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California Environmental Quality Act Analysis

date July 28, 2026
to Mike Tietze, East Turlock Subbasin Groundwater Sustainability Agency
from Kelley Sterle, Emily Kline and Meredith Parkin, Environmental Science Associates
subject CEQA Analysis under the Consolidated Final Turlock Subbasin Groundwater Sustainability Plan Program Environmental Impact Report for the Asai Farm Stormwater Pond Project

Introduction

This document serves as the California Environmental Quality Act (CEQA) analysis to evaluate whether the Asai Farm Stormwater Pond Project (proposed project) is within the scope of the Consolidated Final Turlock Subbasin Groundwater Sustainability Plan (GSP) Program Environmental Impact Report (referred to herein as the GSP PEIR). This analysis considers whether the proposed project activities are consistent with the types of projects and management activities (PMAs) and/or types of impact mechanisms evaluated in the GSP PEIR. If a proposed project is covered by the evaluation of environmental effects in the GSP PEIR and would not result in any new impacts, nor require any new mitigation measures not covered in the GSP PEIR, it may be approved using a finding that the project is within the scope of the GSP PEIR for CEQA compliance, consistent with State CEQA Guidelines Section 15168(c).

Lead Agency and Project Proponent Information

Lead Agency: East Turlock Subbasin Groundwater Sustainability Agency (ETSGSA)

Project Proponent Name: Hiro Asai Farm, INC.

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Project Overview

Project Location

The proposed project is in Merced County and is in the vicinity of the East Turlock Subbasin's (Subbasin's) "cone of depression," where chronic lowering of groundwater levels poses a threat to the Subbasin's sustainability (**Figure 1**). The proposed project address is 13261 Cortez Avenue, Turlock CA. The Project APN is 041-110-024.

