assumed standardized equipment inventory in Table 3.13-8 would exceed the nighttime limit of 50 dBA L_{eq} at distances of 1,400 feet or less from the construction activity. In that implementation of the Project could indirectly result in nighttime construction of new structures that are located within 1,400 feet of an existing single-family residence, the impact associated with possible nighttime construction would be considered potentially significant. However, in accordance with County Code Section B11-154(6)(a), construction and demolition activities would not occur between weekdays and Saturday hours of 7:00 p.m. and 7:00 a.m., or at any time on Sundays or holidays. Construction would only occur during the daytime hours between 7:00 a.m. and 7:00 p.m.; therefore, nighttime construction noise impacts would be less than significant**.** Overall, short term increases in noise levels related to the Project would be **less than significant.**

Impact NOI-2 Would the project result in a permanent increase in community noise levels that would cause a substantial increase in ambient noise levels and exceed County standards?

While the Project would not directly result in new development, it would allow and facilitate agriculture-supportive uses that could indirectly lead to the operation of new buildings and/or the introduction of new noise-generating activities with the potential to impact nearby noise-sensitive receivers.

The development of agriculture-supportive uses could include structures such as greenhouses, buildings housing processing facilities, use of mechanical equipment located outdoors, and the handling of agricultural produce or processed goods. Noise levels at noise-sensitive receivers in the vicinity of new agriculture-supportive operations resulting from the Project would depend on the type of equipment, activity or use schedule, and distance between the noise source and receiver. The range of maximum noise levels for various types of representative mechanical equipment that could be employed for agriculture-supportive uses is depicted in Table 3.13-10.

Table 3.13-10. Reference Noise Levels for Typical Agricultural Support Equipment

Equipment	Reference Distance	Maximum Sound Level (L_{max} dBA) at Reference Distance
Forklift [1]	5 feet	78
Grape Separator [2]	3 feet	83
Greenhouse Circulation Fan [3]	10 feet	73
HVAC (Processing Building) [4]	50 feet	48
Pickup Truck [5]	50 feet	55
Stormwater Pump [6]	6 feet	90

Sources:
1 Toyota, 2021.
2 Pellenc 2019.
3 Schaefer, 2019.
4 Johnson Controls 2015.
5 Noise Navigator, 2013
6 FHWA 2008.
Notes: dBA = A-weighted decibel.

Using the sound level references in Table 3.13-10, and assuming one circulation fan for each 2,000 square feet (SF) of greenhouse, one HVAC package unit for each 2,500 SF of building floor area for a processing facility, or one quantity of the specified equipment, the RCNM-based worksheet was used to determine the distance from various buildings, equipment, or activities at which the resulting noise level would comply with the daytime (55 dBA L_{eq}) or nighttime (45 dBA L_{eq}) operational limits. Table 3.13-11 presents the results of the modeling. Refer to Appendix C for the worksheets.

Table 3.13-11. Reference Noise Levels for Typical Agricultural Support Equipment

Equipment	Distance for Daytime Limit Compliance (55 dBA L_{eq})	Distance for Nighttime Limit Compliance (55 dBA L_{eq})
Agriculture Products Handling	50 feet	150 feet
HVAC (Processing Building)		
5,000 SF	35 feet	100 feet

Table 3.13-11. Reference Noise Levels for Typical Agricultural Support Equipment

Equipment	Distance for Daytime Limit Compliance (55 dBA L_{eq})	Distance for Nighttime Limit Compliance (55 dBA L_{eq})
10,000 SF	50 feet	150 feet
20,000 SF	75 feet	200 feet
Greenhouse (Circulation Fans)		
2,000 SF	75 feet	250 feet
4,000 SF	110 feet	400 feet
8,000 SF	150 feet	500 feet
10,000 SF	175 feet	600 feet
Assorted Equipment		
Grape Separator	60 feet	200 feet
Trash Compactor	35 feet	110 feet
Stormwater Pump [6]	250 feet	800 feet

For relatively steady noise, as represented by operation of mechanical equipment such as HVAC or circulation fans, the L_{eq} value corresponds well with the L_{50} value. Therefore, with respect to application of noise standards found in County Code Section B11-156.d.3 for a high-level evaluation such as this, the L_{50} standard is appropriate. The daytime L_{50} for noise exposure at single-family residences is 55 dBA. As shown in Table 3.13-11, operational noise levels would exceed the daytime limit of 55 dBA L_{50}/L_{eq} at distances ranging from 35 to 250 feet from the equipment location.

As previously discussed, the Project would not directly result in new development, but would allow and facilitate the construction of new agriculture-supportive uses within the project area. County Code Section B11-156(e) states that the County's noise ordinance does not apply to mechanical devices, apparatus, or equipment associated with agricultural operations conducted on agricultural property. Therefore, noise from equipment associated with agriculture-supportive uses would not be in violation of the County's noise ordinance and impacts would be **less than significant.**

Impact NOI-3: Would the project expose existing residential areas to excessive vibration due to project construction or operation?

While the Project would not directly result in new development, it would allow and facilitate agriculture-supportive uses that could indirectly lead to the construction and operation of new buildings and other property improvements. During site clearing, grading and construction activities for potential future development, groundborne vibration would be produced by heavy-duty construction equipment. The most important equipment relative to generation of vibration, and the vibration levels produced by such equipment, is illustrated in Table 3.13-12, below.

Table 3.13-12. Vibration Velocities for Typical Construction Equipment

Equipment	PPV at 25 Feet (Inches Per Second)
Large Bulldozer	0.089
Loaded Trucks	0.076
Drill Rig / Auger	0.089

Table 3.13-12. Vibration Velocities for Typical Construction Equipment

Equipment	PPV at 25 Feet (Inches Per Second)
Jackhammer	0.035
Small Bulldozer	0.003

Source: Caltrans 2020.

As shown in Table 3.13-12, use of heavy equipment (e.g., large bulldozer or drill rig) generates vibration levels of 0.089 ips PPV at a distance of 25 feet. The Caltrans standard is 0.2 ips PPV for prevention of damage to typical residential buildings and avoidance of annoyance to humans (Caltrans 2020). Vibration levels from even a large bulldozer would attenuate to 0.2 ips PPV within 15 feet of the operating equipment. Therefore, vibration levels exceeding the damage threshold would not be anticipated to extend off-site to residences that may exist in the vicinity of future construction sites that indirectly result from implementation of the Project. As such, construction-related vibration impacts associated with the Project would be **less than significant.**

Vibration associated with project operations is generally limited to very large equipment with rotational elements (such as an industrial compressor or turbine) or involving percussive activities (such as a stamping machine). Agriculture-supportive uses associated with implementation of the Project would not be anticipated to include equipment of this nature that would be a source of on-going (long-term) vibration. As such, operations vibration impacts associated with the Project would be **less than significant.**

Impact NOI-4: 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?

While the Project would not directly result in new development, it would allow and facilitate agriculture-supportive uses that could indirectly lead to the construction and operation of new buildings and employment of workers. Agriculture, including support activities such as processing of vegetables or meats, is not considered to be a noise sensitive land use. As such, potential new agriculture-supportive operations located within the mapped 60-65 dBA CNEL contour of one of the County airport facilities would not be expected to expose workers to noise levels that would be harmful or annoying. Thus, the potential exposure to airport-related noise levels for workers associated with future potential developments following implementation of the Project would be **less than significant.**

3.13.6 Cumulative Impacts

Note that noise is not additive. In other words, when two or more noise sources occur, the noise environment is generally dominated by the loudest noise source in relationship to the receptor. Cumulative noise impacts are generally driven by mobile noise, and cumulative increases in vehicular traffic (or air traffic in the case of airports). Neither the Project, nor the cumulative projects would substantially increase growth within the project area. Therefore, the cumulative noise impact would be **less than significant**.

3.13.7 Mitigation Measures

No mitigation is required.

3.13.8 Level of Significance After Mitigation

No impacts related to biological resources have been identified.

3.13.9 References

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3.14 Population and Housing

This section of the Program Environmental Impact Report (PERI) evaluates the potential impacts related to population and housing from implementation of the County of Santa Clara (County) Rural Zoning Amendments and Agricultural Impact Threshold (Project). The following section assesses the potential for the Project to either induce substantial population growth and foster the need for additional housing, or displace a substantial amount of housing.

The project area demographics are examined in the context of comparing existing and projected data for the project area and Santa Clara County as a whole. The discussion of population, housing, and employment provided below is based on information from the Association of Bay Area Governments and the Metropolitan Transportation Commission (ABAG/MTC) Plan Bay Area 2050 (ABAG/MTC 2021a), the Santa Clara County Housing Element Update 2015-2022 (County of Santa Clara 2014), and the Plan Bay Area 2050 Final Blueprint Growth Pattern (ABAG/MTC 2021b).

3.14.1 Environmental Setting

Population

According to the United States Census Bureau 2020 Decennial Census, the population in Santa Clara County was approximately 1,936,259 persons. This represented an increase of 253,674 persons since the year 2000, or approximately 15%. The vast majority of the population lived in incorporated cities; approximately 90,830 persons lived in the unincorporated County representing only 4.7% of the County population (US Census Bureau 2020a). Between 2000 to 2020, the population of unincorporated Santa Clara County decreased by 9,470 persons (US Census Bureau 2000a, 2020a).

According to ABAG/MTC's 2015 to 2050 population forecasts, Santa Clara County is estimated to reach a population of 2,902,500 by 2050 (ABAG/MTC 2021b). This is based on the projected household growth developed for the 2023-2031 Regional Housing Needs Allocation (RHNA) process. The Plan Bay Area 2050 uses a modeling system (Bay Area UrbanSim 2) which creates a universe of simulated households and gives each household characteristics (such as household person count and income) so that the averages for those characteristics are in line with census information. The model households representing the Bay Area have a mean persons per household of 2.7. Assuming 2.7 persons per household in Santa Clara County, there would be approximately 2,902,500 persons distributed across 1,075,000 households.

The California Department of Finance (DOF) also maintains population projections, calculating populations based on a baseline year and factoring in expected births, deaths, and migration. The latest DOF population projections use a 2019 baseline and estimate the Santa Clara County population to be 2,343,610 in the year 2050 (DOF 2021). Compared to ABAG/MTC's forecasted population based on household growth, the DOF estimates 558,890 fewer persons in Santa Clara County in 2050. However, the DOF acknowledges that the population projections should be used with an awareness of events that have taken place since their publication; for example, the projections using the 2019 baseline were published before the COVID-19 pandemic. Table 3.14-1, Estimated and Forecasted Population in Santa Clara County, provides population figures for unincorporated and total Santa Clara County in 2000, 2010, and 2020 based on US Census Bureau Decennial Census data. The table also provides ABAG/MTC and DOF population projections for 2050 for the entire County.

Table 3.14-1. Estimated and Forecasted Population in Santa Clara County

Jurisdiction	2000 Population	2010 Population	2020 Population	ABAG/MTC 2050 Forecasted Population[1]	DOF 2050 Forecasted Population[2]
Unincorporated Santa Clara County	100,300	89,960	90,830	--	--
Santa Clara County (Total)	**1,682,585**	**1,691,682**	**1,936,259**	**2,902,500**	**2,343,610**

Sources: US Census Bureau 2000a, 2010, 2020a; ABAG 2021b; DOF 2021
Notes:
1 The 2050 forecasted population is based on ABAG/MTC's Plan Bay Area 2050 projected household growth for the purposes of Regional Housing Needs Allocation forecasting. It is estimated that Santa Clara County would have 1,075,000 households in 2050 with an average household size of 2.7 persons. The Plan Bay Area 2050 estimates household growth within subcounty areas called "superdistricts." These superdistricts are a combination of cities, towns, and unincorporated areas; therefore, there are no specific household or population projections for unincorporated areas of Santa Clara County.
2 The DOF has not published separate projections for subcounty areas; therefore, there are no specific household or population projections for unincorporated areas of Santa Clara County.

Housing

According to the US Census Bureau 2020 data, there were a total of 688,035 housing units in Santa Clara County, 656,063 of which were occupied. Out of all housing units, only 27,945 were located in the unincorporated County (approximately 4.1%), 26,378 units of which were occupied (US Census Bureau 2020a). Based on the total population and number of occupied housing units, the average household size in Santa Clara County was approximately 2.95 persons per household unit in 2020. In the unincorporated areas of Santa Clara County, the average household size was 3.44 persons per household unit in 2020, higher than the total Santa Clara County average of 2.95 persons per unit. By 2050, Santa Clara County is projected to reach a housing unit stock of 1,075,000 (ABAG/MTC 2021b). Table 3.14-2, Summary of Housing Units in Santa Clara County, summarizes the number of housing units and average household size in the unincorporated areas of Santa Clara County and all of Santa Clara County.

The majority of homes in unincorporated areas of Santa Clara County are single-family detached units (78.5%); however, there are also housing opportunities in multifamily housing units. The high percentage of single-family detached units represents the rural character of much of the unincorporated areas of Santa Clara County. In contrast, Santa Clara County as a whole consists of approximately 50.8% single-family detached homes. Table 3.14-3, Composition of Housing Stock by Percentage Unit Type (2016-2020), summarizes the different types of housing units by percentage in unincorporated areas of Santa Clara County and all of Santa Clara County based on the US Census Bureau American Community Survey (ACS) 5-year estimates (US Census Bureau 2020b).

Table 3.14-2. Summary of Housing Units in Santa Clara County

Jurisdiction	Average Household Size (2020)	2000 Occupied Housing Units	2020 Occupied Housing units	Percentage Change	2050 Forecasted Households[1]
Unincorporated Santa Clara County	3.44	30,889	26,378	-14.6%	--

Table 3.14-2. Summary of Housing Units in Santa Clara County

Jurisdiction	Average Household Size (2020)	2000 Occupied Housing Units	2020 Occupied Housing units	Percentage Change	2050 Forecasted Households[1]
Santa Clara County (Total)	**2.95**	**565,863**	**656,063**	**+15.9%**	**1,075,000**

Sources: US Census Bureau 2000b, 2020a
Notes:
[1] The Plan Bay Area 2050 estimates household growth within subcounty areas called "superdistricts." These superdistricts are a combination of cities, towns, and unincorporated areas; therefore, there are no specific household or population projections for unincorporated areas of Santa Clara County.

Table 3.14-3. Composition of Housing Stock by Percentage Unit Type (2016-2020)

Jurisdiction	Single-Family Detached	Single-Family Attached	Multifamily: Two to Four Units	Multifamily: Five Units Plus	Mobile Homes	Boat, RV, Van, etc.
Unincorporated Santa Clara County	78.48	4.24	2.94	12.09	1.74	0.51
Santa Clara County (Total)	**50.75**	**11.2**	**7.21**	**27.86**	**2.92**	**0.06**

Sources: US Census Bureau 2020b

Employment

In 2015, ABAG/MTC estimated there to be 1,099,000 jobs in Santa Clara County. ABAG/MTC estimates that there will be approximately 1,610,000 jobs in Santa Clara County in 2050, which represents a job increase of 46% (ABAG/MTC 2021b). Table 3.14-4, Summary of Job Estimates and Forecasts in Santa Clara County, summarizes job numbers in Santa Clara County. The Plan Bay Area 2050 does not provide localized forecasts for cities or unincorporated areas. Rather, the Bay Area is divided into 34 subcounty areas, called "superdistricts" that may combine cities, towns, and unincorporated areas. The table below includes localized job estimates and forecasts for these superdistricts, which correspond to different regions of the County. Most unincorporated Santa Clara County land is within Superdistrict 14, which contains the smallest share of jobs within the County (ABAG/MTC 2021b).

Table 3.14-4. Summary of Job Estimates and Forecasts in Santa Clara County

Location	2015 Jobs	2050 Forecasted Jobs	Percentage Change
Northwest (Superdistrict 8)	180,000	207,000	+15.0%
North (Superdistrict 9)	370,000	629,000	+70.0%
West (Superdistrict 10)	145,000	197,000	+36.0%
Central (Superdistrict 11)	178,000	263,000	+48.0%
East (Superdistrict 12)	121,000	170,000	+40.0%
Central South (Superdistrict 13)	57,000	77,000	+36.0%
South (Superdistrict 14)	49,000	68,000	+37.0%
Santa Clara County (Total)	**1,099,000**	**1,610,000**	**+46.0%**

Sources: ABAG/MTC 2021b

Jobs-Housing Balance

Jobs-housing balance is achieved by increasing opportunities for people to work and live in close proximity. The ratio is expressed as the number of jobs divided by the number of housing units. The Santa Clara County superdistricts analyzed in the Plan Bay Area 2050 have a jobs-housing balance that ranges between 0.78 and 3.46 in 2015 and are predicted to have a range between 0.85 and 2.03 in 2050 (see Table 3.14-5, Jobs-Housing Balance in Santa Clara County).

Table 3.14-5. Jobs-Housing Balance in Santa Clara County (2050)

Location	Households (2015)	Households (2050)	Jobs (2015)	Jobs (2050)	Jobs/Housing-Ratio (2015)	Jobs/Housing-Ratio (2050)
Northwest (Superdistrict 8)	74,000	102,000	180,000	207,000	2.43	2.03
North (Superdistrict 9)	107,000	320,000	370,000	629,000	3.46	1.97
West (Superdistrict 10)	121,000	172,000	145,000	197,000	1.20	1.15
Central (Superdistrict 11)	105,000	168,000	178,000	263,000	1.70	1.57
East (Superdistrict 12)	108,000	180,000	121,000	170,000	1.12	0.94
Central South (Superdistrict 13)	73,000	91,000	57,000	77,000	0.78	0.85
South (Superdistrict 14)	35,000	43,000	49,000	68,000	1.4	1.58
Santa Clara County (Total)	**623,000**	**1,075,000**	**1,099,000**	**1,610,000**	**(average) 1.73**	**(average) 1.44**

Source: ABAG/MTC 2021b

3.14.2 Relevant Plans, Policies, and Ordinances

Federal

There are no applicable federal policies or regulations related to housing and population.

State

State Housing Element Law, Government Code Section 65580 et seq.

Government Code Article 10.6. Housing Elements, Section 65580, declares that the availability of housing is of vital statewide importance, and the early attainment of decent housing and a suitable living environment for every Californian, including farmworkers, is a priority of the highest order. Governments and private sectors should work cooperatively to expand housing opportunities and accommodate housing needs in California. Furthermore, designating and maintaining a supply of land and adequate sites suitable, feasible, and available for the development of housing sufficient to meet the locality's housing need for all income levels is essential to achieving the state's housing goals and the purposes of this article.

Regional

ABAG/MTC Plan Bay Area 2050

The ABAG/MTC Plan Bay Area 2050 is a long-range transportation, land use and housing plan that includes strategies intended to support a growing economy, tackle the regional housing crisis, promote alternative transportation choices, and reduce GHG emissions, among other challenges facing the Bay Area. Plan Bay Area 2050 also develops forecasts for households, jobs, and economic activity in the Bay Area. Plan Bay Area 2050 was adopted by the ABAG Executive Board and the MTC on October 21, 2021 and serves as a Sustainable Communities Strategy (SCS) for the San Francisco Bay Area, in compliance with SB 375 which requires regional metropolitan planning organizations in California to develop long-range plans for achieving GHG emissions reductions targets set by the California Air Resources Board (CARB).

Regional Housing Needs Allocation

The Regional Housing Needs Allocation (RHNA) process is a state-mandated process used to plan for housing needs in each region of California. The process starts with the California Department of Housing and Community Development (HCD) determining how much housing is needed for a variety of affordability levels for each region of the state based on population projections produced by the state Department of Finance. Each regional government then develops a methodology to allocate the region's housing need to each local government within the region. The RHNA guides each local government's periodic process of updating the housing elements of its general plan.

The latest RHNA for the San Francisco Bay Area was adopted in December 2021, and covers the region's housing needs for the 2023 to 2031 housing element period (ABAG 2021). In consultation with ABAG, HCD determined that the Bay Area must plan for 441,176 new housing units. This determination is. The County of Santa Clara and 15 cities in Santa Clara County must plan for 129,577 new housing units, which would be approximately 29.4% of the new housing units required in the Bay Area. Table 3.14-6, ABAG Regional Housing Needs Assessment Allocations, details the allocated housing needs assessment for the unincorporated areas of Santa Clara County and Santa Clara County as a whole.

Table 3.14-6. ABAG Regional Housing Needs Allocations

Area	Very Low Income (<50% of Area Median Income)	Low Income (50-80% of Area Median Income)	Moderate Income (80-120% of Area Median Income)	Above Moderate Income (>120% of Area Median Income)	Total
Unincorporated Santa Clara County	828	477	508	1,312	3,125
Santa Clara County Total	**32,316**	**18,607**	**21,926**	**56,728**	**129,577**

Source: ABAG 2021

Local

Santa Clara County Housing Element

State requirements mandating that housing be included as an element of each jurisdiction's general plan is known as housing-element law. California housing element law requires cities and counties to: 1) zone adequate lands to accommodate its RHNA; 2) identify an inventory of sites that can accommodate its share of the RHNA; 3) identify governmental and non-governmental constraints to residential development; 4) develop strategies and a work plan to mitigate or eliminate those constraints; and 5) adopt a housing element and update it on a regular basis. The Santa Clara County Housing Element and related land use policies were last updated in June 2014 (County of Santa Clara2014). However, the County is currently updating its Housing Element for the period of 2023 through 2031.

3.14.3 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment with respect to population and housing if the project would:

POP-1: Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

POP-2: Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere or displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

3.14.4 Methodology

The analysis considers whether the Project would result in a significant population increase, which would be a population increase that surpasses the forecasted population growth for the region. Changes in population can result from the direct creation of housing, or indirectly, by inducing economic growth that increases demand for housing. Impacts may also result from displacement of existing or planned housing. The Project would not directly authorize the construction of housing units, it would include amendments to the Zoning Ordinance that would restrict cumulative building coverage of all non-agricultural development in all four rural zoning districts. This section includes a review of the forecasted population increase by 2050, the estimated population increase resulting from the Project, and existing populations in unincorporated Santa Clara County. Additionally, an analysis if whether the Project would displace population would be done by analyzing potential land use changes, such as residential to non-residential. If the Project has the potential to result in significant unplanned population growth and/or the displacing of populations therefore necessitating the construction new housing elsewhere, a significant effect on the environment may result. Note that according to Section 15382 of the California Environmental Quality Act (CEQA) Guidelines, "An economic or social change by itself shall not be considered a significant impact on the environment." Furthermore, it "is not assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment (Guidelines Section 15126.2[e])."

3.14.5 Environmental Impacts

Impact POP-1: Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The Project would involve the adoption of Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would establish a threshold of significance to evaluate a project's agricultural impacts on a project-by-project basis under CEQA. The Project does not include the development of any new housing or other infrastructure that would directly result in population growth. As described in Chapter 2, Project Description, non-agricultural structures, including residential structures, would be subject to simple, objective development standards to ensure that new non-agricultural structures would be sensitive to surrounding agricultural uses and would be consistent with the rural character of unincorporated County areas. The proposed Zoning Ordinance amendments would not change the density or total number of housing units allowed to be developed in the project area nor the minimum or maximum lot sizes, setbacks, or height requirements.

Furthermore, a Demand Assessment Study conducted on behalf of the Project concluded that the proposed Zoning Ordinance amendments would not induce growth for the non-residential uses affected by the proposed amendments, including agriculture-supportive uses, wineries, and religious land uses (BAE 2021). The study found that there was no unmet demand for these land uses that would result in substantial growth were the streamlining provisions of the Project to be implemented.

Therefore, the Project would not induce population growth either through the increased development of housing units, or indirectly through non-residential growth that could increase future demand for housing. The Project would have **no impact** on population growth within the rural zoning districts.

Impact POP-2: Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere or displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The Project would not involve any demolition of housing or other physical development that may displace people or housing. The Project would not change any land use classifications or constrain development of residential units such that replacement housing may be required elsewhere. The Project would involve the adoption of Zoning Ordinance amendments that would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate a project's agricultural impacts on a project-by-project basis under CEQA. Non-agricultural structures, including residential structures, would be subject to simple, objective development standards to ensure that new non-agricultural structures would be sensitive to surrounding agricultural uses and consistent with the rural character of unincorporated County areas; however, this would not change the allowed residential development density. Therefore, the Project would have **no impact** related to housing displacement.

3.14.6 Cumulative Impacts

The cumulative projects in the Santa Clara County region would have the potential to result in a significant cumulative impact if they would, in combination, directly or indirectly induce substantial population growth. Similar to the Project, cumulative projects in the Santa Clara County region would utilize regional planning documents during planning. Cumulative projects include the Santa Clara County Housing Element Update, Agricultural Employee Housing Zoning Ordinance Amendments, and Senate Bill 9 (refer to Section 3.0.1 of this EIR (Cumulative Analysis) for detailed descriptions of these projects). The Santa Clara County Housing Element Update would address the housing needs of the County from 2023 through 2031 and would incorporate the final RHNA allocations determined by ABAG and HCD. The Santa Clara County Agricultural Employee Housing Zoning Amendment and Senate Bill 9 would streamline the process for new agricultural employee housing, duplexes, and subdividing existing lots. While these projects would allow for more housing, the intent of these projects are to address current housing needs in the Bay Area, rather than induce additional population growth.

Furthermore, as discussed above, implementation of the Project would not conflict with existing land use plans, policies, or regulations of agencies with jurisdiction over the project area. The intent of the Project is to align the Zoning Ordinance with existing County land use policies (see Section 3.11, Land Use and Planning). For these reasons, there is no evidence to conclude that significant impacts will occur based on past project approvals or that the Project's impacts are cumulatively considerable when evaluating any cumulative impacts. Cumulative impacts would be **less than significant**.

3.14.7 Mitigation Measures

No mitigation measures are required.

3.14.8 Level of Significance After Mitigation

No significant unavoidable adverse impacts relating to population and housing have been identified.

3.14.9 References

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3.15 Public Services and Recreation

This section provides an overview of existing public services and recreation and evaluates the potential impacts related to public services and recreation from implementation of the County of Santa Clara (County) Rural Zoning Amendments and Agricultural Threshold Impact (Project) to affect availability, service level, and/or capacity of public services including fire protection and emergency services, law enforcement, school services, and library services, park services, and recreational resources. Utilities and service systems, including water supply, wastewater, and solid waste are addressed in Section 3.17, *Utilities and Service Systems*.

3.15.1 Environmental Setting

Public services in Santa Clara County include fire protection, law enforcement, school services, libraries and parks. These services are provided by the same agencies in the unincorporated areas of the County.

Fire Protection and Emergency Services

Established in 1947, the Santa Clara County Fire Department (SCCFD) provides fire, safety, and emergency medical services to the residents of Santa Clara County (SCCFD 2022a). SCCFD consists of 15 fire stations which include Campbell, Cupertino, El Monte, Los Altos, Loyola, Los Gatos, Monta Vista, Quinto, Redwood, Saratoga, Seven Springs, Shannon, Sunnyoaks, Winchester and West Valley fire stations. Of these locations, the Santa Clara County Administrative Headquarters is located at 14700 Winchester Blvd in Los Gatos, California (SCCFD 2022b). The Central Fire Protection District (CFPD) and California Division of Forestry (CDF) serve most of the unincorporated areas of the County. The Fire Chief serves as the County Fire Marshal and provides oversight for the County's Office of Emergency Management and 9-1-1 Communications Center. The County Fire Marshal Office is headquartered at 70 West Hedding Street on 7th floor in San Jose, California.

SCCFD serves over 226,000 residents in Santa Clara County and the unincorporated areas. The SCCFD operates 15 fire stations with 31 front-line fire apparatus and 3 command vehicles. The SCCFD has a total of over 300 fire prevention, suppression, investigation, administration and maintenance personnel. Minimum daily 24-hour emergency response staffing consists of 66 firefighters operating 19 front-line apparatus and 3 battalion chief command vehicles from all the fire stations in the County (SCCFD 2021).

SCCFD provides first response Advanced Life Support (ALS) paramedic level services to the County and the unincorporated areas. An Emergency Medical Services (EMS) Coordinator and a Firefighter Engineer Paramedic report to the Battalion Chief Officer to facilitate the delivery of a high quality and effective patient care. The district operates 19 fully equipped ALS fire apparatus daily that are all staffed with a minimum of one Paramedic and two Emergency Medical Technicians (EMTs). The Department maintains a Santa Clara County EMS Multi-Casualty Incident (MCI) supply trailer for large-scale emergency medica incidents and is a participant in Master Mutual Aid in the event of major disasters. The SCCFD's EMS division is an active participant in the Santa Clara County EMS System. The division participates in EMS subcommittees and is a representative on the EMS subsection of the Santa Clara County Fire Chief's Association. In addition, the State of California's EMS Authority has recognized the department as a Continuing Education Provider for both paramedics and EMTs (SCCFD 2022c).

SCCFD has the Fire Suppression Department that is configured into three districts. Upon receiving the first-call, initial fire attack equipment and emergency medical services are deployed within seven minutes. A standard first-alarm equipment for fires consists of two engine companies, a ladder truck company, a rescue or hazardous

materials company and a Battalion Chief, for a total of 15 people. For ongoing fires, the response is increased to three engine companies, one ladder truck company, a hazmat and breathing support company, one rescue company, two Battalion Chiefs, a Safety Officer, and a Duty Investigator, totaling 25 people at the scene. In the event of a second alarm, the response would be further increased to another two engine companies, one truck company, one rescue company, and an additional Battalion Chief Officer, totaling 40 people at the scene *(*SCCFD 2022d).

SCCFD provides information on the causes of local fires through administering fire investigations. Fire investigations are performed by Arson Investigation for the County. With the help of local police agencies, arson investigators examine the physical attributes of a fire scene and identify if a fire was a result of an accident or started on purpose. The SCCFD places a strong emphasis on quelling arson fires as they account for approximately 25% of fires (SCCFD 2022e).

The SCCFD also has a Special Operations Task Force (SOTF) to improve emergency responses that are outside the scope of typical emergency calls through providing advanced training, teaching, and emergency responses in the district and adjoining agencies. Personnel for the SOTF make up approximately 15 people plus one Battalion Chief Officer per shift, with three shifts assigned to the program. Members of SOTF are required to undergo advanced training in addition to the regular fire department training which includes CSFM Fire Instructor 1A and 1B, Confined Space Rescue, Trench Route, Low Angle Rescue, Rescue Systems I and/or II, SCTI Hazardous Materials Technician or Specialist, Haz-Mat Safety Officer/All Risk trainings. The program also provides continued training which includes weekly multi company special operations training, participation in the quarterly Hazardous Materials Countywide Refresher Training and the UASI Urban Shield Exercise/Competition and Participation of up to 12 hours. SOTF deployment may occur within district when needed, based on the Incident Command request *(*SCFFD 2022f).

Law Enforcement

Law enforcement services are provided by 11 municipal police departments and the Santa Clara County Sheriff's Office. The Sheriff's Office serves the unincorporated areas of the County and provides contractual police services to the communities of Los Altos Hills, Cupertino, Saratoga and Monte Sereno. The Sheriff's Office is divided into four major bureaus: Administrative Services, Enforcement, Custody and Support Services. The four bureaus encompass one Sheriff and Undersheriff, three Assistant Sheriffs, one Administrative Services Director, 15 Captains, 28 Lieutenants, 132 Sergeants and 1,273 Deputies. Currently, the Sheriff's Office employs 2,025 employees. Of these employees, 1,453 of them are sworn law enforcement officers and 572 people are non-sworn, civilian staff. The Sheriff's Office is headquartered at 55 West Younger Avenue in San Jose, California (County of Santa Clara 2024).

The Sheriff's office also contains several specialized units and teams. These include Canine Unit, Search and Rescue, Drive Team, Traffic/Motorcycles, off-Road Enforcement Team, Hostage Negotiation Team, Sheriff's Emergency Response Team (SERT), Crowd Control Unit, Sheriff's Off-Road Enforcement Team (SORE), Narcotics Task Force, Emergency Response Teams (ERT), Jail Intelligence Unit, Sexual Assault Felony Enforcement (SAFE) Task Force, Rapid Enforcement Allied Computer Team Task Force, Custodial Alternative Supervision Unit (CASU), Parks Boat Patrol, Intelligence/Vice Unit and Bomb Squad (County of Santa Clara 2024).

School Services

Santa Clara County is served by 31 school districts. Of this, 20 school districts serve Kindergarten through 12th grade (K-12) students. The 31 public school districts include 229 elementary schools, 52 middle schools, 46 high schools, and 8 community colleges (County of Santa Clara 1994a).

The County's role in developing and managing educational facilities and programs is limited. However, the Santa Clara County Office of Education (SCCOE) serves as a link between the California State Department of Education and the County's 37 school districts. The SCCOE is guided by the County Board of Education, which is appointed by the Board of Supervisors. The SCCOE provides a vision statement and strategic opportunities for educational facility development to coordinate the assessment of facility needs and the construction of schools that fall to individual school districts (SCCOE 2022). Another role that the County plays in coordinating public school facilities is through the County subdivision approval process, in which developers are required to assess the need for, and in some cases provide, land for the construction of public schools within their development. Development impact fees, based on the size of a development, are distributed to the appropriate school district for the construction of school facilities before the County issues any building permits. Issues associated with educational facilities involve 1) the effective coordination between land use planning and school facilities planning—providing the benefit of joint-use agreements to benefit communities and create operational and economic efficiencies; and 2) the shortage of early care and education facilities in the unincorporated areas. The SCCOE provides direct and indirect services and programs to students, staff, schools and school districts, many of which are mandated by the State of California. Some forms of direct services include special education, alternative education, child development, migrant education and head start programs. The SCCOE organizes workshops for improving teacher's and administrator's skills by providing instructional materials in the form of videos for classroom use, providing transportation needs for special education students and operating community education programs.

All schools located within the unincorporated areas of Santa Clara County are served by the Santa Clara Unified School District (SCUSD). A list of these schools is provided in Table 3.15-1, Santa Clara County Schools Serving Unincorporated Areas.

Table 3.15-1. Santa Clara County Schools Serving Unincorporated Areas

Number	School Name	Address
1	Agnew Elementary School	3534 Zanker Road, San Jose
2	Bowers Elementary School	1889 Lawrence Road, Santa Clara
3	Bracher Elementary School	2700 Chromite Drive, Santa Clara
4	Braly Elementary School	675 Gail Avenue, Santa Clara
5	Briarwood Elementary School	1930 Townsend Avenue, Santa Clara
6	Central Park Elementary School	2720 Sonoma Place, Santa Clara
7	Haman Elementary School	865 Los Padres Boulevard, Santa Clara
8	Hughes Elementary School	1889 Lawrence Road, Santa Clara
9	Laurelwood Elementary School	955 Teal Drive, Santa Clara
10	Mayne Elementary School	5030 N. First Street, Alviso
11	Millikin Basics + Elementary School	615 Hobart Terrace, Santa Clara
12	Montague Elementary School	750 Laurie Avenue, Santa Clara
13	Pomeroy Elementary School	1250 Pomeroy Avenue, Santa Clara
14	Ponderosa Elementary School	804 Ponderosa Avenue, Sunnyvale

Table 3.15-1. Santa Clara County Schools Serving Unincorporated Areas

Number	School Name	Address
15	Scott Lane Elementary School	1925 Scott Blvd., Santa Clara
16	Sutter Elementary School	3200 Forbes, Santa Clara
17	Washington Open Elementary School	270 Washington Street, Santa Clara
18	Westwood Elementary School	435 Saratoga Avenue, Santa Clara
19	Callejon K-8 School	4176 Lick Mill Blvd., Santa Clara
20	Buchser Middle School	1111 Bellomy Street, Santa Clara
21	Cabrillo Middle School	2550 Cabrillo Avenue, Santa Clara
22	Peterson Middle School	1889 Lawrence Road, Santa Clara
23	Huerta Middle School	3556 Zanker Road, San Jose
24	MacDonald High School	3500 Zanker Road, San Jose
25	Mission Early College High School	3000 Mission College Blvd. Gillmor Center Building, Third Floor, Santa Clara
26	New Valley Continuation High School	1875 Lawrence Road, Santa Clara
27	Santa Clara High School	3000 Benton Street, Santa Clara
28	Wilcox High School	3250 Monroe Street, Santa Clara
29	Wilson Alternative High School	1840 Benton Street, Santa Clara
30	Santa Clara Community Day Middle and High School	3450 Brookdale Drive, Santa Clara

Source: SCUSD 2022
Note: All schools are located within the Santa Clara Unified School District

Libraries

The Santa Clara County Library District (SCCLD) provides library services to over 1.8 million residents living in 15 cities in Santa Clara County and to residents living in unincorporated areas. The SCCLD consists of eight libraries. These include Campbell Express Library, Cupertino Library, Gilroy Library, Los Altos Library, Milpitas Library, Morgan Hill Library, Saratoga Library and Bookmobile. Of these libraries, Bookmobile is a library truck service that delivers books to the residents in every part of the County (Santa Clara County Library District 2022).

The SCCLD system is a special funded County department operating under the direction of the Board of Supervisors. The County applies a Library Benefit Assessment fee to all developments in the County's library service area and is intended for raising a revenue necessary to maintain and restore public library services in the County.

Parks and Recreational Resources

The Santa Clara County Parks Department (SCCPD) provides park services to the County. Santa Clara County's regional park system includes 28 regional parks totaling 52,200 acres. The Department manages approximately 27% of all publicly accessible open spaces in the County. The park system offers a unique collection of traditional park facilities as well as specialty recreation facilities and is estimated to receive more than three million visitors annually (Santa Clara County Parks 2018).

County Parks has a high percentage of multi-use park trails available for all park users. The County Parks Department maintains approximately 340 miles of trails within park boundaries, of which about half are multi-use shared trails that serve multiple trail user types including equestrians, hikers, and bikers. Of the available trails,

approximately 20% allow hikers only while 23% of trails are available for both hikers and equestrians. At present, there are no bike-only trails in the County-wide system. Multi-use trails are more common within the county because they serve the widest array of users (Santa Clara County Parks 2018).

County's parks also host a range of recreation events and programs to serve its residents. In 2016, the Department served nearly 150,000 visitors through programs and special events, including the seasonal Fantasy of Lights at Vasona Lake County Park, Day on the Bay at Alviso Marina County Park, Spring and Harvest Festivals at Martial Cottle Park, various Junior Ranger, interpretation, and recreation programs (Santa Clara County Parks 2018).

3.15.2 Relevant Plans, Policies, and Ordinances

Federal

The following federal regulations pertaining to public services would apply to the Project.

National Fire Protection Association

The National Fire Protection Association recommends that fire departments respond to fire calls within six minutes of receiving the request for assistance 90% of the time. These time recommendations are based on the demands created by a structural fire. It is crucial to attempt to arrive and intervene at a fire scene prior to the fire spreading beyond the room of origin. Total structural destruction typically starts within eight to ten minutes after ignition. Response time is generally defined as one minute to receive and dispatch the call, one minute to prepare to respond to the fire station or field and four minutes (or less) travel time.

State

The following state regulations pertaining to public services would apply to the Project.

California Health and Safety Code (Section 13000 et seq.)

State fire regulations are set forth in Section 13000 et seq. of the California Health and Safety Code, which include regulations concerning building standards (as also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and child care facility standards, and fire suppression training. The State Fire Marshal enforces these regulations and building standards in all State-owned buildings, State-occupied buildings, and State institutions throughout California.

California Code of Regulations (CCR) Title 24, Part 2 and Part 9

Part 2 of Title 24 of the CCR refers to the California Building Code, which contains complete regulations and general construction building standards of state adopting agencies, including administrative, fire and life safety, and field inspection provisions. Part 2 was updated in 2019 to reflect changes in the base document from the Uniform Building Code to the International Building Code. Part 9 refers to the California Fire Code, which contains fire-safety-related building standards referenced in other parts of Title 24. This Code was revised in January 2019 with a change in the base model/consensus code from the Uniform Fire Code series to the International Fire Code.

California Public Resources Code (PRC) Section 4201-4204

This section of the PRC was amended in 1982 to require the California Department of Forestry to classify all State Responsibility Areas (SRAs) into fire hazard severity zones. The purpose of this code is to provide classification of lands within SRAs in accordance with the severity of fire hazard present for the purpose of identifying measures to be used to retard the rate of spreading and to reduce the potential intensity of uncontrolled fires that threaten to destroy resources, life, or property.

State Responsibility Area (SRA) Fire Safe Regulations (Title 14 Natural Resources, Department of Forestry and Fire Protection)

These regulations constitute the basic wildland fire protection standards of the California Board of Forestry. They have been prepared and adopted for the purpose of establishing minimum wildfire protection standards in conjunction with building, construction, and development in SRAs. Title 14 mandates that the future design and construction of structures, subdivisions, and developments in an SRA provide for basic emergency access and perimeter wildfire protection measures.

California Government Code 66000

According to California Government Code 66000, a qualified agency, such as a local school district, may impose fees on developers to compensate for the impact that the project will have on existing facilities or services. The State of California legislature passed SB 50 in 1998 that inserted new language into the Government Code (Sections 65995.5-65995.7), which authorized school districts to impose fees on developers of new residential construction in excess of mitigation fees authorized by Government Code 66000. School districts must meet a list of specific criteria, including the completion and annual update of School Facility Needs Analysis, in order to be legally able to impose the additional fees.

Leroy F. Green School Facilities Act

California Government Code Section 65995 (The Leroy F. Green School Facilities Act of 1998) set base limits and additional provisions for school districts to levy fees to help fund expanded facilities to house new pupils that may be generation by the development project. Sections 65996(a) and (b) state that such fees collected by school districts provide full and complete school facilities mitigation under CEQA. These fees may be adjusted by the District over time as conditions change.

The Quimby Act (Government Code Section 66477)

The Quimby Act, enacted in 1975, creates a framework that allows cities and counties to provide parks for growing communities. The Quimby Act authorizes jurisdictions to adopt ordinances that require parkland dedication or payment of in-lieu fees as a condition of approval of residential subdivisions, The Quimby Act also specifies acceptable uses and expenditures of such funds, such as allowing developers to set aside land, donate conservation easements, or pay direct fees for park improvements.

2019 California Fire Code

The California Fire Code (Title 24, Part 9 of the California Code of Regulations) establishes regulations to safeguard life and property against hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The Fire Code also establishes requirements intended to provide safety and assistance

to firefighters and emergency responders during emergency operations. The provisions of the Fire Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout the State of California. The Fire Code includes regulations regarding fire-resistance-rate construction, fire protection systems such as alarm and sprinkler systems, fire service features such as fire apparatus access roads, means of egress fire safety during construction and demolition, and wildland-urban interface areas.

Proposition 40 Park Bond Act

Proposition 40 allows for the maintenance for preservation of parks of the state's growing population by borrowing money through general obligation bonds for the development, restoration, and acquisition of state and local parks, recreation areas and historical resources, and for land, air, and water conservation programs.

The Mello-Roos Community Facilities Act of 1982

The Mello-Roos Community Facilities Act provides an alternative method of financing certain public capital facilities and services, especially in developing areas and areas undergoing rehabilitation. This state law empowers local agencies to establish Community Facilities Districts (CFDs) as a means of obtaining community funding.

Landscaping and Lighting Act of 1972, California Streets and Highway Code Section 22500 –22509

The California Landscaping and Lighting Act of 1972 authorizes local legislative bodies to establish benefit related assessment districts, or Landscaping and Lighting Districts (LLADs) and to levy assessments for the construction, installation, and maintenance of certain public landscaping and lighting improvements. LLADs may be established to maintain local public parks.

Local

The following local/regional regulations pertaining to public services would apply to the Project.

Santa Clara County 1995-2010 General Plan

The Safety and Noise Chapter and the Parks and Recreation Chapter of the Santa Clara County General Plan provides the following goals and policies potentially relevant to the Project (County of Santa Clara 1994b).

Policy R-HS 22. Adequate access and water supplies for fire safety shall be required for all new development, including building sites, subdivisions, and clustered development.

Policy R-HS 24. Dead end roads shall not be extended unless approved by the Fire Marshall or other fire authority.

Policy R-HS 26. For communities in areas of high or extreme fire hazard that have developed under development densities greater than generally allowed under current General Plan policies, water systems with hydrants should be provided wherever feasible

Policy R-HS 28. Development projects shall be reviewed by the County Fire Marshall's Office for safety code compliance and should also be referred if necessary to the appropriate fire protection authority or district for further review and recommendations.

Policy R-PR 2. Sufficient land should be acquired and held in the public domain to satisfy the recreation needs of current and future residents and to implement trailside concept along our scenic roads.

Policy R-PR 3. The County's regional park system should: a. utilize the county's finest natural resources in meeting park and open space needs; b. provide a balance of types of regional parks with a balanced geographical distribution; c. provide an integrated park system with maximum continuity and a clear relationship of elements, using scenic roads, bikeways and trails as important linkages; and d. give structure and livability to the urban community.

Policy R-PR 4. The public open space lands system should: a. preserve visually and environmentally significant open space resources; and b. provide for recreation activities compatible with the enjoyment and preservation of each site's natural resources, with trail linkages to adjacent and nearby regional park lands.

Policy R-PR 9. The parks and recreation system should be designed and implemented to help attain open space and natural environment goals and policies.

Policy R-PR 13. Public recreation uses should not be allowed in areas where comparable private development would not be allowed, unless consistent with an adopted park master plan.

Policy R-PR 14. Privately-owned recreational land uses and facilities within rural unincorporated areas, including but not limited to golf courses, campgrounds, recreational vehicle (RV) parks, and similar uses, should be compatible with the landscape and resources of the areas in which they are proposed. To ensure such compatibility, potentially significant impacts often associated with such land uses should be avoided or reduced to less than significant levels, including: a. water demand; b. traffic generation; c. wastewater generation and disposal; d. alteration of natural topography, drainage patterns, habitat, or vegetative cover; e. use of harmful chemicals, such as pesticides, and herbicides; f. riparian area or heritage resource impacts; g. loss of prime soils or other impacts upon local agriculture; h. visual impacts; and, i. impacts on public services and facilities, including schools

Policy R-PR 28. Trail Routes or Regional Staging Areas shown on the Countywide Trails Master Plan Map in areas currently designated as Ranchland on the County General Plan Land Use Map and actively used for ranching or other agricultural purposes shall not be required (including easements) or developed outside of County road rights-of-way until or unless: 1. The County is notified of a non-renewal of Williamson Act contract affecting the land on which the trail route or regional staging area would be located; 2. such time as the active ranching and/or agricultural use has been permanently abandoned; 3. the land use designation is amended to a non-ranchland designation, or 4. there is specific interest or consent expressed by a willing property owner/seller.

Policy R-PR 28.1. Trail Routes or Regional Staging Areas shown on the Countywide Trails Master Plan Map in areas currently designated as Hillside on the County General Plan Land Use Map and actively used for ranching or other agricultural purposes shall not be required (including easements) or developed outside of County road rights-of-way until or unless: 1. the County is notified of a non-renewal of Williamson Act contract affecting the land on which the trail route or regional staging area would be located; 2. such time as active ranching and/or agricultural use has been

permanently abandoned; or, 3. there is specific interest or consent expressed by a willing property owner / seller.

Santa Clara County Municipal Code

Division B14- Parks and Recreation

Division B14 of the County's Municipal Code establishes and implements a procedure to maintain and protect the County's park system. It consists of articles defining park conduct, park hours, resource protection, public use areas and other important topics. Chapter 6 (Fees and Charges) of the Municipal Code entails information about different charges and fees that are collected for permits, various activities, Park use, park entrance, facility use, and administration costs, that are established by resolution and approved by the Board of Supervisors and amended from time to time.

Santa Clara County Parks 2018 Strategic Plan

The Santa Clara County Parks 2018 Strategic Plan presents nine departmental goals that continue commitments made in the 2003 plan and add clarity for prioritizing investment of the limited Park Charter Funds over the next ten years. The goals express a comprehensive ideal for the Department's overarching management approach and commitment to stewardship of the natural, cultural, and historic resources under our care (Santa Clara County Parks 2018).

Santa Clara County Municipal Code

Division C19-Fire Protection Mitigation Fee Ordinance

According to the County's Municipal Code, the purpose of this division is to establish and implement a procedure for the adoption of fire protection mitigation fees and for the assessment and collection of these fees at the time of issuance of building permits. The fire mitigation fees are to be allocated to the affected fire district for the acquisition of capital facilities and equipment in order to ensure the provision of the capital facilities and equipment necessary to maintain the current levels of fire protection services which are required as the result of new development projects. The fees are determined by the fire mitigation fee in effect on the date of the payment of fees for an unexpired plan check (County of Santa Clara 2014).

Chapter 14-Library Benefit Assessment

As per Section A14-71, the Santa Clara County levies a benefit assessment fee to raise a revenue to maintain and restore public library services in the County. The benefit assessment is levied on all parcels in all zones of the Santa Clara County Library Service Area. The base assessment level is determined to be $33.66 for fiscal year 2004/2005 and is not projected to increase more than two percent annually, upon the approval of a city, to provide enhanced services to the area. The fee shall be collected in the same manner as ordinary County ad valorem property taxes are collected and shall be subject to the same penalties and same procedure and sale in case of delinquency as provided by such taxes. All laws applicable to the levy, collection and enforcement of County ad valorem property taxes shall be applicable to this assessment.

School District Developer Fees

As detailed in Table 3.15-1, Santa Clara County Schools Serving Unincorporated Area, there are 37 school districts that could potentially be burdened by the additional students resulting from the buildout of the zoned area. Most unified school districts have developer fees that would help in offsetting potential burdens on the school district resulting from increased population.

SCUSD has developer fee collection rates for residential, commercial, hotel/motel and self-storage developments that were updated per their 2024 Developer Fee Justification Study. According to this study, the Board of Trustees approved an increase in the developer fees of $5.17 per square foot for residential projects, $0.80 per square foot for commercial projects, $0.40 per square foot for hotel/motel projects, and $0.02 per square foot for self-storage projects. The new developer fee rates would apply from June 10, 2022 *(*SCUSD 2024).

The Park Charter Fund Fees

The Park Charter Fund is a provision in the County's Charter that sets aside a portion of property tax revenue exclusively for County Park purposes. Within this set-asides, funds are distributed between three categories: acquisition, capital improvement, and "unrestricted." As the park system has grown, the allocation of funds has shifted from acquisition and expanding the park system to build-out of the existing park system and its amenities to supporting operations and maintenance, and finally, to developing and rehabilitating park amenities and infrastructure. In 2016, the most recent renewal sets aside 1.5 cents per $100 of assessed value and dedicates 10% for acquisition, 10% for capital improvements, and 80% is unrestricted. The goals in making these latest changes were to better address the maintenance needs of the now 60+ year-old park system, to slow the pace of acquiring additional land, and to account for increasing operating costs. Despite the modest increase and change in allocation of the 2016 Park Charter authorization, work carried out during development of this Strategic Plan showed that the resources of the Park Charter Fund are not sufficient to develop, maintain, and operate the 52,000-acre regional park system over the long term (Santa Clara County Parks 2018).

3.15.3 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment with respect to public services and recreation if the project would:

PS-1: Result in a substantial adverse physical impact associated with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- Fire protection?
- Police protection?
- Schools?
- Parks?
- Other public facilities?

PS-2: Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

PS-3: Includes recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

3.15.4 Methodology

This evaluation of public service impacts is based on a review of published documents pertaining to the Project, including the County of Santa Clara General Plan, as well as publicly available information provided by SCFD and the Santa Clara County Sheriff's Office. The analysis of public services impacts includes the following: (1) evaluation of existing fire and police services and personnel for the fire and law enforcement stations serving the project area; (2) determination of whether the existing fire and law enforcement services and personnel are capable of servicing the Project; and (3) determining whether the Project's contribution to the future service population would cause fire or police station(s) to operate beyond service capacity.

Evaluation of recreational impacts was based on the review of documents pertaining to the Project, including the County of Sanat Clara General Plan, published information from local service providers, and other relevant planning documents such as the Santa Clara County Parks 2018 Strategic Plan. The potential impacts of the Project were identified by comparing existing service capacity and facilities against future demand associated with project implementation.

3.15.5 Environmental Impacts

Impact PS-1 Would the project result in a substantial adverse physical impact associated with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services, police protection services, schools, parks, and/or other public facilities?

The Project consists of amendments to the County's Zoning Ordinance. The Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. Types of land uses allowed in the rural zoning districts would substantially remain the same, with the exception of certain incompatible uses that would be excluded from the Exclusive Agriculture zoning district.