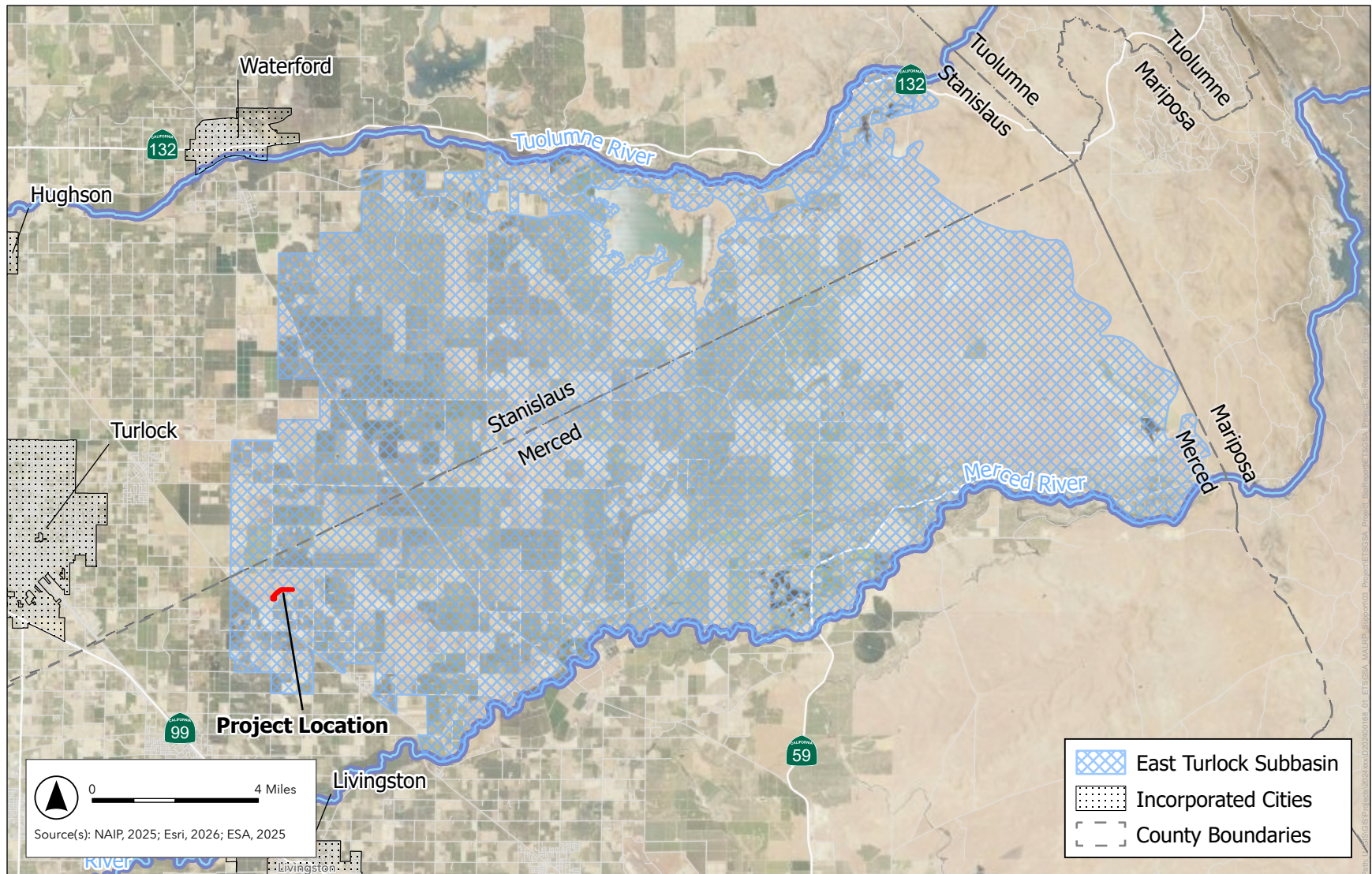


Figure 1
Regional Vicinity

Project Objectives

The primary objectives of the proposed project are to reduce groundwater demand and to promote groundwater recharge and promote deep percolation of water into the groundwater system through agricultural land repurposing. The proposed project is designed to reduce groundwater demand by transitioning land out of irrigated agricultural production while improving regional drought resilience and addressing ongoing groundwater overdraft conditions. The proposed project aims to increase stormwater infiltration, reduce flood risk by slowing runoff, improve soil stability and water quality, and establish native vegetation that provides habitat benefits for pollinators and other wildlife. The proposed project serves as a scalable and transferable model for future land repurposing efforts that promote sustainable water management and multi-benefit environmental outcomes throughout the region.

The proposed project's objectives are consistent with objectives of the Turlock Subbasin GSP (evaluated in the GSP PEIR), which are to achieve the sustainability goal for the Turlock Subbasin by 2042 and avoid undesirable results over the remainder of a 50-year planning horizon.

Project Description

The proposed project would repurpose up to approximately 8 acres of irrigated agricultural land in Merced County through the construction of a passive stormwater capture and infiltration pond system under a 10-year Incentive Agreement with ETSGSA.

The stormwater capture and infiltration pond system, or stormwater pond, would be constructed approximately 15 feet from an existing agricultural drainage ditch. The stormwater pond would range from one to three feet in depth, requiring some excavation and grading. The stormwater pond would be designed to capture and retain stormwater runoff from surrounding lands. Site observations have shown that runoff and drainage water collect within the existing agricultural drainage ditch located along the northern edge of the property. Under the project, stormwater is expected to enter the pond area primarily through seepage from the ditch bank, with occasional overbank flow from the ditch to the stormwater pond during higher-stage storm events. **Figure 2** depicts the location of the stormwater basin.



Figure 2
001 Asai Project Location

Project Implementation

The proposed project would involve construction, maintenance, and monitoring activities described below, to be implemented by the landowners. Note that many of the activities associated with the proposed project already occur under existing agricultural operations and thus are typical of active farming operations that occur in the project area. Based on the existing agricultural operations, it is assumed that the project area as a whole is previously disturbed.