The project area is served by 15 fire stations located throughout Santa Clara County, the Santa Clara County Sheriff's Office, over 30 schools (as indicated in Table 3.15-1), the Santa Clara County regional park system which includes 28 regional parks, and the Santa Clara County Library District which includes eight public libraries. Increased demand for public services, including fire protection, police protection, schools, parks, and other public facilities (e.g., public libraries) is generally associated with an increase in population which would subsequently generate an increased public service demand. As described in Section 3.14, *Population and Housing*, the Project is not considered to be growth inducing, and would not alter current projections and planning for public service facilities within the rural zoning districts. While growth would continue to occur within Santa Clara County, regardless of Project implementation, the Project itself would

not directly authorize the development of occupied structures and/or induce substantial population growth that would result in increase in public service demands.

Future development projects facilitated by the Project would be subject to existing federal, state, and local requirements related to the adequate provision of public services. Further, the County General Plan includes policies that were established to ensure that adequate public services are provided within Santa Clara County. For example, Policy R-HS-10 requires improvements be implemented in rural areas that have inadequate fire protection services (i.e., areas with reduced or impeded access). Because the Project is not considered growth inducing, such that additional public services within Santa Clara County would be required, and would comply with existing public service plans, programs, goals and policies, as outlined in Section 3.15.2, implementation of the Project would not result in the need for new or physically altered governmental facilities to be constructed. Impacts related to acceptable service ratios, response times or other performance objectives for fire protection services, police protection services, schools, parks, and/or other public facilities would be **less than significant**.

Impact PS-2 Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would establish a threshold of significance to evaluate a project's agricultural impacts on a project-by-project basis under CEQA. As previously described, park services and facilities within the County are provided by SCCPD. Santa Clara County's regional park system includes 28 regional parks totaling 52,200 acres. Similar to public service impacts, recreational impacts are generally associated with an increase in population which would generate an increased recreation demand. As discussed in Impact PS-1, above, the Project is not considered to be growth-inducing and would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would not construct any new residences or other growth inducing elements, such as new businesses or infrastructure.

Future development projects facilitated by the Project would be required to comply with existing plans, programs, and policies related to the provision and protestation of existing recreational facilities. Specifically, County General Plan policies R-PR 2, R-PR3, R-PR 4, R-PR 14 ensure that recreational resources within Santa Clara County are made available, preserved, and maintained for recreational users. Additionally, Santa Clara County Municipal Code, Division B14, and the Santa Clara County Parks 2018 Strategic Plan include measures to further protect and manage existing recreational facilities. Because the Project would comply with existing policies and would not result induce growth such that existing facilities would be deteriorated or new or expanded recreational facilities would be required, impacts would **be less than significant**.

Impact PS-3 Would the project include recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

As described above in Impacts PS-1 and PS-2, the Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would establish a threshold of significance to evaluate a project's agricultural impacts on a project-by-project basis under CEQA. The Project would not induce population growth within the project area, nor would it include or require the construction or expansion of new recreational facilities. Future development project facilitated by the Project would be required to comply with existing plans, programs, and local policies and requirements (as listed in Section 3.15.2 and referenced above) related to recreational resources. Furthermore, the proposed Zoning Ordinance amendments would limit certain large-scale recreational uses currently allowed within the Exclusive Agriculture zoning district. Therefore, the Project would not result in an adverse physical environmental effect associated with new or expanded recreational facilities. **No impact** would occur.

3.15.6 Cumulative Impacts

The cumulative context for public services and recreation impacts includes unincorporated areas of Santa Clara County. Cumulative projects include those that would occur within Santa Clara County. For a description of cumulative projects considered in this analysis, refer to Section 3.0*, Introduction to the Analysis*. A cumulative public services and recreation impact would occur if the Project, in combination with past, present, and future projects within Santa Clara County would result in a significant impact with regard to existing public services and recreational facilities. Future development within Santa Clara County, including the construction of growth-inducing projects, such as new housing and infrastructure, would induce population growth, which would increase demand on existing public services and recreational resources in the project area.

The Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would establish a threshold of significance to evaluate a project's agricultural impacts on a project-by-project basis under CEQA. As such, the Project itself would not be growth inducing. As described above, Project impacts related to public services (including acceptable service ratios, response times or other performance objectives for fire protection services, police protection services, schools, parks, and/or other public facilities) and recreation would be less than significant. Thus, the Project would not contribute to a cumulative public service demand, recreational demand, or recreational facility impact.

Reasonably foreseeable future development facilitated by the Project would be subject to existing federal, state, and local regulations/requirements, including County General Plan goals, policies, and regulations that reduce potential impacts public services and recreation. Compliance with these regulations would ensure that potential impacts resulting from subsequent future projects would be less than significant. As a result, and based on the analysis provided above, the Project would not be considered cumulatively considerable, and impacts would be **less than significant** with respect to public services and recreation.

3.15.7 Mitigation Measures

No mitigation measures are required.

3.15.8 Level of Significance After Mitigation

No significant impacts have been identified, and no significant and unavoidable impacts would occur.

3.15.9 References

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3.16 Transportation

This section of the Program Environmental Impact Report (PEIR) evaluates the potential impacts to transportation from implementation of the County of Santa Clara (County) Zoning Amendments and Agricultural Impact Threshold (Project). This section is based on the Project as described in detail in Chapter 2, Project Description. Pursuant to Senate Bill (SB) 743, the CEQA guidelines adopted vehicle miles traveled (VMT) as the new metric to evaluate the significance of transportation impacts. This change eliminated auto delay, level of service (LOS), and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts. The Department of Planning and Development (DPD) and Roads and Airports are in the process of developing methodology and criteria that will enable the County to appropriately evaluate and identify a defensible VMT standard and also evaluate traffic impacts on the County road system in compliance with SB 743. In the meantime, for the purposes of evaluating VMT within CEQA, the County is using the regional guidelines and metrics provided by Governor's Office of Land Use and Climate Innovation (LCI), formerly known as the Governor's Office of Planning and Research, and the Santa Clara Valley Transportation Authority (VTA).

The analysis provided in this section is based on information provided in the following documents: LCI's *Technical Advisory for Evaluating Transportation Impacts under CEQA* (December 2018), *Implementation of County thresholds and Procedures for Evaluating VMT in CEQA Documents* (July 27, 2020), Department of Planning and Development and Roads and Airports Department, *Demand Assessment for Santa Clara County Rural Zoning Ordinance Amendments*, prepared by BAE Urban Economics (September 2022), and *Mitigating Vehicle-Miles Traveled (VMT) in Rural Development*, paper by Ruth Miller and Christopher Ganson, submitted for Transportation Research Bureau (TRB) 2015.

3.16.1 Environmental Setting

This section describes the existing transportation setting in Santa Clara County, including the VMT, roadway, transit, pedestrian, and bicycle systems. The transportation system is also discussed in the context of VTA, which serves as the Congestion Management Agency (CMA) for the County. VTA is also working with the County on the transition from LOS to VMT, per SB 743 requirements.

Vehicle Miles Traveled

CEQA Section 15064.3(a) established VMT as the most appropriate measure of transportation impacts. The subdivision (a) defines VMT as "the amount and distance of automobile travel attributable to a project." The term "automobile" refers to on-road passenger vehicles, specifically cars and light trucks. VMT can be measured in a variety of ways depending on whether the intent is to capture the amount of automobile travel generated by a project (i.e., number of vehicle trips multiplied by their corresponding trip lengths) or a project's effect on VMT within a defined study area (i.e., a measure of absolute VMT). VMT is a preferred metric for environmental effects because it indirectly captures how a project influences the environment related to greenhouse gas emissions and air quality pollution. VMT may also play a role in assessing impacts to pedestrians, bicyclists, transit riders, and travel safety. Low VMT generating areas tend to have higher mode splits for walking, bicycling, and transit.

Based on the predominant use, the following VMT efficiency metrics and method of estimation can be used:

- **Daily total VMT:** All VMT generated by trips with at least one trip end in the jurisdiction or geographic area for a typical weekday.

- **Total VMT per Service Population:** The total VMT to and from all zones in the geographic area are divided by the total service population to get the efficiency metric of VMT per service population. The total service population is the sum of the number residents and the number of employees.
- **Residential (Home-based) VMT per capita:** All home-based auto vehicle trips are traced back to the residence of the trip-maker (non-home-based trips are excluded) and then divided by the population within the geographic area to get the efficiency metric of home-based VMT per capita (or per resident).
- **Employment (Home-based work) VMT per employee:** All auto vehicle trips between home and work are counted, and then divided by the number of employees within the geographic area to get the efficiency metric of home-based work VMT per employee.

The County has used the VTA Model[1] to estimate the baseline VMT for the 15 cities and the County of Santa Clara. The traffic analysis zones (TAZ) is the spatial unit (or geographical area) within which travel behavior and traffic generation are estimated in a travel demand model. Figure 3.16-1 depicts the TAZs from the VTA travel demand model for the Santa Clara County.

As shown in Table 3.16-1, VTA estimated that 2015 Residential VMT per Capita (Home-Based VMT for all trip purposes, divided by total population) across Santa Clara County is 13.33 VMT per person (per weekday). For non-residential land uses, VTA estimated that 2015 Employment VMT Per Job (Home-Based Work VMT, divided by total jobs) across Santa Clara County is 16.64 VMT per job (per weekday).

Table 3.16-1. 2015 Baseline VMT Metrics for Santa Clara County

Region	Residential VMT per Capita	Employment VMT per Employee
Santa Clara County	13.3	16.64

Source: VTA 2020.
Note: VMT = vehicle miles traveled; VTA = Valley Transportation Authority.

Roadway System

The roadway network in Santa Clara County consists of the following facilities:

- Freeways
- County Expressways
- Urban Arterials, which are comprised of principal arterials and roadways that connect with the freeway and/or county expressway system
    - Principal Arterials are defined as either
        - State highway
        - Six-lane facility, or
        - Non-residential arterial with average daily traffic of 30,000 vehicles per day or greater
- Rural Highways

[1] The Santa Clara VTA has developed a Countywide Transportation Model (VTA Model) that is consistent with the methodologies used by the Metropolitan Transportation Commission (MTC). The VTA model is implemented in the CUBE Voyager software package VTA currently uses the ABAG Projections, allocated to the 1490 VTA Countywide model traffic analysis zones from the larger 366 Santa Clara County MTC regional model zone structure.

Figure 3.16-2 illustrates the roadway system in Santa Clara County. Santa Clara County is served by numerous freeways and highways. The main components of this system comprise of Interstates (I) - 280, I 680, and I 880, and State Highways (SR) - 101, SR-17, SR- 85, SR-87, SR-152 and SR-237. Expressways interconnect the North County. Main routes in South County are SR-101, SR-152, Monterey Road and Santa Teresa Boulevard. Santa Clara County has established a commuter lane program to manage commute traffic. This consists of high occupancy vehicle (HOV) as well as express lanes, and park-and ride lots and ramp meter bypass lanes.

Santa Clara County has a mature multimodal transportation system network that consists of 9,900 paved lane miles of local roads, 62 miles of expressways, an on-road bicycle network of 325 miles and an off-street bicycle network of 361 miles (VTA 2022).

Transit

Figure 3.16-3A illustrates the transit network in Santa Clara County. Santa Clara County is currently served by three major transit operators: VTA, Caltrain and Bay Area Rapid Transit (BART).

- VTA operates public transit buses, light rail, shuttles and paratransit within Santa Clara County. Transit bus services include Frequent, Local and Express service. There are three light rail lines in the County – Blue Line, Green Line and Orange Line.
- Caltrain operates commuter rail service between San Francisco, San José and Gilroy It is operated and managed by the Peninsula Corridor Joint Powers Board, which consists of VTA, San Francisco Muni and SamTrans.
- BART recently expanded into Santa Clara County with a two-phased 16-mile extension project from South Fremont to Santa Clara.

There are several other transit services within Santa Clara County provided by other operators or in partnership with VTA, such as Altamont Corridor Express (ACE), ACE Shuttles, Caltrain Shuttles, Capitol Corridor Intercity Rail Service, Dumbarton Express Bus, Highway 17 Express Bus Service, Marguerite Shuttle, Monterey/Salinas Transit, Mountain View Community and GO Shuttle. Figures 3.16-3B and 3.16-3C illustrate the transit services provided by VTA in the North County and South County, respectively.

Bicycles and Pedestrians

Figure 3.16-4A illustrates the existing bicycle network in Santa Clara County which serves as the foundation for cross-county bicycling. The existing bicycle infrastructure in Santa Clara County includes 196 miles of bicycle path, two miles of cycle track, 520 miles of bicycle lane and 150 miles of bicycle routes per Countywide Bicycle Plan (VTA 2018). There are various existing and/or planned cross-county bicycle corridors in Santa Clara County, primarily in the vicinity of the BART stations (Figure 3.16-4B). The purpose of the cross-county bicycle corridors is to provide continuous connections between County jurisdictions and to adjacent counties, and to serve the major regional trip-attractors in Santa Clara County. Bicycle facilities also provide alternative to the use of single occupancy vehicles and support the use of transit. increasing in popularity for recreation, health, and transportation. It helps to reduce greenhouse gas emissions, air pollution, traffic congestion, and increases levels of physical activity while improving health. The County Expressway Bicycle Accommodation Guidelines were adopted by the Roads and Airports Department in August 2003. These guidelines have been used in developing the potential bicycle improvement projects throughout the expressway system and are consistent with the Caltrans Highway Design Manual.

The pedestrian network is less defined in Santa Clara County but includes areas that allow safe travel on foot, such as areas with wide sidewalks, frequent crosswalks, frequent safety features and off-street trails. The most walkable locations in Santa Clara County are the compact, mixed-use downtowns along the Caltrain line, and older town centers such as Los Gatos and Los Altos. Much of the land of Santa Clara County is devoted to single-family residential and office park developments. Destinations are generally far and may require crossing major arterials or expressways. Commercial corridors, including El Camino Real and Stevens Creek Boulevard, have potential for providing good pedestrian environments.

Per Santa Clara County Trails Master Plan Update, there are 650 miles of existing off-highway, non-motorized trails in Santa Clara County that are managed for public use by Federal, State, County and Regional Open Space agencies. In the rural area, the trails are located within publicly-owned parks and open-space lands. Trails in areas with substantial rural residential development can be important components of local circulation systems, providing safe, off-road, pedestrian and equestrian access. In rural areas along the County road system trails effectively serve a similar function to sidewalks in urban areas (County of Santa Clara 1995).

3.16.2 Relevant Plans, Policies, and Ordinances

Federal

There are no federal policies or regulations applicable to transportation with respect to the Project.

State

Senate Bill 375

The Sustainable Communities and Climate Protection Act of 2008 (Sustainable Communities Act; SB 375) supports the state's climate action goals to reduce GHG emissions through coordinated transportation and land use planning with the goal of more sustainable communities. Under the Sustainable Communities Act, the California Air Resources Board sets regional targets for GHG emissions reductions from passenger vehicle use. In 2010, the California Air Resources Board established targets for 2020 and 2035 for each region covered by one of the state's Metropolitan Planning Organizations (MPOs). The California Air Resources Board will periodically review and update the targets, as needed.

Each of California's MPOs must prepare a Sustainable Communities Strategy (SCS) as an integral part of its Regional Transportation Plan (RTP). The SCS contains land use, housing, and transportation strategies that, if implemented, would allow the region to meet its GHG emission reduction targets. Once adopted by the MPO, the RTP/SCS guides the transportation policies and investments for the region. California Air Resources Board must review the adopted SCS to confirm and accept the MPO's determination that the SCS, if implemented, would meet the regional GHG targets. If the combination of measures in the SCS would not meet the regional targets, the MPO must prepare a separate alternative planning strategy to meet the targets. The alternative planning strategy is not a part of the RTP.

The Sustainable Communities Act also establishes incentives to encourage local governments and developers to implement the SCS or the alternative planning strategy. Developers can get relief from certain CEQA requirements if their new residential and mixed-use projects are consistent with a region's SCS (or alternative planning strategy) that meets the targets (see California Public Resources Code, Sections 21155, 21155.1, 21155.2, 21159.28.).

Senate Bill 743

On September 27, 2013, Governor Brown signed Senate Bill 743, which became effective on January 1, 2014. The purpose of SB 743 is to streamline review under the CEQA process for several categories of development projects including the development of infill projects in transit priority areas and to balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions. SB 743 adds Chapter 2.7: Modernization of Transportation Analysis for Transit Oriented Infill Projects to the CEQA Statute (Public Resources Code Section 21099). Section 21099(d)(1) provides that aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment. In addition, SB 743 mandates that alternative metric(s) for determining impacts relative to transportation shall be developed to replace the use of level of service (LOS) in CEQA documents.

In the past, environmental review of transportation impacts focused on the delay that vehicles experience at intersections and on roadway segments, which is often measured using LOS. Mitigation for impacts on vehicular delay often involves increasing capacity such as widening a roadway or the size of an intersection, which in turn induces more vehicular travel and greater pollutant emissions. Additionally, improvements to increase vehicular capacity can often discourage alternative modes of transportation such as biking, walking, and transit. SB 743 directed the LCI to develop an alternative metric(s) for analyzing transportation impacts in CEQA documents. The alternative shall promote the state's goals of reducing greenhouse gas emissions and traffic-related air pollution by promoting the development of multimodal transportation system and providing clean, efficient access to destinations. Under SB 743, it was anticipated that the focus of transportation analysis will shift from vehicle delay (and LOS) to VMT within transit-priority areas (i.e., areas well served by transit).

Pursuant to SB 743, LCI released the draft revised CEQA Guidelines in November 2017, recommending the use of VMT for analyzing transportation impacts. Additionally, OPR released updates to the Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018), to provide guidance on VMT analysis. In this Technical Advisory, OPR provides its recommendations to assist lead agencies in screening out projects from VMT analysis and selecting a significance threshold that may be appropriate for their particular jurisdictions. While LCI's Technical Advisory is not binding on public agencies, CEQA allows lead agencies to "consider thresholds of significance … recommended by other public agencies, provided the decision to adopt those thresholds is supported by substantial evidence" (CEQA Guidelines Section 15064.7[c]).

In December 2018, the CEQA Guidelines were updated to add Section 15064.3, Determining the Significance of Transportation Impacts, that describes specific considerations for evaluating a project's transportation impacts using VMT methodology. This new methodology was required to be used for projects starting on July 1, 2020.

CEQA Guidelines Section 15064.3(b) is divided into four subdivisions as follows:

1. **Land Use Projects.** Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop2 or a stop

[2] LCI's Technical Advisory 2018: Pub. Resources Code, § 21064.3 ("'Major transit stop' means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.")

along an existing high-quality transit corridor3 should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.

2. **Transportation Projects.** Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.
3. **Qualitative Analysis.** If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.
4. **Methodology.** A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project.

Per Section 15064 Determining the Significance of the Environmental Effects Caused by a Project:

> (b) (1) The determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data. An ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting. For example, an activity which may not be significant in an urban area may be significant in a rural area.
>
> (b) (2) Thresholds of significance, as defined in Section 15064.7(a), may assist lead agencies in determining whether a project may cause a significant impact. When using a threshold, the lead agency should briefly explain how compliance with the threshold means that the project's impacts are less than significant. Compliance with the threshold does not relieve a lead agency of the obligation to consider substantial evidence indicating that the project's environmental effects may still be significant

Per Technical Advisory on Evaluating Transportation Impacts in CEQA (page 10):

> Based on LCI's extensive review of the applicable research, and in light of an assessment by the California Air Resources Board quantifying the need for VMT reduction in order to meet the State's long-term climate goals, LCI recommends that a per capita or per employee VMT that is fifteen percent below that of existing development may be a reasonable threshold.

[3] LCI's Technical Advisory 2018: Pub. Resources Code, § 21155 ("For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.")

Per Technical Advisory under Other Considerations for Rural Projects Outside of MPO (page 19):

> In rural areas of non-MPO counties (i.e., areas not near established or incorporated cities or towns), fewer options may be available for reducing VMT, and significance thresholds may be best determined on a case-by-case basis. Note, however, that clustered small towns and small town main streets may have substantial VMT benefits compared to isolated rural development, similar to the transit oriented development described above.

The CEQA Guidelines Section 15064.3(b) does not distinguish between VMT generated in urban or rural areas. However, recognition in threshold setting that rural areas are different than urban areas is consistent with the flexibility provided by CEQA Guidelines Section 15064(b)(1). In rural areas, VMT per resident or per worker tends to be higher than in urban areas due to longer distances between origins and destinations and limited travel mode choices.

As such, CEQA Guidelines Section 15064.3(b)(3) Qualitative Analysis applies to the Project and has been used to evaluate the project's consistency with CEQA Guidelines Section 15064.3(b). Further, the County has the discretion to select thresholds on a case-by-case basis or develop and publish thresholds for general use.

Regional/Local

Valley Transportation Plan 2040

The Valley Transportation Plan 2040 (VTP 2040) provides a long-range vision for the transportation system in Santa Clara County. VTP 2040 identifies programs, projects, and policies that VTA's Board of Directors is going to pursue over the lifetime of the plan. It connects projects and programs with anticipated funds and provides a framework for the development and maintenance of our transportation over the next 25 years. It considers all travel modes and addresses the links between transportation, land use, air quality, energy use, and community livability.

VTA, as CMA for Santa Clara County, is responsible for preparing and updating the VTP on a four-year cycle coinciding with the update of the Bay Area's Regional Transportation Plan (RTP).

Objectives of the VTP are as follows:

- To facilitate the creation and support of an integrated multimodal transportation system that serves all socio-economic groups efficiently and sustainably.
- To pursue, develop, and implement advances in technology, management practices, and policies.
- To be the region's foremost advocate for transportation projects, programs and funding

The VTP acknowledges the need to value and preserve the rural areas with its agricultural economy, natural resources, and open space, by addressing their transportation needs. Investing in non-auto modes, embracing new technologies that use resources efficiently and inventing new ways to travel and interconnecting the systems so that pedestrian, bike, transit, and roadway travel are linked as seamlessly as possible in the rural areas (VTA 2022).

Plan Bay Area 2050

The 2050 update to the RTP, called the Plan Bay Area, is produced by the Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG). This long-range plan guides transportation funding and

helps to inform planning throughout the nine-county Bay Area through the year 2050. The RTP includes a fiscally constrained list of projects and programs that have a reasonable expectation of being funded during the life of the plan. County level projects seeking state or federal funding, completing environmental clearances, or desiring to enter in construction must be included in the fiscally constrained list. The RTP helps to inform the development of the State Transportation Improvement Program (STIP), which prioritizes the use of State transportation funds. With the adoption of SB 375 in September 2008, RTPs and Countywide transportation plans assumed new challenges and responsibilities with regard to transportation and land use integration (MTC and ABAG 2021).

VTP 2040 and the RTP are based on the same land use projections, and the VTP transportation investment plan for Santa Clara County will help achieve the RTP goals.

Countywide Bicycle Plan

VTA developed an update to the county's bicycle plan with the development of the Santa Clara Countywide Bicycle Plan (CBP) in 2018. The CBP establishes a network of Cross County Bikeway Corridors (CCBC) that will provide continuous, complete bike connections across the county. It also establishes the concept of a Bicycle Superhighway Network, a subset of CCBCs that provide high-quality, uninterrupted, long-distance bikeways separated from motor vehicles. It Identifies locations where new and improved bicycle connections are needed across freeways, rail lines and creeks; and Identifies ways to make it easier for people to use their bicycle with transit, including bicycle access to major transit stops, bicycle parking at stops and bicycle accommodations on board (VTA 2018).

Pedestrian Access to Transit Plan

The Pedestrian Access to Transit Plan (the Plan) is the first ever look at pedestrian conditions in Santa Clara County for users of VTA services. The Plan would improve safety, comfort and convenience of the walking environment for transit users. The Plan identifies twelve Focus Areas in Santa Clara County that have high VTA bus ridership and a high need for pedestrian infrastructure improvements. It has identified 165 capital projects that can improve pedestrian access to transit in these Focus Areas (VTA 2017).

Santa Clara County General Plan

The Rural Unincorporated Area Transportation Chapter of the Santa Clara County General Plan, 1995-2010 (General Plan) outlines several strategies to address transportation conditions and opportunities in rural areas of the County (County of Santa Clara 1994).

Strategies for accommodating and managing rural unincorporated transportation needs encourage and emphasize:

- Planning for a safe and adequate rural area transportation system;
- Inclusion of different modes of transportation, rather than being focused solely on the automobile; and
- Roadway development which is sensitive to environmental and aesthetic qualities.

Strategies for accommodating and managing rural unincorporated transportation needs include the following:

Strategy #1: Anticipate and Plan for Future Transportation Demand – This requires assessing existing conditions and future transportation demands as accurately as possible.

Strategy #2: Provide for Non-Motorized Circulation in Rural Residential Communities – Provide for safe pedestrian, equestrian and bicycle circulation in areas that do not generally have sidewalks or alternative method of safe and easy travel by foot, by horse or by bicycle.

Strategy #3: Facilitate the Use of Commute Alternatives – Improvements which may promote transit use, such as parking, bike lockers, an adequate pedestrian access. Consideration should also be given to encouraging business uses within walking distance of transit facilities which provide basic commuter needs.

Strategy #4: Assure the Maintenance and Safety of Rural Roads - Rural roads should be designed and built to standards that will assure driving safety and roadway adequacy.

Strategy #5: Preserve and Enhance Scenic Qualities Adjacent to Scenic Rural Roads - Balance the safety, environmental and aesthetic impacts of roadway development in rural areas.

3.16.3 Thresholds of Significance

According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, a project would normally have a significant effect on the environment with respect to transportation if the project would:

TRA-1: Conflict with an applicable plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

TRA-2: Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).

TRA-3: Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

TRA-4: Result in inadequate emergency access.

3.16.4 Methodology

As described in Chapter 2, Project Description, the Project consists of amendments to the County's Zoning Ordinance that would impact rural zoning districts within unincorporated parts of Santa Clara County. The Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. Although the Project would not directly construct new development, it would allow and facilitate new agriculture-supportive uses that could directly result in construction or operational impacts to the environment. The amendments outlined as part of the Project are proposed at the program level and do not propose any direct development that could have the potential to impact transportation. The Project's potential impact on transportation would occur during future individual projects resulting from facilitation of the Project.

To evaluate the Project's impacts related to the circulation system, this analysis examines the Project's consistency with both regional and local plans, policies, and ordinance that regulate transportation within the project area.

The CEQA Guidelines Section 15064.3, subdivision (b)(3) Qualitative Analysis would apply to the Project and has been used to evaluate the potential for VMT impact. The findings of the Demand Analysis by BAE Economics have been used to determine the potential for growth inducement, hence increase in VMT.

The Project would cause a significant impact if the Project adds demand to facilities that do not meet applicable design standards or if a project proposes transportation network modifications that are inconsistent with applicable design standards.

Per standard CEQA requirements, the emergency access impact evaluates whether the Project would comply with the County's emergency access and/or evacuation requirements including those imposed by the Fire Department.

3.16.5 Environmental Impacts

Impact TRA-1 Would the project conflict with an applicable plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

The Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would establish a threshold of significance to evaluate a project's agricultural impacts on a project-by-project basis under CEQA. Adoption of the Project alone would not produce environmental impacts. Although the Project would not directly construct new development, it would allow and facilitate new agriculture-supportive uses. However, the Project would not have the potential to conflict with applicable local and regional plans, ordinances, and policies addressing the circulation system. Additionally, approval of the Project itself, would not change these plans, ordinances, and policies and would not provide any goals, policies, or programs that would significantly impact the circulation system within the County. Future development projects facilitated by the Project would be encouraged to be limited in scale and would be less likely to conflict with applicable circulation plans and policies. Impacts identified for a future individual project facilitated by the Project would be addressed through the project approval process, particularly with regards to larger scale projects which require additional discretionary review.

Therefore, the Project would not conflict with any regional or local transportation plans, including MTC's Plan Bay Area, VTA's Valley Transportation Plan 2040, VTA's Santa Clara Countywide Bicycle Plan, or the Santa Clara County General Plan as described in Section 3.16.2. The strategies, policies and implementation recommendations included in the General Plan for rural incorporated areas focus on balancing the transportation demand among modes and encouraging other travel modes rather than auto-dependency. As such, the Project, which would clarify, simplify, and standardize the permit process for agriculture-supportive uses; align development in the Exclusive Agriculture zoning district with existing County land use policies; and replace the existing "local-serving" provisions with objective development standards, would not conflict with any strategies included in the transportation chapter of the County's General Plan.

The impacts would be **less than significant**.

Impact TRA-2 Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).

The following discusses the methodology for VMT screening, analysis, and impact determination which could be used for the future development in the project area and evaluates its consistency with CEQA Guidelines section 15064.3, subdivision (b).

Per LCI guidelines, if a project meets any one of the following criteria it can be presumed to have a less than significant impact on VMT:

- The project is located within ½ mile of high-quality transit (either a rail station, or a bus stop with service at least every 15 minutes during the AM and PM peak periods)
- The project is located in an area where existing VMT per capita meets the VMT thresholds (i.e., 15% below existing rates of VMT if that threshold is selected)
- The project is local-serving retail/ public facilities (grocery store, neighborhood school, library, drug store, dry cleaners, gym, etc.) not exceeding 50,000 square feet in size
- The project is small, and generates fewer than 110 daily vehicle trips[4]
- The project consists of 100% affordable housing

However, projects are not eligible for location-based screening (based on transit proximity or location in a low VMT area) if any of the following are true:

- Project is low density (<0.75 FAR)
- Project provides more parking than is required by code
- Project replaces existing affordable housing units with a smaller number of market rate units
- Project is inconsistent with Plan Bay Area

For projects that would not screen out using the above-mentioned criteria, DPD and Roads staff propose to evaluate based on two broad categories:

- Projects that are within Urban Service Areas (USAs) of cities, and
- Projects that are in the rural unincorporated County.

[4] LCI's Technical Advisory, 2018: CEQA provides a categorical exemption for existing facilities, including additions to existing structures of up to 10,000 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area (14 CCR 15301[e][2]). Typical project types for which trip generation increases relatively linearly with building footprint (i.e., general office building, single tenant office building, office park, and business park) generate or attract an additional 110-124 trips per 10,000 square feet. Therefore, absent substantial evidence otherwise, it is reasonable to conclude that the addition of 110 or fewer trips could be considered not to lead to a significant impact.

The projects within USAs would be evaluated using the VTA VMT evaluation tool[5] and the VMT standards from the adjacent city. This approach aligns with County policies requiring new development within a City's USA to conform with the applicable City's General Plan.

For rural areas, transit headways are much longer than 15 minutes but the concept of concentrating growth around fixed route bus stops is still desirable to help reduce VMT. Since the state's goals around VMT and GHG reduction are not intended to reduce future population and employment growth, in rural areas the County could also consider whether land use projects that concentrate growth around fixed route bus stops should be presumed to have a less than significant VMT impact. Other screening criteria, such as for affordable residential projects, may be developed, but would need to be supported by substantial evidence consistent with CEQA Guidelines Section 15064.7, thus considering data, facts, research, and analysis. For the rural unincorporated area, future individual project evaluation would be on a case-by-case basis and could use a default VMT threshold based on the existing VMT per capita in the rural unincorporated County (based on VTA's travel demand model base year of 2015) or the threshold could be considered on a case-by-case basis.

The Project is in the rural unincorporated area of the County, therefore, future individual projects facilitated by the Project would benefit from a case-by-case evaluation and threshold.

The project would establish two classifications of local-serving uses within each use category, i.e., Limited and General.

- **Limited:** Projects in the Limited classification would be permitted using a nondiscretionary, ministerial Planning Clearance. The proposed threshold for ministerial approval would be between 1,200 and 5,000 square feet for *Agricultural Sales/Events*, between 5,000 and 10,000 square feet for *Agricultural Processing*, and between 1,200 and 5,000 square feet for *Places of Worship*.
- **General:** Projects in the General classification would be above the "Limited" threshold and would be subject to a discretionary permit (i.e., would be subject to additional planning review compared to the Limited Classification).

[5] VTA has developed a countywide, web and Geographic Information Systems (GIS)-based tool, called the Santa Clara Countywide VMT Evaluation Tool that offers the following:
- Baseline VMT screening evaluation for small- to medium-sized residential, office and industrial land use projects in Santa Clara County. The Tool can evaluate these land uses individually, in combination with each other, and with or without local-serving retail.
- Screens land use projects to determine whether further VMT analysis is necessary, by identifying whether projects fall within a low-VMT area according to the applicable jurisdiction's VMT threshold, and/or whether they fall within proximity to transit.
- Estimates the project-generated VMT associated with the project using VMT data from a travel demand model at the specific project location and calculates project-generated VMT after reductions from certain VMT-reducing measures have been applied.

Based on the available information on anticipated demand for small-scale places of worship[6], wineries[7], and agriculture-supportive uses[8] throughout the unincorporated County that may result from implementation of the Project, a Demand Analysis was conducted by BAE (BAE 2021). The analysis generally finds that demand for these uses is likely to be quite limited. BAE estimates that the County may receive one or two applications for new places of worship or winery facilities every three to five years, which is consistent both with the historical trend and projected future demand. While the available information regarding small-scale agriculture-supportive uses is quite limited, the Demand Analysis does not anticipate significant induced demand resulting from the Project. In many cases, agriculture-supportive uses are already being established, either under existing regulations or simply without going through the County's permitting process; thus, little additional induced demand is expected.

Most of the unincorporated County lands would not meet the VMT screening criteria for transit proximity or map-based screening. It can also be inferred that future individual project classed as General would result in trip generation that exceeds 110 daily trips. Therefore, the potential projects would not screen out or result in less than significant VMT impacts and require a case-by-case evaluation for potential of VMT impacts.

However, the Project alone would not lead to direct physical impacts on the environment. The Project would only provide a more simplified and standardized approach for uses directly supportive of agriculture, preserve the County's rural areas by limiting non-compatible uses, and further the County's General Plan policies for continued agricultural viability. The Project also includes new development standards related to cumulative building coverage of all non-agricultural development in all four rural zoning districts, which would regulate the size and scale of new development; these proposed development standards would discourage larger, incompatible, developments and not induce new demand. Any future development facilitated by the Project would be subject to future discretionary permits and CEQA evaluation. The VMT impact of future individual projects facilitated by the Project that are of significant size and intensity in the rural unincorporated County, would be addressed by conducting project-specific analysis. Those projects would be subject to additional discretionary review and CEQA review to identify VMT impacts and mitigation.

The Project is not proposing any physical development and is not anticipated to induce significant growth of small projects which would potentially screen out of conducting a detailed VMT analysis. Most of the future individual projects would be local-serving retail uses (not exceeding 50,0000 square feet) and would

6 **Places of Worship:** Based on the available information, BAE estimates that Santa Clara County may receive one application for a new places of worship every two or three years, which is consistent both with the historical trend and projected future demand. Assuming that the historical use permit records are representative of future demand, it is anticipated that all, or nearly all, of the anticipated new development is likely to be for projects greater than 2,400 square feet in size.

7 **Wineries:** Based on the available information, BAE estimates that if wine grape production over the next five years mirrors the growth in cultivated acreage observed since 2015, the County could add another 46 acres of wine grapes. Assuming that the average acreage per winery remains static, the County could experience demand sufficient to support another four winery facilities. However, the data indicated that the County may be somewhat overconcentrated with wineries. The trend in wine production in Santa Clara County is towards consolidation, indicating that the average cultivated acreage per winery may be increasing. While the historical data on use permit applications for wineries includes at least two records requesting permission to develop facilities of less than or equal to 2,400 square feet, the majority of applications include requests to develop larger facilities. While not conclusive, this suggests that applications for new winery facilities are likely to include requests for developed area that exceed the 2,400 square foot threshold for projects eligible for Planning Clearance, meaning that they would require additional planning review for a Special Permit or Use Permit.

8 **Agriculture-Supportive Uses:** BAE reviewed the permit applications for agriculture-supportive uses such as agricultural processing, sales, and events between 1989 and 2021. Based on BAE's review of the historical use permit applications data, as well as a review of the available supplemental data and conversations with industry representatives and the County Agricultural Commissioner's Office, BAE does not anticipate that the County will experience significant induced demand for small-scale agriculture-supportive uses that are below the threshold of 2,400 square feet of use resulting from implementation of the Project.

primarily serve the local population. Therefore, the Project would not conflict with CEQA Guidelines section 15064.3 and impacts would be **less than significant**.

Impact TRA-3 Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would establish a threshold of significance to evaluate a project's agricultural impacts on a project-by-project basis under CEQA. The Project does not propose any direct development or new roadways, or intersections and it does not include any standards that would increase hazards due to a geometric design feature or incompatible use. Future individual development projects facilitated under the Project would be subject to, and constructed in accordance with, the County's applicable Land Development Engineering (LDE) standards and applicable General Plan policies. Future individual projects facilitated by the Project, including site development, layout and emergency access improvements associated with these future individual projects would be subject to, and designed in accordance with County 's LDE or VTA standards[9] and specifications which address potential design hazards including sight distance/clearance, driveway placement and access, and signage. Per Section 2,20.090 of the County's municipal code, local-serving uses shall not generate significant additional traffic that creates a safety hazard or impairs local rural roads. New traffic associated with the use should not increase traffic levels significantly above existing conditions.

Additionally, for larger or cluster developments, the site layout would be required to demonstrate efficiency in the location and length of roadways, driveways, and other basic infrastructure improvements or extensions. Roads shall be of adequate design, capacity, and construction to accommodate traffic associated with the development safely, efficiently, and with minimal long term maintenance needs.

Therefore, an appropriate review of future individual projects facilitated by the Project would ensure appropriate improvement measures are identified to reduce hazards due to geometric design features. Therefore, with the implementation of County's LDE standards and guidelines, the Project would not increase hazards because of a roadway design feature or incompatible uses and impacts would be **less than significant**.

Impact TRA-4 Would the project result in inadequate emergency access?

The Project consists of amendments to the County's Zoning Ordinance and does not propose any direct development or new roadways, or intersections and it does not include any standards that would result in inadequate emergency access. The design and access details for future individual projects facilitated by the Project, such as new or modified driveway locations, are unknown at the time of this writing. Emergency access of future individual projects facilitated by the Project would be subject to review by the County and

[9] Below are examples of established guidelines and standards typically used in the County:
- VTA Community Design and Transportation Best Practices Manual
- VTA Bicycle Technical Guidelines
- VTA Pedestrian Technical Guidelines
- Caltrans Highway Design Manual
- Highway Capacity Manual
- Manual on Uniform Traffic Control Devices

responsible emergency service agencies including the Santa Clara County Fire Department (SCCFD) and Santa Clara County Fire Marshal's Office (CFMO). The CFMO includes standards consistent or more conservative than the County's LDE standards applicable to access roads and driveways serving new or proposed expanded development of various land uses and road locations, such as hillside, rural and urban. This review would ensure that any proposed future development is designed to meet all emergency access and design standards based on the size and intensity of development and California Fire Code (CFC) and applicable municipal code. Any changes proposed to internal circulation and/or external circulation associated with the implementation of future individual projects facilitated by the Project would be subject to review by the County and responsible emergency service agencies. This would ensure that the future individual projects facilitated by the Project would be designed to meet all applicable emergency access and design standards and adequate emergency access would be provided.

The County will maintain a current evacuation plan, ensure future development is provided with adequate emergency and/or secondary access, require visible street name signage, and provide directional signage to rural highways and freeways at key intersections to assist in emergency evacuation operations.

Therefore, the Project would have a **less-than-significant** impact associated with inadequate emergency access.

3.16.6 Cumulative Impacts

Where a lead agency concludes that the cumulative effects of a project, taken together with the impacts of other closely related past, present, and reasonably foreseeable future projects are significant, the lead agency then must determine whether the project's incremental contribution to such significant cumulative impact is "cumulatively considerable" (and thus significant in and of itself). The cumulative study area used to assess potential cumulative transportation impacts includes the County. Similar to the Project, cumulative projects in the Santa Clara County region would utilize appropriate guidelines and standards during the planning process and be subject to discretionary review, to the extent that they are applicable. Cumulative projects in these jurisdictions would be required to comply with the applicable plans or policies related to the circulation system or they would not be approved without a general plan amendment. Projects listed in Section 3.0*, Introduction to the Analysis,* would not amend the County's Zoning Ordinance or establish threshold of significance to evaluate a project's agricultural impacts and therefore would not contribute to cumulative impacts related to the County's rural zoning districts. For these reasons, there is no evidence to conclude that significant impacts will occur based on past project approvals or that the Project's impacts are cumulatively considerable when evaluating any cumulative impacts. Cumulative impacts would be **less than significant**.

3.16.7 Mitigation Measures

No mitigation measures are required.

3.16.8 Level of Significance After Mitigation

No significant impacts related to transportation have been identified. Impacts would be **less than significant**.

3.16.9 References

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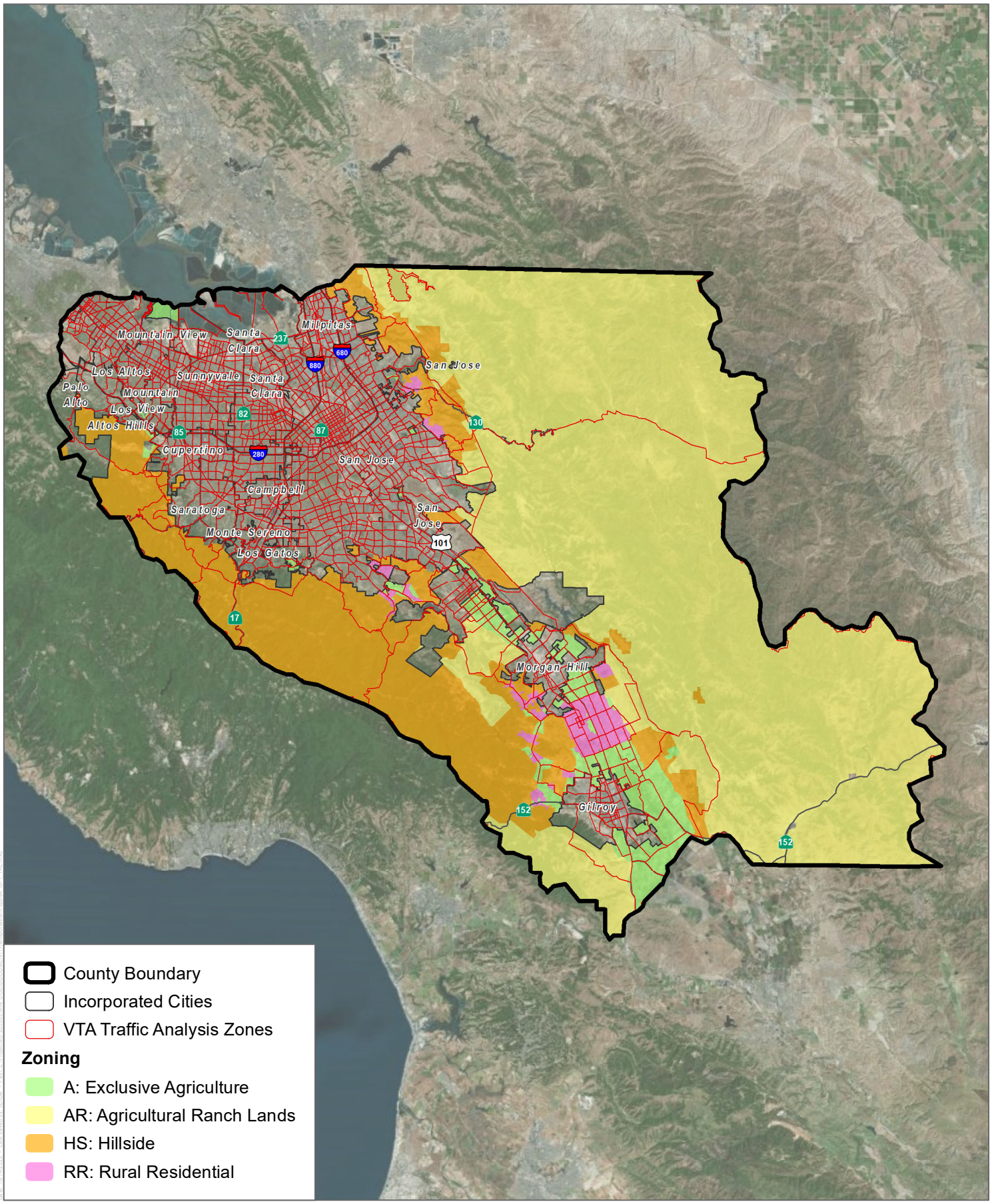
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SOURCE: Bing Imagery 2021, Santa Clara County 2022, VTA Travel Demand Model Santa Clara 2022

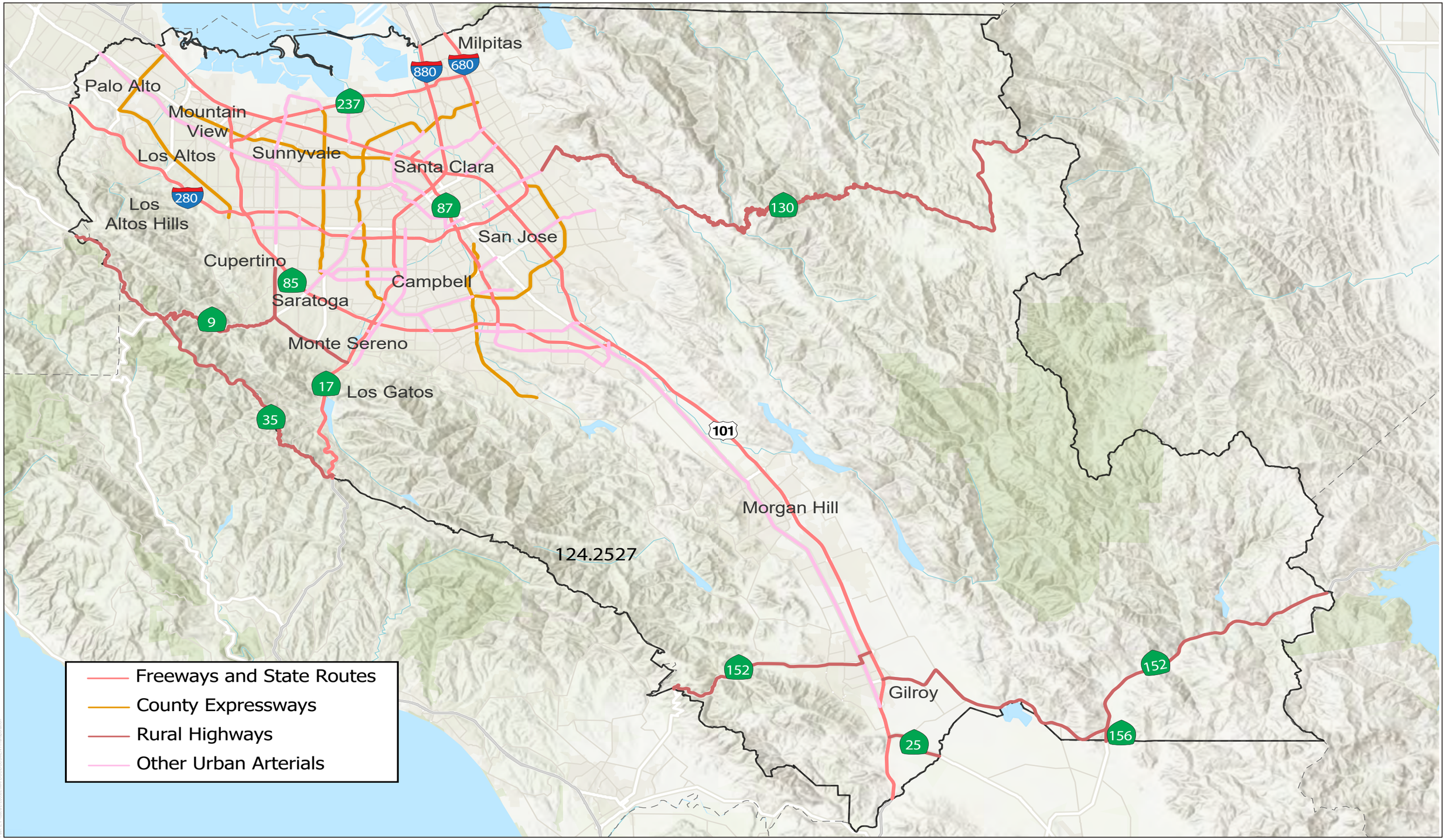
FIGURE 3.16-1

Traffic Analysis Zones from the VTA Travel Demand Model for the Santa Clara County