Designate Work Areas, Access, and Haul Routes

The proposed project site would be accessed by existing ranch roads. An existing ranch road exists south of the agricultural drainage ditch, and excavation activities would not disturb the existing ranch road or agricultural drainage ditch. Staging areas would be located at existing equipment staging areas used for farming equipment.

Construct Stormwater Pond

The proposed project would construct a passive stormwater capture and infiltration pond system under a 10-year Incentive Agreement with ETSGSA. The designated 8-acres of land is currently fallowed. An excavator would be used to excavate the stormwater pond, which would range between 1 to 3 feet in depth. Berms would be constructed alongside the southern edge of the stormwater pond to retain stormwater as it seeps from the existing agricultural drainage ditch through or as stormwater overflows the existing drainage ditch and ranch road during periodic heavy storms. Pond grading would include variable depth zones designed to promote natural spreading, temporary storage, waterfowl habitat, and infiltration of stormwater through the more permeable soils in the western portion while maintaining passive operation. The proposed project also includes establishment of riparian-type vegetation along pond perimeter areas to reduce erosion and stabilize the seepage face. In addition, a diverse mix of wet- and dry-tolerant native vegetation would be established throughout the basin footprint to provide habitat structure and ground cover. The proposed project would be implemented, operated, and managed in accordance with the ETSGSA Implementation Standards.

Operations, Monitoring, and Maintenance

Proposed project operations would remain entirely passive and would not require pumps, pipelines, or active flow-control infrastructure. Field observations also identified a transition from lower-permeability soils on the eastern portion of the site to more permeable sandy soils on the western portion of the property, supporting the site's suitability for infiltration and groundwater recharge. Maintenance of the stormwater pond would require establishing beneficial vegetation, erosion control, and occasional sediment removal. Maintenance of the stormwater pond and beneficial vegetation would be required to continue for 10 years per the ETSGSA Implementation Standards. Reduced groundwater use would be measured via evapotranspiration monitoring using remote-sensing technologies. ETSGSA has an existing program for groundwater consumptive use monitoring, and while the lands repurposed under the proposed project would be exempt from the ETSGSA's groundwater use fee and allocation, consumptive use on the project lands would still be monitored using the same technology and approach, allowing for monitoring of project outcomes using monthly evapotranspiration data that are compiled on an annual basis.

The primary benefits of the stormwater ponds land repurposing practice are increased stormwater infiltration and flood risk reduction through slowing and reducing the peak flow rates of stormwater runoff. Additional groundwater sustainability, climate resilience, disadvantaged community, and habitat benefits of this practice include incidental groundwater recharge; water quality benefits through natural filtration and sediment retention; habitat for wildlife, pollinators, and other beneficial species; channel erosion reduction; and decreased dust generation from the land relative to an unmanaged fallow condition.

The land repurposing practices included in the proposed project would be implemented by the landowner in accordance with a set of Implementation Standards developed by the ETSGSA for use in its Multi-benefit Agricultural Land Repurposing Program (MLRP) and its broader demand management framework. The Implementation Standards were developed to reflect local considerations through a collaborative process involving the Turlock MLRP technical team, partner agencies (including but not limited to the East Stanislaus and East Merced Resource Conservation Districts), landowners and growers in the region, and members of the ETSGSA Technical Advisory Committee.

Equipment and Materials

Implementation of the proposed project would involve equipment typically used in agricultural practices, including backhoes, bulldozers, chippers/grinders, compactors, excavators, graders, haul trucks, loaders, lubricating and fueling trucks (i.e., to support operation of construction equipment), mowing equipment, and tractors. A diverse mix of wet- and dry-tolerant native vegetation would be established throughout the basin footprint to provide habitat structure and ground cover.

Estimated Construction Schedule

Construction would begin in September 2026 and would take less than one month to complete.