DUDEK

0 3 6 Miles

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SOURCE: CMP, 2021

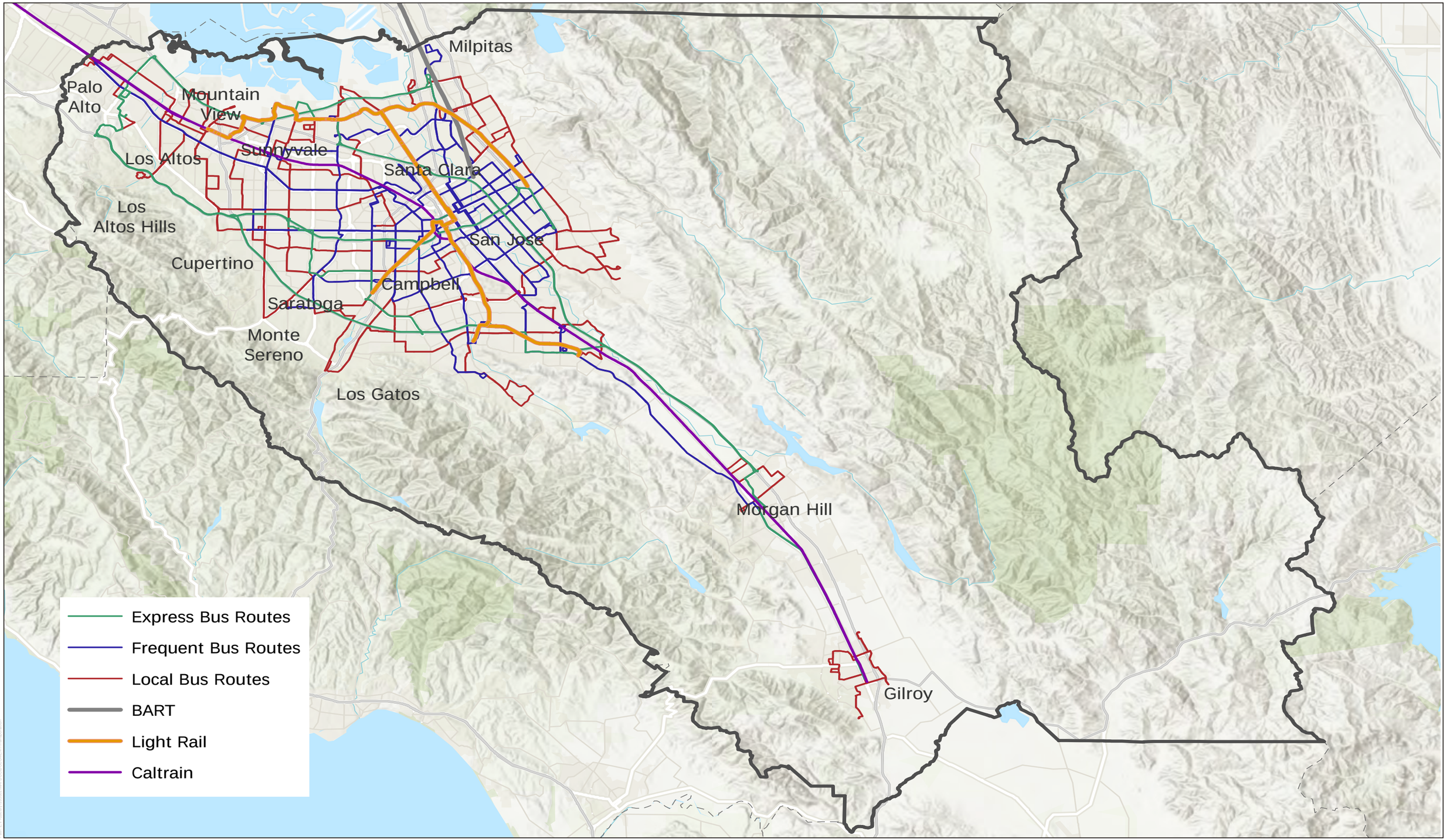
DUDEK 0 500 1,000 Feet

FIGURE 3.16-2

Roadway Network in the Santa Clara County

Santa Clara County - Rural Zoning Ordinance Amendment

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SOURCE: CMP, 2021

DUDEK 0 500 1,000 Feet

FIGURE 3.16-3A

Transit Network in the Santa Clara County

Santa Clara County - Rural Zoning Ordinance Amendment

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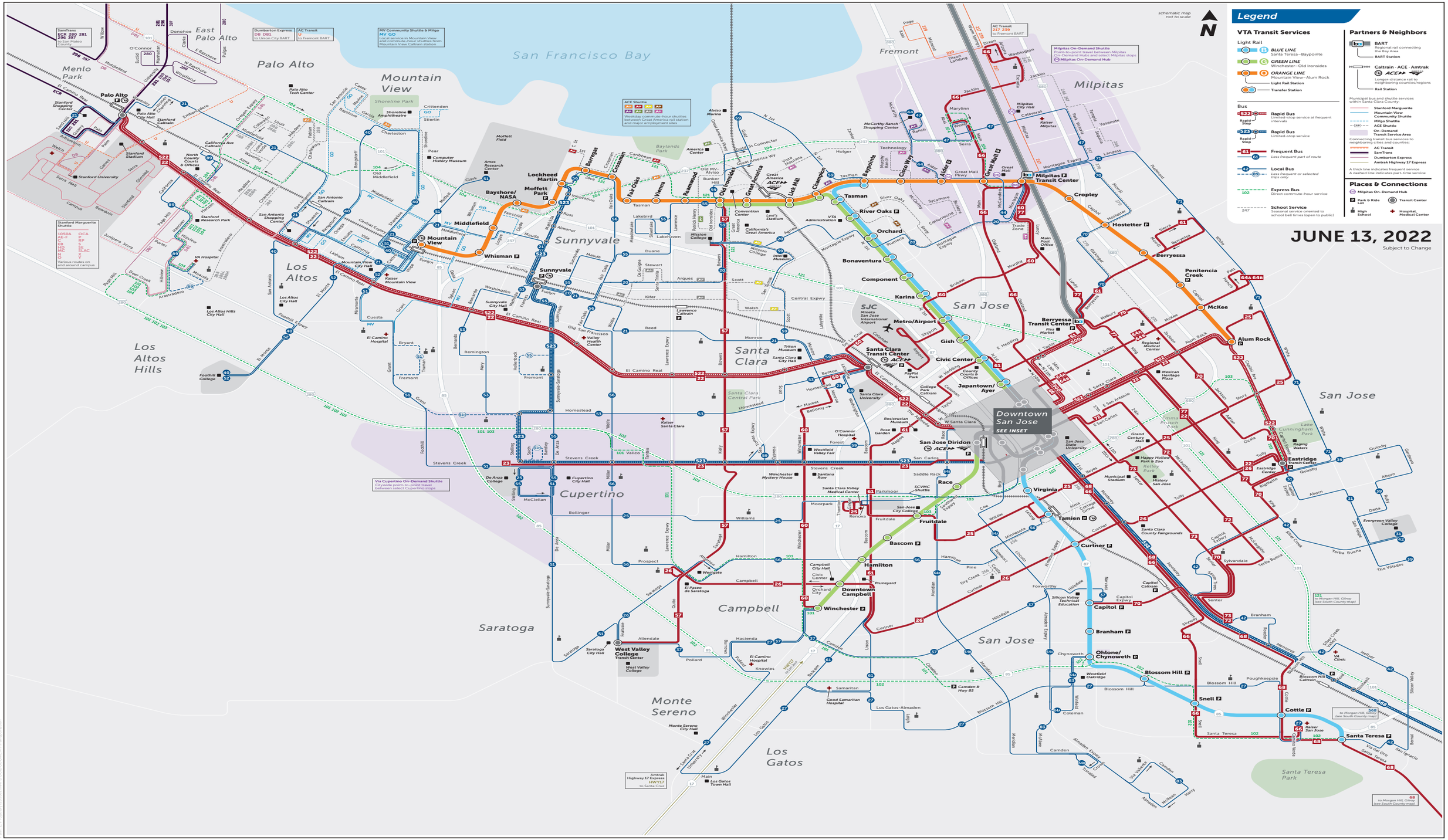


FIGURE 3.16-3B

Transit Facilities in the North Santa Clara County

Santa Clara County - Rural Zoning Ordinance Amendment

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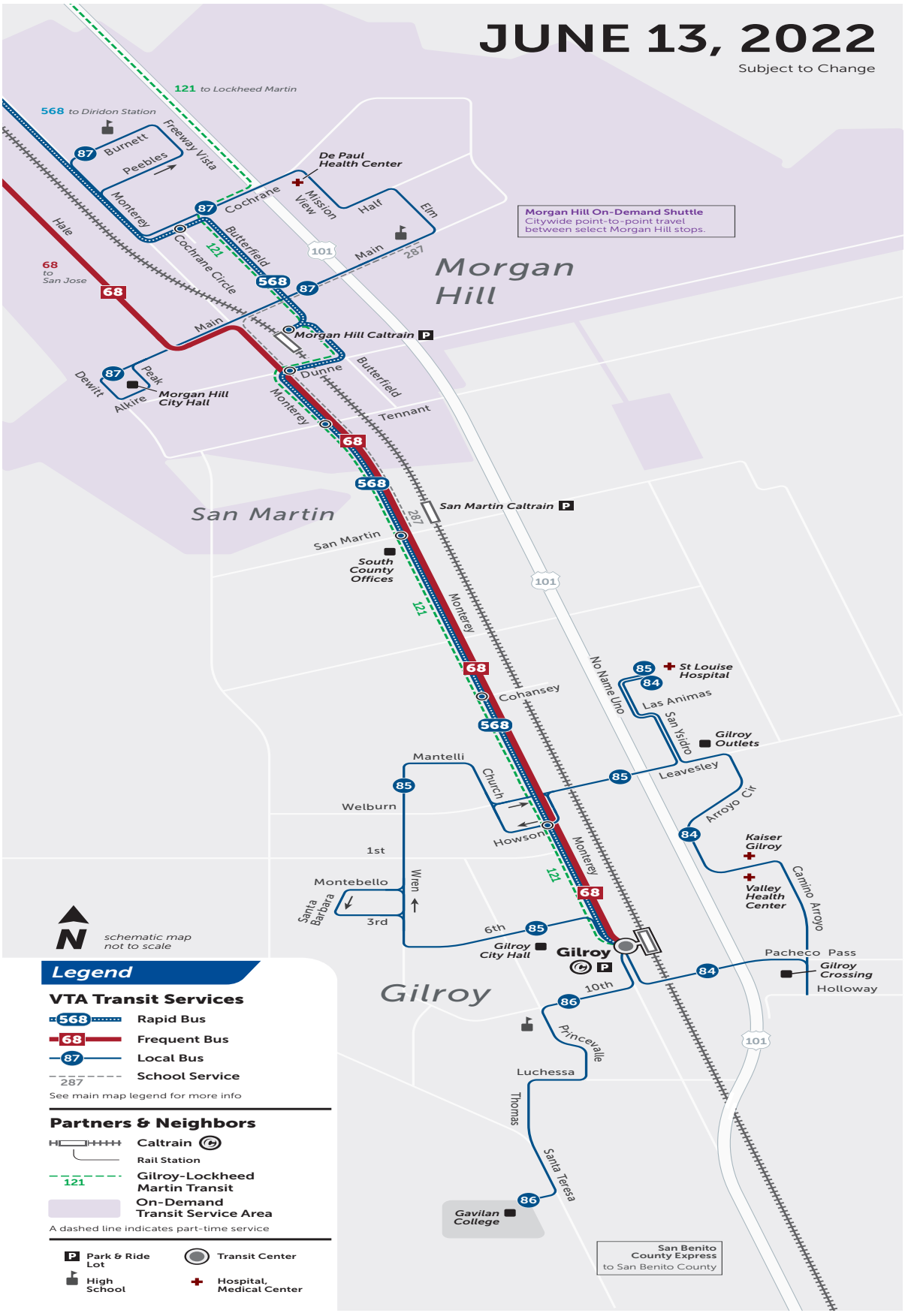


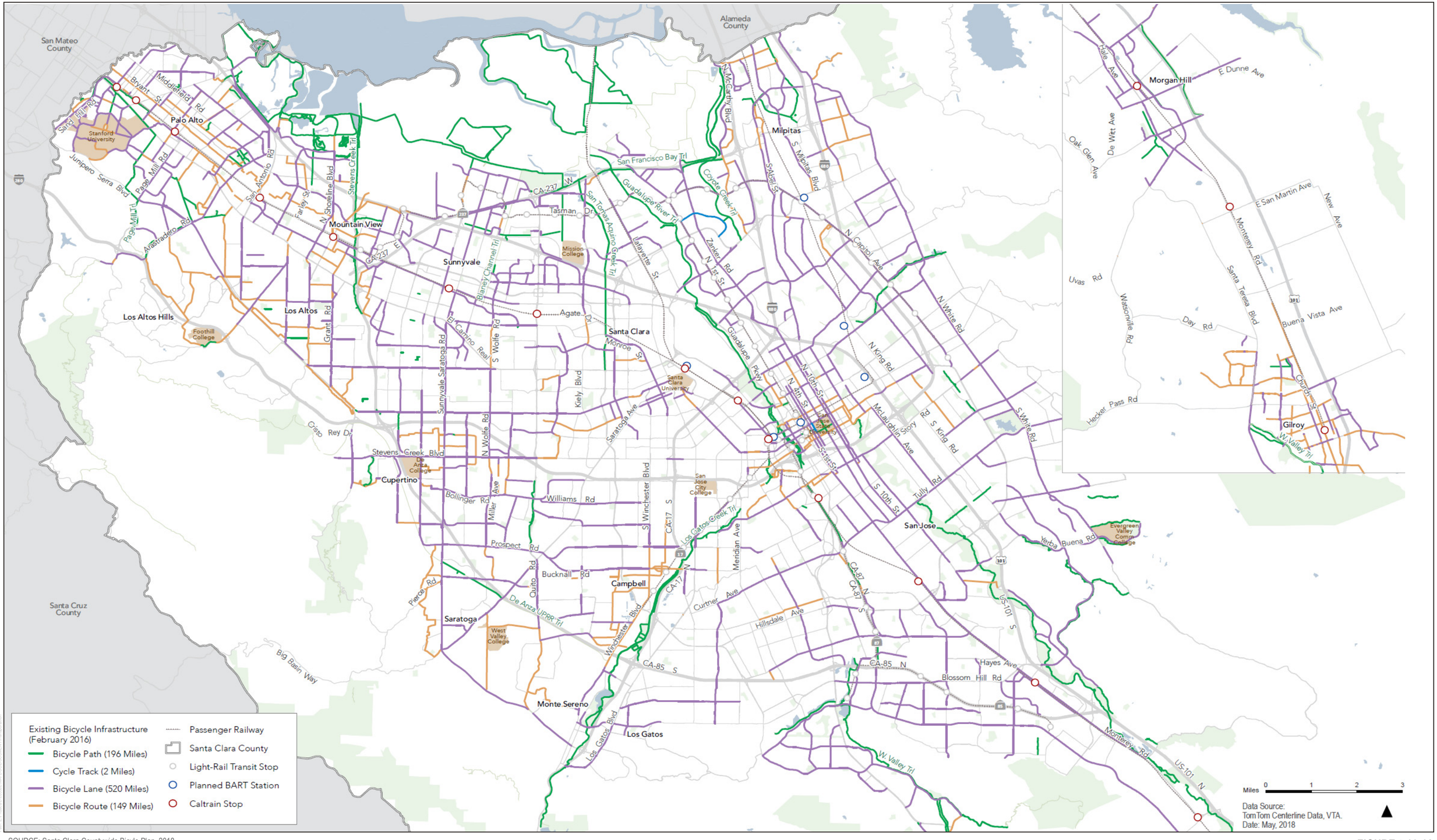
FIGURE 3.16-3C

Transit Facilities in the South Santa Clara County

Santa Clara County - Rural Zoning Ordinance Amendment

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SOURCE: Santa Clara Countywide Bicyle Plan, 2018

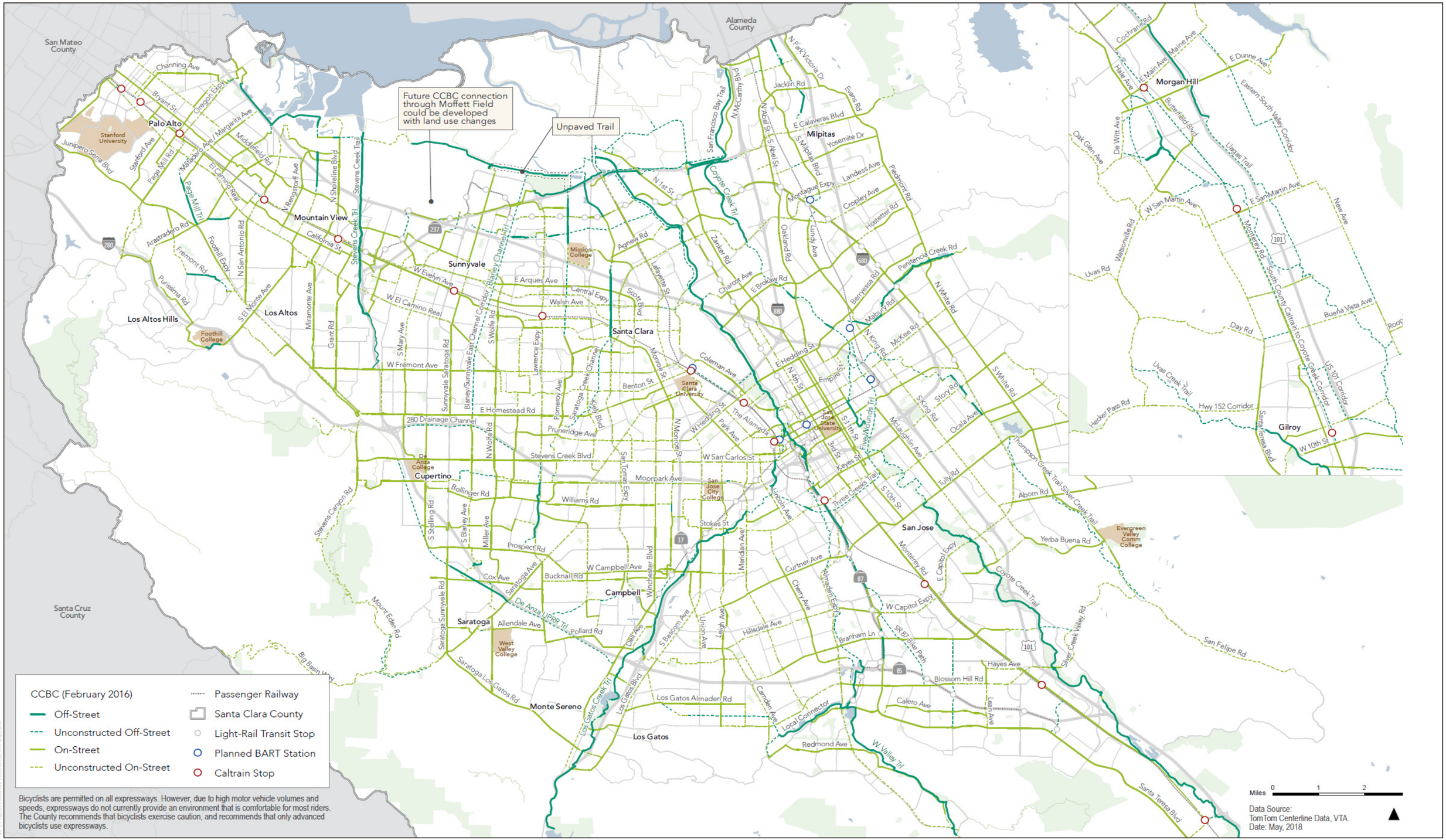
DUDEK 0 500 1,000 Feet

FIGURE 3.16-4A

Existing Bike Facilties in the Santa Clara County

Santa Clara County - Rural Zoning Ordinance Amendment

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SOURCE: Santa Clara Countywide Bicyle Plan, 2018

Figure 5-1: Built and Unbuilt Cross-County Bicycle Corridors

DUDEK 0 500 1,000 Feet

FIGURE 3.16-4B

Built and Unbuilt Cross-County Bicycle Corridors

Santa Clara County - Rural Zoning Ordinance Amendment

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3.17 Utilities and Service Systems

This section of the Program Environmental Impact Report (PEIR) evaluates the adequacy of existing and planned utilities to serve the demands projected to result from implementation of the County of Santa Clara (County) Rural Zoning Amendments and Agricultural Impact Threshold (Project). Specifically, this section addresses:

- water supply, distribution, and treatment;
- wastewater treatment and disposal;
- stormwater management;
- solid waste disposal; and
- energy facilities.

Refer to Section 3.6, *Energy*, for an analysis of energy efficiency related to implementation of the Project pursuant to State CEQA Guidelines, Appendix F requirements. Impacts related to groundwater aquifers, hydrology and water quality are addressed in Section 3.10, *Hydrology and Water Quality*.

3.17.1 Environmental Setting

The Santa Clara Valley Water District (Valley Water) provides water resources management for Santa Clara County. Valley Water's water system includes local water from reservoirs, groundwater, imported water, and recycled water. These supplies are used to recharge local groundwater subbasins, treated at drinking water treatment plants, released to local creeks to meet environmental needs, or sent directly to water users. Valley Water's service area includes the entirety of Santa Clara County which encompasses approximately 1,300 square miles and includes 15 cities from Palo Alto in the north to Gilroy in the south. Most water use occurs on the valley floor between the Santa Cruz Mountains to the west and the Diablo Range to the east.

Valley Water manages 10 dams and surface water reservoirs, three water treatment plants, an advanced recycled water purification center, a state-of-the-art water quality laboratory, 142 miles of raw and treated water pipelines, 101 groundwater recharge ponds covering 276 acres, and more than 275 miles of jurisdictional streams, including 91 miles suitable for in-stream recharge.

Approximately half of the land area within Santa Clara County is open space (52%). Agriculture accounts for 25% of the land area, followed by residential land use (15%). The remaining area consists of commercial, industrial, and institutional use (7%) and transportation and utility use (1%) (SCVWD 2021a).

Water Supply

Water supply provided by Valley Water includes local surface water and groundwater, imported water, and recycled water. Local water supplies make up about half of the county's water supply. Local sources include natural groundwater recharge and surface water supplies, including surface water rights held by Valley Water, San José Water Company, and Stanford University. A small but growing portion of local water supply is recycled water used for non-potable purposes. Imported water from the State Water Project (SWP), Central Valley Project (CVP), and supplies delivered by the San Francisco Public Utilities Commission (SFPUC) make up about another half of the county's supply (SCVWD 2021a).

Imported Water

Much of Valley Water's current water supply comes from hundreds of miles away from natural runoff and releases from statewide reservoirs. This imported water is pumped out of the Delta and brought into the Santa Clara County through the complex infrastructure of the SWP and CVP. Valley Water holds contracts for 100,000 acre-feet per year (AFY) from the SWP and for 152,500 AFY from the CVP. The actual amount of water delivered is typically less than these contractual amounts and depends on hydrology, conveyance limitations, and environmental regulations. In addition, supplemental imported water is acquired through transfers and exchanges as needed and available. The imported supplies are sent to Valley Water's three drinking water treatment plants, used for managed groundwater recharge, or stored in local and State and Federal reservoirs for use in subsequent years. Valley Water also stores some of its imported water in the Semitropic Groundwater Bank in the Central Valley for withdrawal during dry periods or as otherwise needed.

Eight retailers in Santa Clara County have contracts with SFPUC to receive water from the SFPUC Regional Water System. Valley Water does not control or administer SFPUC supplies in the Santa Clara County, but their supply meets some of the countywide demand (SCVWD 2021a).

Surface Water Treatment

Valley Water operates three water treatment plants that clean and disinfect imported water: the Rinconada Water Treatment Plant, Penitencia Water Treatment Plant, and Santa Teresa Water Treatment Plant.

The Rinconada Water Treatment Plant, located in Los Gatos, is the second largest of the Santa Clara Valley Water District's plants. Completed in 1967 by the Santa Clara County Flood Control and Water Conservation District, the plant can treat and deliver up to 80 million gallons of water each day for retailers who supply residential and commercial users in the West Valley, including the cities of Santa Clara, Campbell, Sunnyvale, Cupertino, Mountain View, Monte Sereno, Saratoga and Los Altos and the towns of Los Gatos and Los Altos Hills.

The Penitencia Water Treatment Plant, located in San Jose, is the smallest of the three water treatment plants in the Santa Clara Valley Water District's system, serving an area from Milpitas in the north to Aborn Road in the south. Penitencia Water Treatment Plant supplies drinking water to 270,000 residential and commercial users.

The Santa Teresa Water Treatment Plant, also located in San Jose, serves most of South San Jose - Almaden Valley, Blossom Valley and Santa Teresa - supplying water to residential and commercial users. The plant can also serve the majority of the Penitencia Water Treatment Plant's service area when needed (SCVWD 2022).

Groundwater

Valley Water is the Groundwater Sustainability Agency (GSA) for the Santa Clara and Llagas Subbasins, which are both identified as high priority basins by the California Department of Water Resources (DWR). Valley Water sustainably manages local groundwater basins to support beneficial use by water retailers, private well users, and the environment. Valley Water is also the GSA for the small portion of the North San Benito Subbasin within Santa Clara County.

DWR has identified both the Santa Clara and Llagas subbasins as high priority subbasins based on criteria that include overlying population, projected growth, number of wells, irrigation acreage, groundwater reliance, and groundwater impacts. Neither subbasin has been identified by DWR as being critically over drafted. Groundwater

conditions throughout the county are sustainable, with managed and in-lieu recharge programs maintaining adequate storage to meet annual water supply needs and provide a buffer against drought or other shortages. Although groundwater levels declined during the recent (2012-2016) statewide drought, groundwater levels in the Santa Clara and Llagas subbasins quickly recovered after the drought due largely to Valley Water's proactive response and comprehensive water management activities.

Agricultural uses within Santa Clara County are supported nearly entirely by independent groundwater pumping. Independent groundwater pumping includes groundwater pumping by individual domestic well owners, small and mutual water companies, businesses, non-agricultural irrigation, and environmental cleanup. Agricultural water use from groundwater pumping in Santa Clara County has been generally constant over the last twenty years at approximately 25,000 AFY. Historically, there is evidence that significant reductions in harvested acres and in agricultural water use had occurred prior to 2000s and declines in the number of harvested acreage over time were the result of both increasing urban development and higher productivity. Current local land use plans and agricultural reports indicate that the amount of harvested acreage is likely in a stable state, with only minor declines due to increased urban development in the future (SCVWD 2021a). Table 3.17-1, below, describes historic agricultural groundwater pumping within the county.

Table 3.17-1. Historic Agricultural Groundwater Pumping (Approximate)

	2000	2005	2010	2015	2020
Water Pumped (AFY)	27,500	26,000	23,000	25,000	24,000

Source: SCVWD 2020

Valley Water has implemented numerous programs to protect groundwater resources, including comprehensive monitoring programs related to groundwater levels, land subsidence, groundwater quality, recharge water quality, and surface water flow (SCVWD 2021a). Valley Water's comprehensive groundwater management programs and investments have resulted in sustainable groundwater conditions for many decades and will ensure groundwater resources are sustainable far into the future. Due to this, the subbasins are in long-term balance and groundwater quality is typically very good. (SCVWD 2021b).

Current and Projected Water Supplies and Demand

Water use in Santa Clara County includes domestic, municipal, industrial, and agricultural use. Overall, more than half of water use is for residential, while the Commercial, Industrial, and Institutional (CII) sector represents 41% of use. As previously described, agricultural uses are supported nearly entirely by independent groundwater pumping. Countywide average annual water use was approximately 310,000 AFY in 2020. Actual water use of Valley Water's supply in 2020 was estimated at approximately 306,000 AFY. The countywide water use represents the total use of Valley Water supply, SFPUC Supply, and San José Water Company and Stanford University water rights. As a result of Valley Water's investments in water conservation since 1992, overall water use in the county has decreased for the past 15 years despite a 25% increase in population over the same period. As reported in Valley Water's 2020 Urban Water Management Plan, Valley Water's water use is still low and there is not likely to be a rebound to pre-drought water use (Valley Water 2020). Table 3.17-2, below, describes Valley Water's current and projected water use through 2045.

Table 3.17-2. Current and Projected Water Demand

Use Type	Current Use/Projected Water Use (AFY)					
	2020[1]	2025[3]	2030[3]	2035[3]	2040[3]	2045[3]
Retailer Demand	263,000[2]	288,000	280,000	285,000	290,000	299,000
Agricultural Irrigation	25,000	25,000	25,000	25,000	25,000	25,000
Independent Groundwater Pumping	13,000	14,000	14,000	14,000	14,000	14,000
Untreated Surface Water	2,000	2,000	2,000	2,000	2,000	2,000
Losses	3,000	3,000	3,000	3,000	3,000	3,000
Total	**306,000**	**330,000**	**325,000**	**330,000**	**335,000**	**345,000**

Source: SCVWA 2020 (Table 4-1 and 4-3)
Notes:
1 All numbers are rounded to the nearest 1000 AF. The total water use represents countywide demand, which is partially served by the SFPUC, and surface water rights held by San Jose Water Company and Stanford University. SFPUC, San Jose Water Company, and Stanford supplies are accounted for in the Retailer Water Use.
2 Represents the total of treated water and groundwater as well as recycled water.
3 Total numbers are rounded to the nearest 5000 AF, and all other numbers are rounded to the nearest 1000 AF. The numbers represent countywide demands, which are partially served by the SFPUC, recycled water, and surface water rights held by San Jose Water Company and Stanford University.

As indicated in Table 3.17-2, projected water demand is expected to increase by approximately 39,000 AFY by 2045. This increase is primarily attributed to retailer water demand.

Table 3.17-3, below, describes projected available water supply and demand during average, single dry, and multiple dry years.

Table 3.17-3. Projected Average, Single Dry, and Multiple Dry Year Supply and Demand (AFY)

		2025	2030	2035	2040	2045
Average Year	Supply Totals	446,000	518,000	640,000	643,000	650,000
	Demand Totals	330,000	325,000	330,000	335,000	345,000
	Difference	116,000	193,000	310,000	308,000	305,000
Single Dry	Supply Totals	355,000	373,000	497,000	503,000	505,000
	Demand Totals	330,000	325,000	330,000	335,000	345,000
	Difference	25,000	48,000	167,000	168,000	160,000
First Year	Supply Totals	345,000	349,000	491,000	483,000	487,000
	Demand Totals	330,000	325,000	330,000	335,000	345,000
	Difference	15,000	24,000	161,000	148,000	142,000
Second Year	Supply Totals	370,000	376,000	477,000	482,000	501,000
	Demand Totals	330,000	325,000	330,000	335,000	345,000
	Difference	40,000	51,000	147,000	147,000	156,000
Third Year	Supply Totals	340,000	349,000	443,000	450,000	448,000
	Demand Totals	330,000	325,000	330,000	335,000	345,000
	Difference	10,000	24,000	113,000	115,000	103,000
Fourth Year	Supply Totals	347,000	341,000	416,000	421,000	429,000
	Demand Totals	330,000	325,000	330,000	335,000	345,000

Table 3.17-3. Projected Average, Single Dry, and Multiple Dry Year Supply and Demand (AFY)

		2025	2030	2035	2040	2045
	Difference	17,000	16,000	86,000	86,000	84,000
Fifth Year	Supply Totals	341,000	365,000	430,000	440,000	444,000
	Demand Totals	330,000	325,000	330,000	335,000	345,000
	Difference	11,000	40,000	100,000	105,000	99,000

Source: SCVWA 2020 (Table 7-2, 7-3, 7-4)
Notes: Supply numbers are rounded to the nearest 1,000 AF and demand numbers to the nearest 5,000 AF

As shown in Table 3.17-3, above, Valley Water has available water supplies to support average, single dry, and multiple dry years through 2045.

Stormwater

Valley Water provides stormwater infrastructure and collection services within Santa Clara County. Valley Water's managed recharge program includes capturing local runoff in reservoirs and releasing it to groundwater recharge facilities or drinking water treatment plants. On average, about 50,000 AFY of local runoff is recharged through existing recharge facilities. Through its water supply master planning, Valley Water plans to increase stormwater capture and reuse capacity as part of its 'ensure sustainability strategy.' Valley Water has several stormwater-related projects on the planning horizon intended to strengthen stormwater management within its jurisdiction (SCVWD 2020).

Wastewater

Santa Clara County is served by eight municipal and eight special sanitary district sewage collection systems. Sewage collected from incorporated areas in the northern part of the County is treated at the San Jose/Santa Clara Water Pollution Control, Palo Alto, and Sunnyvale plants. These wastewater plants treat industrial water in conjunction with residential and commercial flows and discharge effluent into the San Francisco Bay (Valley Water 2020).

Unincorporated areas of Santa Clara County are served by West Valley Sanitation District (WVSD). In addition to serving unincorporated areas of Santa Clara County, WVSD also provides contract storm water management and storm drain maintenance services to the cities of Campbell, Saratoga, Monte Sereno and Los Gatos WVSD was formed in 1948 as County Sanitation District #4 of Santa Clara County, and later changed its name to reflect its geographical service area. WVSD provides wastewater collection services to the cities of Campbell, Monte Sereno, Los Gatos, two thirds of Saratoga, and the intervening unincorporated areas of Santa Clara County. WVSD owns, operates, and maintains the collection system within its jurisdiction and contracts with the San Jose-Santa Clara Regional Wastewater Facility for wastewater treatment and disposal (SCLAFCO 2022).

The San Jose-Santa Clara Regional Wastewater Facility has a daily wastewater treatment capacity of 167 million gallons per day (mgd), and an average daily treatment of 110 mgd. Approximately 13% of daily treated wastewater is recycled at the South Bay Water Recycling pump station (City of San Jose 2016).

Solid Waste

The County of Santa Clara Recycling & Waste Reduction Division (RWRD) manages garbage and recycling contracts for unincorporated county residents and businesses while the County of Santa Clara Department of Environmental Health (DEH) Solid Waste Program is certified by the California Department of Resources, Recycling and Recovery (CalRecycle) as the Local Enforcement Agency (LEA) for the unincorporated areas of Santa Clara County. The LEA regulates solid waste facilities to ensure compliance with state minimum standards. There are six active transfer processing facilities within the county and two panned for future use. There are ten landfills within Santa Clara County, all of which are currently closed for operation (County of Santa Clara 2022). As such, solid waste generated in Santa Clara County ultimately ends up in landfills within neighboring jurisdictions, such as the Ox Mountain Landfill, located in San Mateo County

Energy

Electric/energy services within Santa Clara County are served by Silicon Valley Clean Energy (SVCE) in partnership with Pacific Gas & Electric Company (PG&E). SVCE buys clean electricity directly from the source (e.g., solar, wind power, etc.). PG&E delivers electricity over existing infrastructure within Santa Clara County, maintains power lines and provides customer service (SVCE 2022).

3.17.2 Regulatory Setting

Federal Regulations

Federal Safe Drinking Water Act

The Safe Drinking Water Act is the main federal law that regulates the quality of potable water for the public. The Safe Drinking Water Act authorizes the U.S. Environmental Protection Agency (EPA) to establish national health-based standards for drinking water quality. These standards may apply to naturally occurring and human-caused constituents in drinking water. The national standards are established using scientific methods to evaluate health risks and consider available technology and costs to achieve the standards. The National Primary Drinking Water Regulations establish maximum contaminant levels or mandated methods for water treatment to remove contaminants, and requirements for regular water quality testing to make sure standards are achieved. In addition to setting these standards, the EPA provides guidance, assistance, and public information about drinking water, collects drinking water data, and oversees state drinking water programs. States can apply to the EPA for authority to implement the Safe Drinking Water Act within their jurisdictions by showing that they will adopt standards at least as stringent as the national standards and adequately enforce these standards. California has been granted this authority, and the California Department of Public Health establishes and enforces statewide drinking water standards.

Clean Water Act

The Federal Water Pollution Act of 1972, more commonly known as the Clean Water Act, regulates the discharge of pollutants into watersheds throughout the nation. It is the primary federal law governing water pollution. Under the Clean Water Act, the US EPA implements pollution control programs and sets wastewater standards. The objective of the Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of the nation's waters by preventing point and nonpoint pollution sources, providing assistance to publicly owned treatment works for the improvement of wastewater treatment, and maintaining the integrity of wetlands.

National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program was established in the Clean Water Act to regulate municipal and industrial discharges to surface waters of the United States. Federal NPDES permit regulations have been established for broad categories of discharges, including point-source municipal waste discharges and nonpoint-source stormwater runoff. NPDES permits generally identify effluent and receiving water limits on allowable connections and/or mass emissions of pollutants contained in the discharge; prohibitions on discharges not specifically allowed under the permit; and provisions that describe required actions by the discharger, including industrial pretreatment, pollution prevention, self-monitoring, and other activities.

Wastewater discharge is regulated under the NPDES permit program for direct discharges into receiving waters and by the National Pretreatment Program for indirect discharges to a sewage treatment plant.

State Regulations

California Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act, which was passed in California in 1969 and amended in 2013, the State Water Resources Control Board (SWRCB) has authority over State water rights and water quality policy. This Act divided the State into nine regional basins, each under the jurisdiction of a Regional Water Quality Control Board (RWQCB) to oversee water quality on a day-to-day basis at the local and regional level. RWQCBs engage in a number of water quality functions in their respective regions. RWQCBs regulate all pollutant or nuisance discharges that may affect either surface water or groundwater.

California Urban Water Management Planning Act

Through the Urban Water Management Planning Act of 1983, the California Water Code requires all urban water suppliers within California to prepare and adopt an Urban Water Management Plan (UWMP) and update it every five years. This requirement applies to all suppliers providing water to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. The Act is intended to support conservation and efficient use of urban water supplies. The Act requires that total project water use be compared to water supply sources over the next 20 years in five-year increments, that planning occur for single and multiple dry water years, and that plans include a water recycling analysis that incorporates a description of the wastewater collection and treatment system within the agency's service area along with current and potential recycled water uses. In September 2014, the Act was amended by SB 1420 to require urban water suppliers to provide descriptions of their water demand management measures and similar information.

The Water Conservation Act of 2009

The Water Conservation Act of 2009, SB X7-7, requires all water suppliers to increase water use efficiency. The legislation sets an overall goal of reducing per capita water by 20% by 2020, with an interim goal of a 10% reduction in per capita water use by 2015. Effective in 2016, urban retail water suppliers who do not meet the water conservation requirements established by this bill are not eligible for state water grants or loans. The SB X7-7 requires that urban water retail suppliers determine baseline water use and set reduction targets according to specified standards. It also requires agricultural water suppliers to prepare plans and implement efficient water management practices.

State Updated Model Landscape Ordinance

The updated Model Landscape Ordinance requires cities and counties to adopt landscape water conservation ordinances by February 1, 2016, or to adopt a different ordinance that is at least as effective in conserving water as the updated Model Ordinance.

CAL Green Building Code

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11, Title 24, known as "CALGreen") was adopted as part of the California Building Standards Code (Title 24, California Code of Regulations [CCR]) to apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure, unless otherwise indicated in the code, throughout the State of California. CALGreen established planning and design standards for sustainable site development, including water conservation measures and requirements that new buildings reduce water consumption by 20%. The mandatory provisions of the California Green Building Code Standards became effective January 1, 2011. The building efficiency standards are enforced through the local building permit process. The purpose of CALGreen 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 reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories:

- Planning and design
- Energy efficiency
- Water efficiency and conservation
- Material conservation and resource efficiency
- Environmental quality

The California Building Code, including CALGeen, is updated every three years. The CEC adopted the 2022 Title 24 Energy Code in August 2021 and the California Building Standards Commission approved incorporating the updated code into the California Building Standards Code in December 2021. The 2022 Energy Code will go into effect on January 1, 2023.

The California Plumbing Code (Part 5, Title 24, CCR)

The California Plumbing Code (Part 5, Title 24, CCR) was adopted as part of the California Building Standards Code. The general purpose of the universal code is to prevent disorder in the industry as a result of widely divergent plumbing practices and the use of many different, often conflicting, plumbing codes by local jurisdictions. Among many topics covered in the code are water fixtures, potable and non-potable water systems, and recycled water systems. Water supply and distribution shall comply with all applicable provisions of the current edition of the California Plumbing Code.

Executive Order 29-B-15

Executive Order B-29-15, signed by Governor Brown on April 1, 2015, imposed mandatory water restrictions in California. The Order requires the SWRCB to impose restrictions to achieve a statewide 25% reduction in potable urban water usage through February 28, 2016, as compared to the amount used in 2013. In addition to requiring cities and towns to save water, the Order is intended to increase enforcement to prevent wasteful

water use, streamline the state's drought response and invest in new technologies that will make California more drought resilient.

Executive Order B-36-15

On November 13, 2015, Governor Brown issued Executive Order B-36-15 (EO B-36-15) that calls for an extension of restrictions to urban potable water usage until October 31, 2016, should drought conditions persist through January 2016.9 EO B-36-15 is the fifth in a series of Executive Orders by Governor Brown on actions necessary to address California's severe drought conditions. On February 2, 2016, the State Water Board adopted an extended and revised emergency regulation. The regulation extends restrictions on urban water use through October 2016 while providing urban water suppliers more flexibility in meeting their conservation requirements. It also directs staff to report back on additional flexibility once more complete water supply information is known in April 2016. The February 2016 Emergency Regulation allows suppliers flexibility in meeting their conservation requirements through adjustments and credits that allow a supplier to modify its conservation standard up to eight percentage points, based on consideration of: 1) climatic differences experienced throughout the state; 2) water- efficient growth experienced by urban areas; and 3) significant investments that have been made by some suppliers toward creating new, local, drought-resilient sources of potable water supply. Conservation standards were able to be adjusted by submitting required information for verification through the new on-line reporting tool at the state's Drinking Water Information Clearinghouse (DRINC) Portal. The tool was available beginning the week of February 8, 2016, through March 15, 2016. On May 9, 2016, the Governor issued an Executive Order (B-37-16) that directs the State Board to adjust and extend its emergency water conservation regulations through the end of January 2017 in recognition of the differing water supply conditions for many communities.

State Water Resources Control Board

On May 2, 2006, the State Water Resources Control Board (SWRCB) adopted a General Waste Discharge Requirement (Order No. 2006-0003) for all publicly owned sanitary sewer collection systems in California with more than one mile of sewer pipe. The order provides a consistent statewide approach to reducing sanitary sewer overflows (SSOs) by requiring public sewer system operators to take all feasible steps to control the volume of waste discharged into the system, to prevent sanitary sewer waste from entering the storm sewer system, and to develop a Sanitary Sewer Master Plan. The General Waste Discharge Requirement also requires that storm sewer overflows be reported to the SWRCB using an online reporting system.

The SWRCB has delegated authority to nine Regional Water Quality Control Boards (RWQCBs) to enforce these requirements within their region.

Sanitary District Act of 1923

The Sanitary District Act of 1923 (Health and Safety Code Section 6400 et seq.) authorizes the formation of sanitation districts and enforces the Districts to construct, operate, and maintain facilities for the collection, treatment, and disposal of wastewater. The Act was amended in 1949 to allow the districts to also provide solid waste management and disposal services, including refuse transfer and resource recovery.

California Integrated Waste Management Act

California's Integrated Waste Management Act of 1989, AB 939, subsequently amended by SB 1016, set a requirement for cities and counties throughout the State to divert 50% of all solid waste from landfills by January

1, 2000, though source reduction, recycling, and composting. To help achieve this, the Act required that each city and county prepare and submit a Source Reduction and Recycling Element. AB 939 also established the goal for all California counties to provide at least 15 years of on-going landfill capacity.

In 2007, SB 1016 amended AB 939 to establish a per capita disposal measurement system. The per capita disposal measurement system is based on two factors: a jurisdiction's reported total disposal of solid waste divided by a jurisdiction's population. The California Integrated Waste Management Board was replaced by the California Department of Resources Recycling and Recovery (CalRecycle) in 2010. CalRecycle sets a target per capita disposal rate for each jurisdiction. Each jurisdiction must submit an annual report to CalRecycle with an update of its progress in implementing diversion programs and its current per capita disposal rate. In 2013, the statewide residential per capita disposal rate was 4.4 pounds per resident per day, and the statewide employee per capita disposal rate was 10.2 pounds per employee per day.

In 2011, AB 341 was passed that sets a state policy goal of not less than 75% of solid waste that is generated to be source reduced, recycled, or composted by the year 2020. CalRecycle was required to submit a report to the legislature by January 1, 2014, outlining the strategy that will be used to achieve this policy goal.

California Solid Waste Reuse and Recycling Access Act of 1991

The California Solid Waste Reuse and Recycling Access Act require areas in development projects to be set aside for collecting and loading recyclable materials. This Act required CalRecycle to develop a model ordinance for adoption by any local agency relating to adequate areas for collection and loading of recyclable materials as part of development projects. Local agencies are required to adopt the model, or an ordinance of their own, providing for adequate areas in development projects for the collection and loading of recyclable materials.

Mandatory Commercial Organics Recycling

In October of 2014 Governor Brown signed AB 182676 requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. Greenhouse gas (GHG) emissions result from the decomposition of organic wastes in landfills. Mandatory recycling of organic waste is aimed at helping achieve California's aggressive recycling and GHG emission goals.

Global Warming Solutions Act of 2006

The California Global Warming Solutions Act of 2006 (also known as AB 32) Scoping Plan, which was adopted by the Air Resources Board (ARB), included a Mandatory Commercial Recycling Measure. The Mandatory Commercial Recycling Measure focuses on diverting commercial waste as a means to reduce greenhouse gas (GHG) emissions, with the goal of reducing GHG emissions by five million metric tons of carbon dioxide equivalents (MTCO2e), consistent with the 2020 targets set by AB 32. To achieve the Measure's objective, the commercial sector will need to recycle an additional 2 to 3 million tons of materials annually by the year 2020.

CalRecycle adopted this Measure at its January 17, 2012 monthly public meeting. The regulation was approved by the Office of Administrative Law on May 7, 2012, and became effective immediately. On June 27, 2012, the

Governor signed SB 1018, which included an amendment requiring both businesses that generate 4 cubic yards or more of commercial solid waste per week and multi-family residences with five or more units to arrange for recycling services. This requirement became effective on July 1, 2012.

Statewide General Permit

The SWRCB elected to adopt a statewide general permit (Water Quality Order No. 2003-0005-DWQ) for Small Municipal Separate Storm Sewer System (MS4s) operators to efficiently regulate stormwater discharges under a single permit. Permittees must develop and implement a Stormwater Management Plan (SWMP) with the goal of reducing the discharge of pollutants to the maximum extent practicable.

NPDES Municipal Regional Stormwater Permit

The Project study area is covered under the regulations of the new Municipal Regional Stormwater NPDES Permit (MRP) issued by the RWQCB. This NPDES Permit falls under Order R2-2015- 0049, adopted on November 19, 2015. The municipalities have to require both private and public projects to implement post-construct stormwater controls as part of their obligations under Provision C.3 of the MRP. Above and beyond post-construction stormwater management practices, the permit also requires municipalities to adopt trash and street sweeping programs to regulate discharges into storm drain systems or directly into waters of the United States.

California Public Utilities Commission

In September 2008, the California Public Utilities Commission (CPUC) adopted the Long Term Energy Efficiency Strategic Plan, which provides a framework for energy efficiency in California through the year 2020 and beyond. It articulates a long-term vision, as well as goals for each economic sector, identifying specific near-term, mid-term, and long-term strategies to assist in achieving these goals. This Plan sets forth the following four goals, known as Big Bold Energy Efficiency Strategies, to achieve significant reductions in energy demand:

- All new residential construction in California will be zero net energy by 2020;
- All new commercial construction in California will be zero net energy by 2030;
- Heating, Ventilation and Air Conditioning (HVAC) will be transformed to ensure that its energy performance is optimal for California's climate; and
- All eligible low-income customers will be given the opportunity to participate in the low-income energy efficiency program by 2020.

With respect to the commercial sector, the Long Term Energy Efficiency Strategic Plan notes that commercial buildings, which include schools, hospitals, and public buildings, consume more electricity than any other end-use sector in California. The commercial sector's five billion-plus square feet of space accounts for 38% of the state's power use and over 25% of natural gas consumption. Lighting, cooling, refrigeration, and ventilation account for 75% of all commercial electric use, while space heating, water heating, and cooking account for over 90% of gas use. In 2006, schools and colleges were in the top five facility types for electricity and gas consumption, accounting for approximately 10% of state's electricity and gas use.

Local Regulations

Valley Water Urban Water Management Plan

Valley Water is a special district that provides water resources management for Santa Clara County. Every five years, urban water suppliers in California are required by State law to prepare an Urban Water Management Plan (UWMP). The plan is a water agency's long-term water resource planning document to ensure that adequate water supplies are available to meet existing and future water needs within its service area. The UWMP provides an overall picture of a water agency's current and future water conditions and management over the next 25 years (SCVWD 2020).

Valley Water Groundwater Management Plan

The 2021 Santa Clara Valley Water Groundwater Management Plan (GWMP) describes Valley Water's comprehensive groundwater management framework, including existing and potential actions to achieve basin sustainability goals and ensure continued sustainable groundwater management. The GWMP covers the Santa Clara and Llagas subbasins, located entirely in Santa Clara County and identified by the Department of Water Resources (SCVWD 2021b). Protecting groundwater resources is a key part of Valley Water's mission as demonstrated by the following Board policy related to water supply:

- **Water Supply Objective 2.1.1:** Manage groundwater to ensure sustainable supplies and avoid land subsidence.
- **Water Supply Objective 2.1.2:** Aggressively protect groundwater from the threat of contamination.

Valley Water Supply Master Plan

Valley Water's Water Supply Master Plan 2040 (Master Plan) presents Valley Water's strategy for meeting the county's future water needs. The Master Plan looks ahead at how Santa Clara County's water needs and water supply may change over the next 20 years. The Master Plan's annual Monitoring and Assessment Program (MAP) provides a mechanism for adapting to changing supply and demand conditions, climate change, regulatory and policy changes, other risks, and uncertainty. Through regular monitoring of specific projects and overall conditions, Valley Water will assess whether changes to the Master Plan strategy or projects are needed (SCVWD 2019a).

Santa Clara Basin Stormwater Resource Plan

The Santa Clara Basin Stormwater Resource Plan (SWRP) is a planning document that uses a map-based approach to identify and prioritize local and regional Green Stormwater Infrastructure (GSI) projects that can be implemented to improve local surface water quality through enhanced stormwater management. The development of the SWRP was funded by a Prop 1 grant from the State Water Resources Control Board (SWRCB) to the Santa Clara Valley Water District (SCVWD 2019b).

Santa Clara County 1994 General Plan

The Santa Clara County 1994 General Plan contains the following general plan policies related to water supply, stormwater, wastewater, solid waste, and utility infrastructure, relevant to the Project (County of Santa Clara 1994):

> Policy C-RC 5. An adequate, high quality water supply for Santa Clara County should be considered essential to the needs of households, business and industry.

Policy C-RC 6. A comprehensive strategy for meeting long term projected demand for water should at a minimum include the following:

A. Continued conservation and increased reclamation;
B. Securing additional sources as supplemental supply;
C. System and local storage capacity improvements; and
D. Drought contingency planning and groundwater basin management programs.

Policy C-RC 7. Countywide land use and growth management planning should be coordinated with overall water supply planning by the SCVWD in order to maximize dependability of long term water supply resources.

Policy C-RC 9. Conservation should continue to be considered an integral component of local water "supply" resources, effectively minimizing the amount of supplemental supplies which must be obtained from other sources.

Policy C-RC 12. More efficient use of water for agricultural irrigation and industrial processes should be promoted through improved technology and practices.

Policy C-RC 13. Use of reclaimed wastewater for landscaping and other uses, including groundwater recharge if adequately treated, should be encouraged and developed to the maximum extent possible.

Policy C-RC 18. Water quality countywide should be maintained and improved where necessary to ensure the safety of water supply resources for the population and the preservation of important water environments and habitat areas.

Policy C-RC 22. Countywide, compliance should be achieved with the requirements of the National Pollution Discharge Elimination System (NPDES) permit for discharges into S.F. Bay, and to that end, the Countywide Nonpoint Source Pollution Control Program should receive the full support and participation of each member jurisdiction.

Policy C-RC 63. Santa Clara County shall strive to reduce the quantity of solid waste disposed of in landfills and to achieve or surpass the requirements of state law.

Policy C-RC 65. All solid waste management services and facilities shall conform to applicable federal, state, and local regulations and standards.

3.17.3 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would have a significant effect on the environment with respect to utilities and service systems if the project would do any of the following:

U-1: Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;

U-2: Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;

U-3: Result in a determination by the wastewater treatment provider that 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;

U-4: 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 fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

3.17.4 Methodology

While the Project would not directly result in development, it would change how development is regulated in rural zoning districts. The Project consists of amendments to the Zoning Ordinance. The Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate a project's agricultural impacts on a project-by-project basis under CEQA. A complete project description is provided in Chapter 2, Project Description.

The analysis for utilities and service systems is based on documents obtained from the County and Santa Clara Valley Water District. The potential effects of the Project are evaluated at a programmatic level based on information available to the County where reasonably foreseeable, direct, and indirect physical changes in the environment could be considered.

3.17.5 Environmental Impacts

Impact U-1 Would the project require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

As described above, proposed amendments to the Zoning Ordinance would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. Types of land uses allowed in the rural zoning districts would substantially remain the same, with the exception of certain incompatible uses that would be excluded from the Exclusive Agriculture zoning district.

Construction of water systems (e.g., new water or expanded water, wastewater treatment or storm drainage facilities) and utilities (e.g., electric power, natural gas, or telecommunications facilities) is generally associated with increased customer demand, typically as a result of new land development (such as development that transitions land use from a rural to more urban use) and/or population growth. As described in Chapter 3, *Project Description*, and in Section 3.14, *Population and Housing*, the Project, by nature, is not considered to be growth inducing. While growth would continue to occur within the County,

regardless of Project implementation, the Project itself would not include the development of occupied structures and/or induce substantial population growth that would require or result in the need for new and/or expanded utility infrastructure.

As such, projects undertaken in response to the proposed amendments are not anticipated to require the expansion or relocation of utility infrastructure beyond what is currently planned. However, in the event that future individual projects facilitated by the Project have the potential to require or result in the relocation or construction of new utility infrastructure, individual projects would be required to comply with existing plans and policies intended to reduce and/or eliminate environmental effects related to utility infrastructure. Specifically, compliance with General Plan policies identified in Section 3.17.2, *Regulatory Setting*, above, would reduce potential effects associated with new or expanded utility infrastructure by ensuring long-term comprehensive water supply and wastewater planning, water quality maintenance and improvements, as well as compliance with NPDES and solid waste services requirements. In addition to this, all future individual projects facilitated by the Project that are proposed and/or implemented within the County would be subject to existing County regulations and requirements, including policies established to reduce or eliminate potential impacts related to construction or new or expanded infrastructure. Therefore, Project impacts would be considered **less than significant**.

Impact U-2 Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

As previously described, though Project implementation would not result in growth inducement, amendments to the Zoning Ordinance would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. As a result, increased agriculture-supportive uses could occur, and therefore, the Project could result in increased water demand associated with new or expanded development within the rural zoning districts in unincorporated Santa Clara County.

As described above, agricultural uses within the County primarily rely on groundwater. According to the Valley Water 2020 UWMP, Santa Clara County has a current groundwater use of 24,000 AFY, and projected agricultural irrigation demand of 25,000 AFY (see tables 3.17-1 and 3.17-2). As indicated in Table 3.17-2, Valley Water has available water supplies to serve the County during average, single dry, and multiple dry years through 2045. Implementation of the Project is not anticipated to increase groundwater demand such that existing supplies would be substantially reduced and/or depleted. Future development projects facilitated by the Project would be subject to County regulations and requirements, including policies established to ensure sufficient water supplies (County General Plan policies C-RC 5, C-RC 6, C-RC 7, C-RC 9, and C-RC 12). Further, Valley Water has robust groundwater management programs that have resulted in sustainable groundwater conditions currently and into the future. As such, adequate water supply is available within Santa Clara County to serve implementation of the Project. Impacts would be **less than significant.**

Impact U-3 Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that is has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

As described above, unincorporated areas of Santa Clara County are served by WVSD. While WVSD owns, operates, and maintains the collection system within its jurisdiction, WVSD contracts with the San Jose-

Santa Clara Regional Wastewater Facility for wastewater treatment and disposal. Though the San Jose-Santa Clara Regional Wastewater Facility has a daily wastewater treatment capacity of 167 million, it treats a daily average of 110 mgd. As such, the San Jose-Santa Clara Regional Wastewater Facility has availability for an additional 57 mgd. Further, approximately 13% of the average daily wastewater treated at the San Jose-Santa Clara Regional Wastewater Facility is recycled. Although the Project is not growth-inducing in nature and would not directly result in increased wastewater generation, future individual projects facilitated by the Project could result in uses that generate wastewater. However, future projects facilitated by the Project would be subject to County regulations and requirements, including policies established to ensure appropriate wastewater discharge, recycling/reuse, treatment, and capacity (County General Plan policies C-RC 12 and C-RC 22). As such, the Project's impacts related to wastewater treatment and capacity would be **less than significant**.