Cultural and Biological Resource Assessments

This section summarizes findings from the cultural and biological resource assessments for the proposed project used to evaluate the potential impacts of the proposed project on cultural, tribal cultural, and biological resources. For additional details, refer to **Appendix A**, *Cultural Resources Assessment*, and **Appendix B**, *Biological Resources Reconnaissance Survey Report*. Note that in these reports, the proposed project represents one of multiple groundwater recharge projects in the Turlock Subbasin.

Cultural Resources in the Proposed Project Area

Methods

In June 2026, ESA Archeologist Heidi Keonig, MA conducted a cultural resources assessment to evaluate the existing conditions of the proposed project area with regard to cultural resources. The assessment comprised the following: 1) a records search of the California Historical Resources Information System (CHRIS); 2) research on existing cultural resources literature; 3) a review of historic maps and aerial photography; and 4) a desktop geoarchaeological sensitivity analysis of indigenous and historic-era resources. Refer to Appendix A for additional details regarding the methods and sources of data used.

Results

The cultural resources assessment concluded that there are no previously recorded cultural resources in the proposed project area, though no previous cultural resources studies that included field surveys appear to have been conducted in the project area. As presented in **Appendix A**, there exists a low sensitivity for buried indigenous archaeological resources and a low sensitivity for buried historic-era archaeological resources in the proposed project area. Based on these findings, the assessment did not recommend a cultural resources pedestrian survey be conducted for the proposed project area to verify the presence/absence of cultural resources (both archaeological and architectural).

Biological Resources in the Proposed Project Area

Methods

In May 2026, Environmental Science Associates (ESA) Biologist Missy Zepeda and ESA Environmental Scientist Emily Kline surveyed for and evaluated biological resources within the proposed project area, focusing on identifying the presence or potential presence of sensitive biological resources regulated by federal or state resource agencies, and the presence of habitat for special-status species that should be considered during CEQA review. The information and analysis focus on special-status species, wildlife habitat, vegetation communities, and potentially jurisdictional waters of the United States (U.S.) and/or of the state that occurs or has the potential to occur within or in the vicinity of the proposed project area. The assessment included a literature review and database queries as well as a reconnaissance-level field survey. Refer to **Appendix B** for additional details regarding the methods and sources of data used.

Results

The records search found that several species known to occur in the vicinity of the proposed project area are regulated pursuant to federal and/or state endangered species laws or have been designated as Species of Special Concern by California Department of Fish and Wildlife (CDFW). In addition, Section 15380(b) of the CEQA Guidelines provides a definition of rare, endangered, or threatened species that are not included in any listing. Species recognized under these terms are collectively referred to as “special-status species.” Refer to **Appendix B, Attachment D** for a map of CNDDDB special-status species occurrences within 5 miles of the proposed project area.

No special-status plants or wildlife were observed during the reconnaissance survey in the proposed project area. However, the proposed project area and surrounding area (within 0.5-mile) contain habitat suitable for nesting migratory birds, including Swainson’s Hawk (*Buteo swainsoni*), and ground nesters such as killdeer, meadowlark, and western burrowing owl (*Athene cunicularia*). Potential impacts on nesting birds listed under the Migratory Bird Treaty Act (MBTA) could occur depending on the timing of construction activities; usage of heavy construction equipment can cause impacts to MBTA-protected species if they are operated in close proximity to bird nests, as the increase in noise and vibrations could trigger breeding adults to abandon a nest before it has successfully fledged during the nesting bird season, defined as February 1 through September 15.

No sensitive natural communities are present with the proposed project area. While several special-status listed wildlife species have known ranges within the Central Valley that may overlap with the proposed project area, the proposed project area does not provide suitable habitat or forage for these species.

Therefore, listed special-status wildlife is more likely to be passing through rather than residing within the proposed project area.

The National Wetland Inventory (NWI), field survey, and aerial photos identified a agricultural drainage ditch located adjacent to the proposed stormwater basin (refer to Appendix B, Attachment F). During the reconnaissance survey, no riparian vegetation or surface water was observed in the proposed project footprint. All aquatic features were observed to be north of the existing ranch road, which would not be disturbed during project construction or operation.