Impact U-4 Would the project 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 fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Although the Project is not growth-inducing in nature and would not directly result in increased solid waste generation, future individual projects facilitated by the Project, could result in increased solid waste generation.

Future individual projects facilitated by the Project could involve new or expanded agriculture-supportive uses, which could result in solid waste generation. As described above, solid waste generated within the County is ultimately disposed of within neighboring jurisdictions. Future individual projects facilitated by the Project would be subject to the County's solid waste requirements and guidance, including County General Plan policies established to reduce the quantity of solid waste as well as comply with solid waste regulations and standards (e.g., General Plan Policies C-RC 63 and C-RC 65). Compliance with established regulations, in addition to adopted General Plan policies related to solid waste would ensure that future individual projects facilitated by the Project would not generate solid waste in excess of State standards, substantially affect landfill capacity such that additional waste disposal facilities would be required, or otherwise impair the attainment of solid waste reduction requirements. This impact would be **less than significant**.

3.17.6 Cumulative Impacts

The cumulative context for utility-related impacts is the service area for each utility (water, wastewater, stormwater, solid waste) Cumulative projects include those that would occur within Santa Clara County. A cumulative impact would occur if the Project, in combination with past, present, and future projects within Santa Clara County, would result in a significant impact related to utilities.

The Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate a project's agricultural impacts on a project-by-project basis under CEQA As such, the Project itself would not be growth inducing, however, could allow for development of agriculture-supportive uses. As described above, Project impacts with respect to expansion of utility infrastructure, water supply, wastewater treatment and capacity, or solid waste compliance and capacity would be less than significant.

Therefore, the Project would not contribute to a cumulative condition related to utility infrastructure, water supply, wastewater treatment/capacity, or solid waste impacts.

Future individual projects facilitated by the Project would be subject to existing federal, state, and local regulations/requirements, including County General Plan goals, policies, and regulations that reduce potential impacts to utilities and service systems. Compliance with these regulations would ensure that potential impacts resulting from future projects would be less than significant. As a result, and based on the analysis provided above, the Project would not be considered cumulatively considerable, and impacts would be **less than significant** with respect to utilities.

3.17.7 Mitigation Measures

No mitigation is required.

3.17.8 Level of Significance After Mitigation

No significant impacts related to wastewater infrastructure have been identified; therefore, impacts would be less than significant.

3.17.9 References

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3.18 Wildfire

This section of the Program Environmental Impact Report (PEIR) evaluates potential impacts related to wildfire from implementation of the County of Santa Clara (County) Rural Zoning Amendments and Agricultural Impact Threshold (Project). This section describes the existing wildfire conditions within the project area, identifies associated regulatory requirements, and identifies mitigation measures, if any, related to implementation of the Project.

3.18.1 Environmental Setting

Fire Protection Services

The project area is provided fire, safety, and emergency medical services by multiple fire protection districts and the California Department of Forestry and Fire Protection (CalFire). According to the Local Agency Formation Commission of Santa Clara County (LAFCO), four fire protection districts including South Santa Clara Central Fire Protection District (CCFD), South Santa Clara County Fire Protection District (SCFD), Saratoga Fire Protection District, and Los Altos Hills County Fire District (LAHFD) cover part of the unincorporated County, while the rest is outside formal fire service provider jurisdiction and is served primarily by CalFire (Santa Clara County LAFCO 2010). The CCFD primarily covers unincorporated areas adjacent to the communities of Campbell, Cupertino, Los Altos Hills, Los Altos, Los Gatos, Monte Sereno, and Redwood Estates, but also provides fire marshal services to other unincorporated County areas. The SCFD covers most of the southern unincorporated County including Coyote and areas outside of Morgan Hill and Gilroy. The Saratoga Fire Protection District and LAHFD primarily cover incorporated lands, but also cover small portions of unincorporated land outside of city boundaries (Santa Clara County LAFCO 2022). CalFire is the primary fire service provider in most of the eastern unincorporated County.

For purposes of wildland fire protection, California law segregates lands within the state into three categories for jurisdictional and financial responsibility: 1) Federal Responsibility Areas (FRAs), wherein a federal government agency has jurisdiction for wildland fire protection on federally owned land; 2) SRAs wherein CalFire has jurisdiction for wildland fire protection on all lands within this zone whether public or private ownership; and 3) Local Responsibility Area (LRAs), wherein neither the federal government nor the state have jurisdiction for wildland fire protection. The majority of the project area is designated as an SRA, but where SRA designated lands are involved, there can be dual, or layered, responsibility for delivering fire protection to the community. Therefore, both CalFire and local fire protection districts are mutually responsible for fire protection services within the project area. A countywide mutual aid agreement is in place in Santa Clara County and all public fire departments are a signatory to the agreement. Fire agencies in Santa Clara County typically have automatic aid agreements with adjacent departments, which are ongoing agreements that the resources of one department will respond automatically to service calls in the other jurisdiction (Santa Clara County LAFCO 2010).

Most fire agencies in Santa Clara County staff are fire engines with a company of three firefighters, while trucks are typically staffed with a company of three or four. Engines are the predominant first responder and are equipped to pump water, set up the fire ground and prepare for suppression activities. Trucks are more specialized, providing extended aerial ladders and various emergency tools.

Wildland Fire Hazards

California law establishes a classification of fire hazard severity zones (FHSZs) per Government Code Sections 51175–51189. These designations are based on factors including predicted fire behavior, amount and

type of vegetative cover, and topography. The County faces major wildland fire threats due to its hilly terrain, dry weather conditions, and the prolonged drought conditions. Variations in vegetative cover type and species composition have a direct effect on fire behavior. Some plant communities and their associated plant species have increased flammability based on plant physiology (resin content), biological function (flowering, retention of dead plant material), physical structure (bark thickness, leaf size, branching patterns), and overall fuel loading. For example, grass-dominated plant communities become seasonally prone to ignition and produce lower intensity, higher spread rate fires. Climate change is also expected to influence existing fire-related hazards and vulnerabilities. Consequences of a changing climate include changing precipitation patterns, reduced water supply, and increased hazards such as heat waves and wildfire. Changes in precipitation (rain and snowfall), humidity, and temperature have the cumulative effect of increasing conditions where wildfires could occur with greater frequency and severity. Very high FHSZs are particularly evident along the eastern side of the county, as well as along the southwestern portion from Los Altos Hills to outside of Gilroy (CalFire 2024). FHSZs within the County are shown in Figure 3.18-1, Fire Hazard Severity Zones.

Fire History

CalFire maintains yearly wildfire activity statistics and identifies the cause of fires. Santa Clara County had a listed total of 59 wildfire occurrences in 2020 and 46 occurrences in 2021. Table 3.18-1 below shows the number of occurrences and acres burned for each cause of fire (CalFire 2020a, 2021).

Table 3.18-1. Santa Clara County Numbers of Fires and Acres Burned by Cause

Cause of Wildfire	Number of Wildfires (2020)	Number of Acres Burned (2020)	Number of Wildfires (2021)	Number of Acres Burned (2021)
Arson	8	10	12	3
Campfire	1	0	0	0
Debris Burning	2	0	1	0
Electrical Power	4	13	5	2
Equipment Use	4	9	2	38
Lightning	4	165,203	0	0
Playing With Fire	5	12	1	1
Vehicle	17	0	15	13
Railroad	0	11	0	0
Smoking	1	0	1	0
Undetermined	7	3	7	0
Miscellaneous	6	48	2	0
Total	**59**	**165,309**	**46**	**57**

Source: CalFire 2020a, 2021

Notes:

[1] Fire ignited by events or activities that are not classified as arson, campfire, debris burning, equipment use, lightning, playing with fire, powerline, railroad, smoking, vehicle, undetermined, or other included categories. This category includes fires caused by explosive devices, fireworks, glass refraction, shooting, spontaneous combustion, and others (CalFire 2019a).

The number of acres burned in 2020 is significantly larger than 2021 numbers due to the SCU (Santa Clara Unit) Lightning Complex, a grouping of several fires that burned a total of 396,624 acres in six counties (including Santa Clara County) from August 2020 to October 2020 (CalFire 2020b). The fires resulted in 26 damaged structures, 225 destroyed structures, and 6 confirmed fire personnel and civilian injuries. The fires in Santa Clara County were

caused by lightning strikes in the northern Diablo Range of eastern Santa Clara County, within the project area (CalFire and DOC 2020).

3.18.2 Regulatory Setting

Federal

The following federal regulations pertaining to wildfire would apply to the Project.

Federal Response Plan

The Federal Response Plan of 1999 is a signed agreement among 27 federal departments and agencies, including the American Red Cross, that provides the mechanism for coordinating delivery of federal assistance and resources to augment efforts of state and local governments overwhelmed by a major disaster or emergency; supports implementation of the Robert T. Stafford Disaster Relief and Emergency Act, as well as individual agency statutory authorities; and supplements other federal emergency operations plans developed to address specific hazards. The Federal Response Plan is implemented in anticipation of a significant event likely to result in a need for federal assistance or in response to an actual event requiring federal assistance under a Presidential declaration of a major disaster or emergency.

State

The following state regulations pertaining to wildfires would apply to the Project.

California Health and Safety Code (Section 13000 et seq.)

State fire regulations are set forth in Section 13000 et seq. of the California Health and Safety Code, which include regulations concerning building standards (as also set forth in the California Building Code noted below), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, and fire suppression training. The State Fire Marshal enforces these regulations and building standards.

California Building Standards Code (Title 24 of the California Code of Regulations)

The State of California provides a minimum standard for building design through the California Building Standards Code, the most recent of which was published on July 1, 2022, with an effective date of January 1, 2023. The California Building Code (CBC) is located in Part 2 of Title 24 of the California Code of Regulations (CCR). The CBC contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. Buildings are plan-checked by local city and county building officials for compliance with the CBC. Typical fire safety requirements of the CBC include the installation of sprinklers in certain buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildlife hazard areas. Part 9 of Title 24 includes the California Fire Code (CFC), which contains regulations consistent with nationally recognized and accepted practices for safeguarding life and property from fire hazards. The 2022 CFC is based on the 2021 International Fire Code.

California Public Resources Code Sections 4201–4204

This section of the California Public Resources Code (PRC) was amended in 1982 to require the California Department of Forestry to classify all SRAs into fire hazard severity zones. The purpose of this code is to provide classification of lands within SRAs in accordance with the severity of fire hazard present for the purpose of identifying measures to be used to retard the rate of spreading and to reduce the potential intensity of uncontrolled fires that threaten to destroy resources, life, or property.

State Responsibility Area Fire Safe Regulations (Title 14 Natural Resources, Department of Forestry and Fire Protection)

These regulations constitute the basic wildland fire protection standards of the California Board of Forestry. They have been prepared and adopted for the purpose of establishing minimum wildfire protection standards in conjunction with building, construction, and development in SRAs. Title 14 mandates that the future design and construction of structures, subdivisions, and developments in an SRA provide for basic emergency access and perimeter wildfire protection measures.

Local

The following local/regional regulations pertaining to wildfire would apply to the Project.

Santa Clara County Community Wildfire Protection Plan

The Santa Clara County Community Wildfire Protection Plan (CWPP), adopted in August 2016, is a countywide strategic plan intended to assist in protecting human life and reducing property loss due to wildfire throughout the planning area (Santa Clara County Fire Department 2016). The plan is the result of a community-wide wildland fire protection planning process and the compilation of documents, reports, and data developed by a wide array of contributors. The CWPP identifies fuel reduction treatments and recommends the types and methods of treatments to protect at-risk communities and pertinent infrastructure from wildfire hazards. The CWPP also includes action items that residents and communities can take to reduce the ignitability of structures.

Santa Clara County Code

Division C19-Fire Protection Mitigation Fee Ordinance

According to the County's Municipal Code, the purpose of this division is to establish and implement a procedure for the adoption of fire protection mitigation fees and for the assessment and collection of these fees at the time of issuance of building permits. The fire mitigation fees are to be allocated to the affected fire district for the acquisition of capital facilities and equipment in order to maintain the current levels of fire protection services which are required as the result of new development projects. The amount of fees is determined by the fire mitigation fee in effect on the date of the payment of fees.

County Fire Marshal

The County Fire Marshal's Office works to protect lives, property and the environment through education, plan review, inspection, and code enforcement. The County Fire Marshal derives its authority from Division A-33, Chapter IV, Article 1, Section A33-40 through A33-59 of the Santa Clara County Code, and from the California Health and Safety Code. The County Code assigned the title of "County Fire Marshal" to the Chief of the Fire Department, and

the Fire Department provides staff to cover the duties performed by the Office. The County Facilities branch of the Santa Clara County Fire Marshal's Office is responsible for plan review and inspection of all Santa Clara County construction projects, in addition to fire safety inspections of all existing county owned and leased facilities.

Emergency Operations Plans

Santa Clara County maintains the County of Santa Clara Emergency Operations Plan (EOP) and the Santa Clara County Operational Area Hazard Mitigation Plan (HMP) (Santa Clara County 2017a, 2017b). The EOP establishes a county incident management organization and describes compliance with relevant legal statutes. The EOP serves as the legal and conceptual framework for incident management to be utilized by the County and its various departments. The HMP is intended to reduce risks from natural disasters in the unincorporated County and incorporated jurisdictions within the geographical boundaries of the County. The plan complies with federal and state hazard mitigation planning requirements to establish eligibility for funding under Federal Emergency Management Agency (FEMA) grant programs.

Santa Clara County General Plan

The Safety and Noise Element of the County General Plan provides the following goals and policies pertaining to the Project (Santa Clara County 1994).

R-HS 7. Areas of significant natural hazards, especially high or extreme fire hazard, shall be designated in the County's General Plan as Resource Conservation Areas, with generally low development densities in order to minimize public exposure to risks associated with natural hazards and limit unplanned public costs to maintain and repair public infrastructure.

R-HS 22. Adequate access and water supplies for fire safety shall be required for all new development, including building sites, subdivisions, and clustered development.

R-HS 23. Areas for which inadequate access is a general concern, either due to lack of secondary access, dead-end roads of excessive length, and substandard road design or conditions, should be examined to determine if there are means by which to remedy the inadequacies. Such means may include:

- specific local area circulation plans to establish alternative access;
- specific roadway improvements to remedy hazardous situations, financed by those most benefited by the improvements; and
- traffic routing and controls to discourage the use of such roads by non-residents.

R-HS 26. For communities in areas of high or extreme fire hazard that have developed under development densities greater than generally allowed under current General Plan policies, water systems with hydrants should be provided wherever feasible.

R-HS 27. The County should encourage the use of fire-retardant building materials and landscaping not already required by County development and building codes when new development and rebuilding are proposed in areas of high or extreme fire hazard.

R-HS 28. Development projects shall be reviewed by the County Fire Marshall's Office for safety code compliance and should also be referred if necessary to the appropriate fire protection authority or district for further review and recommendations.

R-HS 33. For areas where it may be appropriate, fire protection agencies and districts should utilize controlled burns and other forms of vegetation management to reduce the build up of vegetative matter and the potential fire hazard within an area.

R-HS 34. Public awareness of the prevalence and risks of natural hazards should be maintained and enhanced by activities and programs of the County, safety service providers, and through the educational system.

The Health Element of the County General Plan provides the following goals and policies pertaining to the Project (Santa Clara County 2015).

HE-G.13 Fire Prevention. Support state, federal, County, and other local efforts to prevent wildfires. Emphasize prevention cost-efficiency over that of ever-increasing expense of fighting and suppressing wildfires.

HE-G.24 Public Awareness. Increase public awareness and understanding of climate change impacts on health, and the need to prepare for these changes, including informing the general population and vulnerable communities about severe hazards from local and regional wildfires and health impacts from extreme heat days.

The South County Joint Area Plan from the General Plan provides the following goals and policies relevant to the Project (Santa Clara County 1994).

SC 15.4. Development in fire hazard areas should be minimized. When development is permitted, it should be planned and constructed so as to reduce exposure to fire hazards and to facilitate fire suppression efforts in the event of a wildfire. Actions which increase fire risk, such as increasing public access roads in fire hazard areas, should be avoided because of the great environmental damage and economic loss associated with a large wildfire.

3.18.3 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment with respect to wildfire if the project would:

WF-1: Substantially impair an adopted emergency response plan or emergency evacuation plan.

WF-2: 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.

WF-3: 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.

WF-4: 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.

3.18.4 Methodology

This analysis of impacts of the Project on fire protection services and wildfire hazards is based on review of CalFire maps and data (CalFire 2020a, 2020b, 2022), the County's General Plan (Santa Clara County 1994), the Santa Clara LAFCO 2010 Countywide Fire Service Review (Santa Clara LAFCO 2010), the Santa Clara County CWPP (Santa Clara County Fire Department 2016), the County's EOP and HMP (Santa Clara County 2017a, 2017b) and the County Code.

3.18.5 Environmental Impacts

Impact WF-1 Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

The Project would include amendments to the County Zoning Ordinance. The proposed amendments would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate a project's agricultural impacts on a project-by-project basis. A Demand Assessment study conducted for the Project indicates that the Project would not induce growth by streamlining certain uses (which are already allowed under the existing Zoning Ordinance), and therefore the overall amount of development is not expected to change (BAE 2021). As such, the Project would not increase demand for emergency response and related services.

The County, in conjunction with local governments and emergency service providers, has prepared an EOP and HMP that identify an incident management organization and strategies for coping with natural and human-caused hazards, including wildfires. The EOP demonstrates compliance with relevant legal statutes regarding emergency operations and the HMP complies with state and federal mitigation planning requirements to establish eligibility for funding under FEMA grant programs. The Project would not involve any actions or components that would impact these plans. Future individual projects facilitated by the Project would be subject to state and federal regulations, such as compliance with the CBC to ensure fire safety and evacuation requirements are met. The County Fire Marshal's Office would continue to review and inspect construction projects in the County for compliance with relevant laws and regulations.

Additionally, the County's General Plan contains goals and policies that support effective County emergency response capabilities; see Section 3.18.2, Relevant Plans, Policies, and Ordinances, of this EIR, specifically Policies R-HS 7, 22, 23, 24, 26, 27, 28, 33, 34, HE-G.13 and HE-G.24 and SC 15.4. Compliance with applicable regulations and implementation of the existing County's General Plan goals and policies would ensure the risk of impaired implementation or physical interference with an adopted emergency response plan or emergency evacuation plan is **less than significant.**

Impact WF-2 Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

The project area could be at risk of wildland fire threats due to hilly terrain, presence of flammable vegetation, and prolonged drought conditions. Very high FHSZs are particularly evident along the eastern

side of Santa Clara County, as well as along the southwestern portion from Los Altos Hills to outside of Gilroy, as shown in Figure 3.18-1 (CalFire 2024). Compared to urbanized areas in the County, the sparse development in the rural zoning districts may allow for quicker or more uncontrolled spread of wildfire (for example, grass-dominated plant communities are seasonally prone to ignition and produce higher spread rate fires). The project area also includes hilly terrain such as the Diablo Range in the eastern county, which is where lightning struck in August 2020 and contributed to the SCU Lightning Complex fires burning a total of 396,624 acres in six California counties.

While the project area is at risk from wildfire hazards, the Project would not exacerbate these conditions, nor would it induce growth that would expose additional project occupants to these hazards. As discussed under Impact WF-1, the Project would allow and facilitate agriculture-supportive uses (which are already allowed under the existing Zoning Ordinance); however, the Project would not induce growth and the overall amount of residential development is not expected to change. The project area would continue to receive fire protection and emergency services through local fire protection districts and CalFire. Future development projects facilitated by the Project would continue to be subject to regulations such as the CBC and aforementioned local policies in the County General Plan. With consideration of the above, the Project would not result in a significant increase to wildfire risks and the impact would be **less than significant**.

Impact WF-3 Would the project 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?

As previously discussed, the Project would not directly involve construction of new components. The Project would clarify, simplify, and standardize the permit process for agriculture-supportive uses, align development in the Exclusive Agriculture zoning district with existing County land use policies, and replace the existing "local-serving" provisions with objective development standards. The Project would also establish a threshold of significance to evaluate agricultural impacts on a project-by-project basis under CEQA. The Project would not require installation or maintenance of infrastructure, nor would it induce growth that would necessitate the construction of these components, beyond those facilities already planned to accommodate development in the County. Future individual projects facilitated by the project would be required to comply with all relevant laws and regulations regarding the installation or maintenance of infrastructure, such as connecting new components to County utilities. Therefore, the Project would have a **less-than-significant** impact associated with fire risk from the installation or maintenance of associated infrastructure.

Impact WF-4 Would the project 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?

As noted in Impact WF-2 above, the project area may be at risk of wildfire hazards due to hilly terrain, presence of flammable vegetation, and prolonged drought conditions. Wildfires can affect soil properties and result in post-fire geologic hazards such a slope stability issues, increased runoff, and erosion. However, as previously discussed, the Project would not induce growth and the overall level of development is not expected to change. The Project would not result in more exposure of people or structures to these post-fire hazards. The Project would not include any components that would exacerbate the risk of wildfire or post-fire hazards. Continued compliance with applicable regulations, goals, and policies such as the CBC and County General Plan policies would be required for future individual development projects facilitated

by the Project, the same as existing conditions. Therefore, the Project would have a **less-than-significant** impact associated with post-fire hazards such as flooding, slope instability, or runoff.

3.18.6 Cumulative Impacts

Cumulative impacts are defined as the direct and indirect effects of a Project which, when considered alone, would not be deemed a substantial impact, but when considered in addition to the impacts of related projects in the area, would be considered significant. "Related projects" refers to past, present, and reasonably foreseeable probable future projects, which would have similar impacts to the Project. CEQA deems a cumulative impact analysis to be adequate if a list of "related projects" is included in the EIR or the project is consistent with an adopted general, specific, master, or comparable programmatic plan (Section 15130[b][1][B]). CEQA also states that no further cumulative impact analysis is necessary for impacts of a project consistent with an adopted general, specific, master, or comparable programmatic plan (Section 15130[d]).

Cumulative projects include the Santa Clara County Housing Element Update, the Agricultural Employee Housing Zoning Ordinance Amendments, and Senate Bill 9 (refer to Section 3.0*, Introduction to the Analysis* for detailed descriptions of these projects). Future development within the County including the construction of new housing and related infrastructure would induce population growth, which would lead to the exposure of more people and structures to wildfire-related hazards such as the uncontrolled spread of fire, increased pollutant concentrations, or post-fire geologic hazards. This would also result in increased demand for fire protection, emergency response and related services. As such, there is an existing significant cumulative impact.

The analysis of cumulative impacts in an EIR requires a determination of whether a project's incremental contribution to the impact would be cumulatively considerable. As determined in the impact analyses above, the Project would have less-than-significant project-level impacts. The overall impact concerning wildfire risks would not significantly change under the Project; it is anticipated that the Project would not increase the level of development (and therefore would not expose more people or structures to wildfire risks), and no project components are proposed that would exacerbate any wildfire hazards. Additionally, future development facilitated by the Project would be required to comply with all applicable federal, state, and local regulations, such as the CBC which includes fire safety and evacuation standards for new buildings. With consideration of the above, it is not anticipated that the Project would substantially increase adverse effects regarding wildfires or wildfire risks. Therefore, the Project's effects would be **less than cumulatively considerable.**

3.18.7 Mitigation Measures

No mitigation measures are required.

3.18.8 Level of Significance After Mitigation

No significant unavoidable adverse impacts relating to wildfire have been identified.

3.18.9 References

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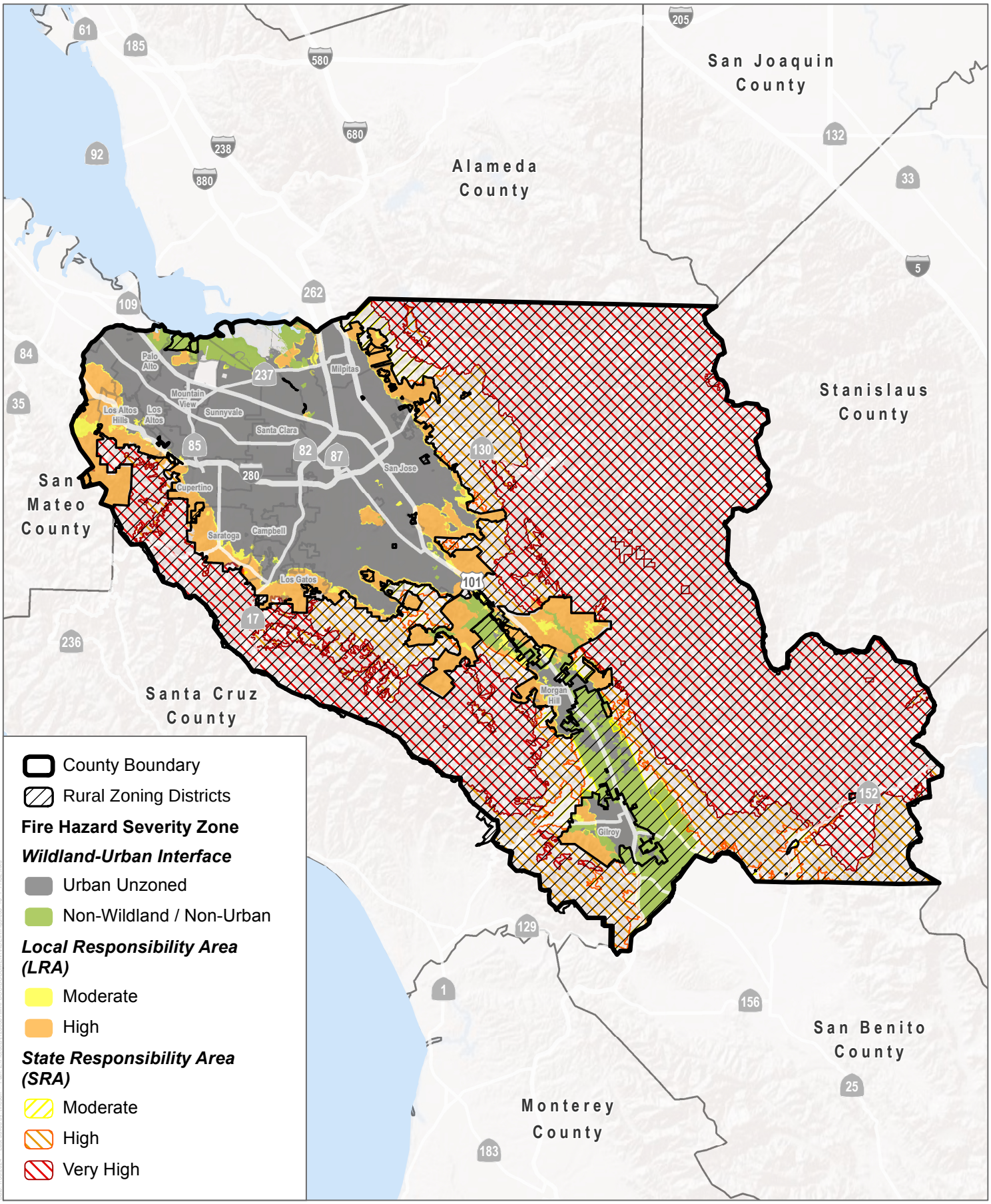
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SOURCE: ESRI 2024, Santa Clara County 2024, CalFire 2024

DUDEK

FIGURE 3.18-1

Fire Hazard Severity Zones

Santa Clara County Rural Zoning Ordinance Amendments EIR

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4 Other CEQA Considerations

Chapter 4 of the Program Environmental Impact Report (PEIR) for the County of Santa Clara (County) Rural Zoning Amendments and Agricultural Impact Threshold (Project) has been prepared in furtherance of the content requirements set forth in the California Environmental Quality Act (CEQA) Guidelines Section 15126.2. As such, this chapter discusses the following:

- Significant and Unavoidable Environmental Impacts
- Significant and Irreversible Environmental Effects
- Growth Inducement
- Effects Found Not to Be Significant

4.1 Significant and Unavoidable Environmental Impacts

Section 15126.2(c) of the CEQA Guidelines requires than an EIR describe any significant impacts which cannot be avoided. Specifically, Section 15126.2(c) states the following:

> Describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described.

Implementation of the Project, as discussed in Chapter 3 of this PEIR would result in no impact or a less-than-significant impact in all environmental topic areas, except for a significant and unavoidable impact for Impact AG-1.

4.2 Significant and Irreversible Environmental Impacts

The CEQA Guidelines (14 CCR 15000 et seq.) require an EIR to address any significant irreversible environmental changes that would result from the Project should it be implemented. Pursuant to Section 15126.2(d), significant irreversible environmental impacts could involve any of the following:

- 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;
- The primary and secondary impacts of the project would generally commit future generations of people to similar uses;
- Irreversible damage from environmental accidents associated with the project;
- The proposed consumption of resources is not justified (e.g., the project results in wasteful use of energy).

The Project consists of amendments to the Zoning Ordinance of the County of Santa Clara. The proposed amendments would streamline permitting for certain agricultural-supportive development, introduce objective development standards, and further implement existing County General Plan policies to prevent sprawl and preserve agricultural land. The Project would also establish a threshold of significance for conversion of farmland

and create the Santa Clara County Agricultural Mitigation Program. Although the Project would not directly construct new development, it would allow and facilitate new agricultural-supportive uses. At the same time, the proposed amendments would introduce objective development standards that would be protective of agricultural land and natural resources.

4.2.1 Large Commitment of Nonrenewable Resources

Examples of irretrievable commitments provided in the State CEQA Guidelines include the use of nonrenewable resources (e.g., fossil fuels and minerals) during initial and continued phases of the project.

The Project does not authorize any specific development, but would streamline the approval of certain agricultural-supportive uses. Such uses may include structures that include both renewable (lumber) and nonrenewable (metal and concrete) materials. In addition, construction and operation will require the consumption of energy. As discussed in Section 3.6, Energy, Santa Clara County receives electrical service from the Pacific Gas and Electric Company (PG&E) and Silicon Valley Clean Energy (SVCE). PG&E's energy mix was approximately 35% renewable energy in 2020. SVCE is a community choice aggregation that allows its customers to receive 100% renewable energy. The Project would not increase the commitment of nonrenewable construction materials or energy. By encouraging smaller developments, the Project may have a positive effect on the use of nonrenewable resources. Overall, the change is unlikely to be substantial.

It is also noted that future development consistent with the Project would also be subject to compliance with the California Building Energy Efficiency Standards and CALGreen. These standards encourage reductions in energy usage and reduction in construction waste, which has a positive effect on nonrenewable resources.

4.2.2 Commitment to Future Uses

The Project would not change planned land uses within the project area. The Project would still allow development within agricultural areas, which may convert important farmland. However, the Project would encourage smaller, more compatible land uses, to implement general plan policies to preserve important farmland and reduce sprawl. The Project would also encourage the preservation of farmland. The Project may reduce, but would not substantially change the commitment of future generations to the use of nonrenewable resources.

4.2.3 Irreversible Damage from Environmental Accidents

The Project would not encourage hazardous land uses, including the manufacture or storage of hazardous materials. However, as discussed in Section 3.9, Hazards and Hazardous Materials, the construction of future development in the rural zoning districts may involve the routine use of hazardous materials (such as fuels and solvents). Agricultural operations may include the use of pesticides. As noted in Section 3.9, federal, state, and local regulations control the use of such materials. These laws and regulations are designed to reduce and/or eliminate exposure of hazardous materials to the public and the environment. The Project would not increase the risk of irreversible environmental damage.

4.2.4 Consumption of Resources Justified

Existing zoning and general play policy allows for development within the rural zoning districts. As discussed above, future development requires the use of nonrenewable resources. The Project would likely lower, but not substantially

change, the commitment of future nonrenewable resources. By encouraging smaller, compatible development, and discouraging sprawl, the Project would not have a significant adverse effect on nonrenewable resources.

4.3 Growth-Inducing Impacts

CEQA requires a discussion of ways in which the Project could be growth inducing. The CEQA Guidelines identify a project as growth inducing if it fosters economic or population growth or results in the construction of additional housing, either directly or indirectly, in the surrounding environment (14 CCR 15126.2[e]). Included in this are projects which would remove obstacles to population growth, such as an expansion of infrastructure that would allow additional construction within the service area. Increases in the population may also tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. An EIR should also discuss the potential for certain projects to encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. Under CEQA, it is not assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

New employees from commercial or industrial development and new population from residential development represent direct forms of growth. The Project does not directly authorize the construction of commercial or residential development. The Project would streamline the approval of certain agricultural supportive uses. As discussed in Section 3.14 of this PEIR, the Project would have no impact on population growth. The Project does not alter allowable residential uses or densities in the rural zoning districts.

To determine if the streamlining provisions of the ordinance update may encourage an increase in non-residential development in the rural districts, a growth study was prepared under the direction of the lead agency. The document is “Demand Assessment for Santa Clara County Rural Zoning Ordinance Amendments” prepared by BAE Urban Economics, September 14, 2021 (BAE 2021). This document analyzed available information on anticipated demand for small-scale religious institutions, wineries, and agriculture supportive uses. The analysis generally finds that demand for the subject uses is limited. In other words, there is not a substantial pent up demand for these developments that has been hampered by the existing regulatory structure. It appears that the demand for such uses is currently being met, and the proposed ordinance changes will not result in a substantial increase in development applications.

The Project would not result in growth through the removal of a regulatory obstacle, as discussed above. In addition, the Project would not remove physical obstacles to growth. No construction of infrastructure is proposed, nor changes to the County’s capital improvement program or other infrastructure and facilities master plans contemplated under the Project.

In summary, the Project does not directly result in growth, and would not indirectly (by removing regulatory barriers) increase growth in the project area.

4.4 Effects Found Not to Be Significant

Section 15128 of the CEQA Guidelines requires that an EIR briefly describe potential environmental effects that were determined not to be significant and therefore were not discussed in detail in the EIR. The potential environmental effects of the Project are discussed in Sections 3.1 through 3.18. None of the issues identified in Appendix G of the CEQA Guidelines was “scoped out” or eliminated from further discussion in the EIR.

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5 Alternatives

This chapter describes and evaluates alternatives to the County of Santa Clara ("County") Rural Zoning Amendments and Agricultural Impact Threshold ("Project") as required by the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.), and identifies the Environmentally Superior Project Alternative, as required by CEQA Guidelines Section 15126.6(e)(2).

5.1 Introduction

CEQA requires that Environmental Impact Reports (EIRs) "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" (14 CCR 15126.6[a]). The CEQA Guidelines direct that the selection of alternatives be governed by "a rule of reason" (14 CCR 15126.6[a] and [f]). As defined by the CEQA Guidelines (14 CCR 15126.6[f]):

> The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the Lead Agency determines could feasibly attain most of the basic objectives of the project.

As presented in prior sections of this Program EIR (PEIR), the Project would result in a significant and unavoidable impact related to conversion of farmland. No other significant impacts have been identified after consideration of applicable plans, policies, and regulations. Consistent with CEQA, the analysis presented in this chapter considers a reasonable range of alternatives to the Project and evaluates their comparative environmental impacts. The selection of alternatives and their discussion must "foster informed decision making and public participation" (14 CCR 15126.6[a]). Therefore, this chapter identifies potential alternatives to the Project and evaluates them.

The inclusion of an alternative in an EIR does not constitute definitive evidence that the alternative is in fact "feasible." The final decision regarding the feasibility of alternatives lies with the decision maker(s) for a given project, who must make the necessary findings addressing the potential feasibility of an alternative, including whether it meets most of the basic project objectives (further described in Section 5.2, Project Objectives) or reduces the severity of significant environmental effects pursuant to CEQA (California Public Resources Code, Section 21081; see also 14 CCR 15091).

This PEIR includes the analysis of three alternatives to the Project:

- Alternative A – No Project Alternative
- Alternative B – Implementation of the Rural Zoning Amendments without Agricultural Impact Threshold
- Alternative C – Implementation of the Rural Zoning Amendments and Agricultural Impact Threshold without the "Limited" Use Category
- Alternative D - Implementation of the Rrual Zoning Amendments and a Reduced Agricultural Impact Threshold

5.2 Project Objectives

The purpose of the Project is to update how development is regulated in rural zoning districts within the County, establish a threshold of significance for evaluating the potential agricultural impacts from future projects, and create an agricultural impact threshold to address such impacts. The following objectives have been established for the Project:

Rural Zoning Amendments

Objective 1. Simplify and streamline the permit processes for uses directly supportive of agriculture.

Objective 2. Align future development in the Exclusive Agriculture zoning district with existing County land use policies.

Objective 3. Replace "local-serving" provisions with objective development standards.

Agricultural Impact Threshold

Objective 4. Promote consistency in the environmental review process.

Objective 5. Protect farmland within the County.

5.3 Significant and Unavoidable Impacts

The Project would result in significant and unavoidable impacts related to future conversion of farmland to non-agricultural uses. The Project encourages limited-scale agriculture-supportive uses in the rural zoning districts of unincorporated Santa Clara County. The Project also removes certain land uses from the Exclusive Agriculture zoning district that are not consistent with County policies to ensure the future viability of agriculture and preserve farmland. The Project would establish a threshold of significance under CEQA for conversion of farmland to non-agricultural uses. Mitigation, in the form of agricultural conservation easements, would reduce, but not avoid the effects of such development, as it cannot guarantee no net loss of farmland in the rural zoning districts. Therefore, the impact would be significant and unavoidable.

5.4 Alternatives Considered and Eliminated During the Project Planning Process

CEQA Guidelines Section 15126.6(c) recommends that an EIR identify any alternatives that were considered by the lead agency but were rejected as infeasible and briefly explain the reasons for their rejection. Among the factors described by CEQA Guidelines Section 15126.6 in determining whether to exclude alternatives from detailed consideration in an EIR are: failure to meet most of the basic objectives of a project, infeasibility, or inability to avoid significant environmental impacts.

With respect to the feasibility of potential alternatives to a project, CEQA Guidelines Section 15126.6(t)(l) states the following:

> 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 … and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.

As the fundamental objective of the project is to update the provisions of the County Zoning Ordinance regarding uses and development in rural areas, an alternative location was not considered. The project, by its nature, would affect lands in the four rural zoning districts. Therefore, an alternative location was not considered.

Elimination of Single Family Residential in the Exclusive Agriculture District

The conversion of farmland parcels located in the Exclusive Agriculture zoning district is an important driver of farmland conversion (County of Santa Clara 2018). Single family residential development is an allowed use in the Exclusive Agriculture zoning district. This supports occupancy of agricultural land by the owner or operator, without the limitations and restrictions of Agricultural Employee Housing. However, it also provides an opportunity for "ranchette" type estate home development, where the land use becomes primarily residential, without engaging in continued agricultural use, resulting in conversion of farmland.

Eliminating residential use without on-site agriculture (either creating a conditional use or not allowing the use) in the Exclusive Agriculture zoning district would relieve one source of farmland conversion. However, this may harm agricultural operators or landowners who wish to develop a home on the land being farmed. It also may conflict with state laws that limit the ability of local agencies to eliminate housing as an allowed use in zoning districts. For these reasons, this alternative was deemed infeasible and was not considered further.

Implementation of the Agricultural Impact Threshold Only

This alternative would not update the Zoning Ordinance but would still establish a CEQA significance threshold for farmland conversion impacts. In this manner, it can be seen as a form of the No Project Alternative, in that it would keep the existing Zoning Ordinance in its current form.

As this alternative can be considered "business as usual" with regards to land uses and development standards in the rural zoning districts, it would not introduce new significant impacts. However, the size, scale, and intensity of development could be greater, depending on implementation of the "local-serving" standard," with a concomitant increase in future impacts such as biological resources, geology and soils, and hydrology. By adopting a threshold of significance for conversion of farmland to non-agricultural use, this alternative would provide additional protections for farmland

Alternative C would not achieve Objectives 1 through 3 related to implementation of the Zoning Ordinance update. The alternative would achieve Objectives 4 and 5. As this alternative would not achieve most of the project objectives and has no clear environmental benefits over the proposed project, this alternative was deemed infeasible and was not considered further.

5.5 Alternatives Selected for Further Analysis

This section discusses a reasonable range of alternatives to the Project, including a no project alternative in compliance with CEQA Guidelines Section 15126.6(e). These alternatives include the following:

- Alternative A – No Project Alternative
- Alternative B – Implementation of the Rural Zoning Amendments without Agricultural Impact Threshold
- Alternative C – Implementation of the Rural Zoning Amendments and Agricultural Impact Threshold Without the "Limited" Use Category
- Alternative D – Implementation of the Rural Zoning Amendments and a Reduced Agricultural Impact Threshold

Pursuant to Section 15126.6(d) of the CEQA Guidelines, each alternative is evaluated in sufficient detail to determine whether the overall environmental impacts would be less than, similar to, or greater than the corresponding impacts of the Project. Each alternative is also evaluated to determine whether the Project objectives would be substantially attained.

5.5.1 Alternative A – No Project Alternative

Alternative Description

Section 15126.6(e) of the CEQA Guidelines requires that an EIR evaluate the specific alternative of "no project" along with its impact. As stated in this section of the CEQA Guidelines, the purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving a proposed project with the impacts of not approving a proposed project. As specified in Section 15126.6(e)(3)(A), when a project is the revision of an existing land use or regulatory plan or policy or an ongoing operation, the no project alternative will be the continuation of the plan, policy, or operation into the future. Therefore, the no project alternative, as required by the State CEQA Guidelines, would analyze the effects of not adopting the proposed Zoning Ordinance amendments and the agricultural impact threshold, and instead would analyze continuation of development under the current Zoning Ordinance.

Under the No Project Alternative, the County would continue to regulate development within the rural zoning districts (Exclusive Agriculture, Agricultural Ranchlands, Hillsides, and Rural Residential) using the currently adopted Zoning Ordinance. The existing ordinance does not contain consistent objective development standards for non-residential uses, such as limits to cumulative building site coverage, but instead relies on a vague and subjective "local-serving" standard, and only in certain instances. This standard evaluates similar development within the project vicinity to determine what allowable intensity of development would be similar to existing development. While this process serves to somewhat limit development in the rural areas, it is difficult to implement and does not provide certainty for property owners (since each application must be assessed on an individual basis, based on extensive research of existing development in the project vicinity). In addition, single-family residences in the rural areas do not have any objective development limitations, other than setbacks and height requirements. Consequently, large estate homes are often constructed on these parcels, creating a residential footprint and siting of the development that effectively prevents the property from being used for commercial agricultural purposes.

The existing ordinance provides the same permitting processes for agriculture-related uses without a consistent approach to the size or intensity of the project. Under the No Project Alternative, all such projects would continue

to be processed as discretionary projects. While the discretionary process allows for additional environmental and planning review, it creates additional barriers to project applicants who wish to develop limited-scale agriculture-supportive uses. This creates a disincentive to development that could support agricultural operations and limit the conversion of agricultural lands.

Under the No Project Alternative, no County threshold of significance for conversion of farmland would be adopted. Analysis of impacts to agricultural resources under CEQA would continue to be done on a project-by-project basis.

Comparison of the Effects of Alternative A to the Project

The Project would also increase the preservation and continued agricultural use of farmland in the following ways:

- Limit the size of development in the rural zoning districts through objective development standards;
- Encourage smaller scale agriculture-supportive uses through streamlining of "Limited" scale uses;
- Encourage preservation of farmland areas for agricultural use by eliminating certain uses within the Exclusive Agriculture zoning district; and
- Establishing a threshold of significance for conversion of farmland.

The first three points serve to incentivize smaller development that is either compatible with, or actively supports, ongoing agricultural activity. Regarding the last points, while the Land Evaluation and Site Assessment (LESA) model may be used to determine the significance of an individual project for farmland conversion, the model can be time-consuming, and potential applicants may not know the constraints associated with development (i.e., if the proposed project may have a significant environmental impact) prior to submitting an application, thus reducing certainty. In addition, the proposed threshold is protective of a wider range of farmland. Farmland of Local Importance and Farmland of Local Potential, and fallowed (unirrigated) farmland tends to score lower in the LESA model, even though this land may support the agricultural economy and natural resource base. While CEQA requires consideration of all feasible mitigation measures to avoid or substantially reduce a significant impact, the proposed project includes Mitigation Measure AG-1, which would clarify mitigation requirements for projects converting more than five acres of farmland.

Thus, the No Project Alternative would have greater agricultural conversion impacts in the county than the Project. No additional significant impacts would result, however, the size, scale, and intensity of development could be slightly greater, with a moderate associated increase in future impacts.

The No Project Alternative would not achieve any of the project objectives.

5.5.2 Alternative B – Implementation of the Rural Zoning Amendments without Agricultural Impact Threshold

Alternative Description

This alternative would not establish a CEQA significance threshold for farmland conversion impacts but would still implement the proposed rural zoning amendments in the Zoning Ordinance. The rationale for this alternative is to explore the effects of amending the Zoning Ordinance without establishing an agricultural impact threshold.

Comparison of the Effects of Alternative B to the Project

By not adopting a threshold of significance for conversion of farmland to non-agricultural uses, this alternative would not provide additional protections for farmland and support for agriculture through the Zoning Ordinance. As discussed in Alternative A, the Land Evaluation and Site Assessment (LESA) model may be used to determine the significance of an individual project for farmland conversion, although on an ad hoc basis. The model can be time-consuming, and potential applicants may not know the constraints associated with development (i.e., whether the proposed project may have a significant environmental impact) prior to submitting an application, thus reducing certainty. In addition, the proposed threshold is protective of a wider range of farmland. Farmland of Local Importance and Farmland of Local Potential, and fallowed (unirrigated) farmland tends to score lower in the LESA model, even though this land may support the agricultural economy and natural resource base.

Overall, while not resulting in any new or significantly greater impacts, this Alternative provides fewer environmental benefits than the Project.

Alternative B would not achieve Objectives 4 and 5 related to implementation of a CEQA significance threshold for farmland conversion and the SCCAMP. The alternative would achieve Objectives 1 through 3.

5.5.3 Alternative C – Implementation of the Rural Zoning Amendments and Agricultural Impact Threshold Without the "Limited" Use Category

Alternative Description

This alternative would update the Zoning Ordinance as proposed with one notable change: the introduction of the "Limited" sub-category for Agricultural Processing, Agricultural Sales/Events, and Places of Worship would be eliminated. Instead, these uses would be processed in the same manner as their larger, "General" counterparts. There would be no ministerial approval pathway for such uses. All other components of the rural zoning amendments, including consolidation of the various use descriptions, removing certain uses from the Exclusive Agriculture zoning district, and replacing "local-serving" standards with objective development standards would still occur. This alternative would also establish a CEQA significance threshold for farmland conversion impacts.

Comparison of the Effects of Alternative C to the Project

By reducing the overall size, scale, and intensity of development (through standardized development standards), eliminating uses from the Exclusive Agricultural zoning district that do not directly support or benefit agricultural viability, and adopting an Agricultural Impact Threshold, this alternative would have a similar impact on agricultural resources as the proposed project. By eliminating By eliminating ministerial approval of smaller scale uses, this alternative would arguably provide a means to further evaluate and mitigate site-specific impacts related to those smaller scale projects. By eliminating ministerial approval of limited non-agricultural uses (such as Limited Places of Worship), this alternative may reduce the conversion of farmland – or at least allow such conversions to be fully evaluated and potentially mitigated (although not to a less-than-significant level).

By eliminating the streamlined (ministerial) approval of small-scale agriculture-supportive uses, this alternative would not provide the same level of support for continued agricultural activity in the rural zoning districts. Thus, Alternative C would only partially achieve Objective 1, and would achieve Objectives 2 through 5.

5.5.4 Alternative D – Implementation of the Rural Zoning Amendments and a Reduced Agricultural Impact Threshold

Alternative Description

This alternative would update the Zoning Ordinance and would establish a CEQA significance threshold for farmland conversion impacts of 2.5 acres (as compared to 5 acres). The rationale for the five-acre threshold is discussed in Section 3.2, Agriculture and Forestry Resources.

Comparison of the Effects of Alternative D to the Project

A lower threshold of significance of 2.5 acres of valuable farmland would lead to 1,956 rural parcels subject to the threshold, for a total of 35,968 acres of valuable farmland. No non-rural parcels would be affected, as there are no non-rural parcels between 2.5 and 5 acres containing farmland. The number of additional parcels would increase by 32.79%; however, the increase in covered rural acreage of valuable farmland would only increase by 5.21% (1,782 acres). Thus, impact would only slightly be decreased – and notably, would remain significant and unavoidable – while the number of properties affected would increase substantially. By increasing the number of small parcels subject to the impact threshold, and to mitigation, obtaining and administering mitigation lands (through agricultural conservation easements) would likely be more complicated and time-consuming for both the property owners and the County, which must verify and monitor such mitigation. This is a policy consideration, if the nominal increase in protection would justify the increased regulatory and financial burden on small (less than 2.5-acre) property owners, and the additional administrative burden to the County.

Alternative D would achieve all five project objectives.

5.6 Comparison of Alternatives

Alternative A, the No Project Alternative would not result in new or substantially greater impacts to the existing environment as compared to the Project. However, it would not realize any of the environmental benefits of the Project and, as shown in Table 5-1, would not achieve any of the project objectives.

Alternative B would achieve the benefits to agriculture of adopting objective development standards in the rural zoning districts, facilitating agriculture-supportive uses through permit streamlining, and better aligning the Exclusive Agriculture zoning district with County policies to promote agriculture and preserve farmland. This alternative would not achieve the benefits of adopting the CEQA significance threshold for farmland conversion. The impact to the conversion of farmland into permanent development could be greater under Alternative B without implementation of the CEQA significance threshold. This alternative would achieve Objectives 1 through 3 but would not achieve Objectives 4 and 5, as shown in Table 5-1.

Alternative C would achieve the benefits of adopting the CEQA significance threshold for farmland conversion and objective development standards in the rural zoning districts, and better align the Exclusive Agriculture zoning district with County policies to promote agriculture and preserve farmland. Alternative C would not facilitate agriculture-supportive uses through permit streamlining. As shown in Table 5-1, this alternative would partially achieve Objective 1, and fully achieve Objectives 2 through 5.

Alternative D would reduce the agricultural impact threshold to 2.5 acres. Alternative D would slightly reduce impacts related to the conversion of farmland, by adding another 1,782 acres of farmland in the form of small parcels that would fall under the proposed threshold of significance, although it would not avoid the significant and unavoidable impact. Alternative D would achieve all the project objectives.

Table 5-1. Comparison of Alternatives and Project Objectives

Does the Alternative Meet the Following Project Objectives?	Alt A - No Project	Alt B	Alt C	Alt D
Objective 1: Simplify and streamline the permit process for uses directly supportive of agriculture.	No	Yes	Partial	Yes
Objective 2: Align future development in agricultural areas with existing County land use policies.	No	Yes	Yes	Yes
Objective 3: Replace "local-serving" provisions with objective development standards.	No	Yes	Yes	Yes
Objective 4: Promote consistency in the environmental review process.	No	No	Yes	Yes
Objective 5: Protect farmland within the County.	No	No	Yes	Yes

5.7 Environmentally Superior Alternative

An EIR must identify an "environmentally superior" alternative; and, where the no project alternative is environmentally superior, the EIR is then required to identify an alternative from among the others evaluated as environmentally superior (14 CCR 15126.6[e][2]).

As discussed in Section 5.6, Alternative D may be considered the environmentally superior alternative, in that it would increase the acreage of farmland subject to the impact threshold from 34,186 acres to 35,968, an increase of 5%. However, it does not avoid a significant impact, and would increase the financial and regulatory burden on small property owners seeking approval of discretionary projects.

5.8 References

County of Santa Clara. 2018. *Santa Clara Valley Agricultural Plan.* January 9, 2018.

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