CEQA Analysis

Eligibility of the Project under GSP PEIR

The proposed project is located within the Turlock Subbasin, the study area evaluated in the GSP PEIR. The proposed project is consistent with the types of PMAs described in Chapter 2, *Description of the Types of Projects and Management Actions to be Implemented under the Turlock Subbasin Groundwater Sustainability Plan*, of the Turlock Subbasin GSP PEIR. As defined in Section 2.2.1, *Projects Identified*, of the GSP PEIR, the term “projects” generally refers to physically constructed (structural) features designed to recharge the groundwater system using stormwater. The Turlock Subbasin GSP categorizes projects according to their primary recharge mechanism (direct groundwater recharge, in-lieu groundwater recharge, and combination of both). As defined in Section 2.2.1, *Management Actions Identified*, of the GSP PEIR, the term “management actions” generally refers to nonstructural programs or policies that are designed to incentivize voluntary actions and strategies, such as demand reduction strategies, that encourage land fallowing or conservation. The proposed project involves construction of a passive stormwater capture and infiltration system, implementing a combination of in-lieu and direct groundwater recharge. The proposed project is therefore consistent with the types of projects presented in Table 2-2 of the GSP PEIR (i.e., Group 3, East Turlock Subbasin Agricultural Water Supply Projects).

Implementation of the proposed project involves construction activities consistent with those described in Section 2.3, *Construction Overview for Turlock Subbasin GSP Projects and Management Actions*, and summarized in Table 2-4 of the GSP PEIR. These activities include the mobilization of equipment and materials, excavation, and drainage modification. Additionally, implementation of the proposed project involves operations and maintenance activities that are consistent with those described in Section 2.4, *Operations and Maintenance Overview for the Turlock Subbasin GSP Projects and Management Actions* and summarized in Table 2-4 of the GSP PEIR. These activities include observations of cover crop quality and replanting of cover crops, regularly scheduled inspections and evaluations of feature performance, and water quality monitoring.

Tribal Consultation

Assembly Bill 52 (Chapter 532, Statutes of 2014) amended CEQA to define “tribal cultural resources” (PRC Section 21074) and to provide that a substantial adverse change in a tribal cultural resource may be a significant effect on the environment (PRC Section 21084.2). State CEQA Guidelines Appendix G was subsequently amended to address tribal cultural resources. PRC Section 21080.3.1 outlines the process required for tribal contact and consultation.

As described in Chapter 1, *Introduction*, of the GSP PEIR, CEQA requires lead agencies to notify California Native American tribes that are traditionally and culturally affiliated with the geographic area of an individual restoration project, if they have requested notice of projects proposed in that area. Upon receipt of the notice, the tribe has 30 days to request consultation. Consultation may involve discussing the type of environmental review necessary, the significance of tribal cultural resources, the significance of the project's impacts on the tribal cultural resources, and alternatives and mitigation measures recommended by the tribe. The parties must consult in good faith. Consultation is considered concluded either when the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource (if such a significant effect exists) or when a party concludes that mutual agreement cannot be reached.

The requirements under PRC Section 21080.3.1 and the GSP PEIR Mitigation Measure CUL-2 include outreach to the California Native American Heritage Commission and California Native American Tribes who may be culturally and geographically affiliated with the proposed project area to determine if there are any cultural or tribal resources of which such tribes may be aware that could be impacted by implementation of the proposed project. Tribal outreach and engagement would occur as part of the MLRP. Therefore, ETSGSA did not send additional notifications to contacts at this time.

Environmental Impacts

Table 1 presents the impact analysis of the proposed project, including the resource area, the impact statement from the GSP PEIR, whether the impact statement is applicable to the proposed project (yes or no) and why (in the explanation column), the applicable mitigation measure, and a determination of consistency with the GSP PEIR (i.e., whether the proposed project impacts are within the scope of the GSP PEIR because they are consistent with the activities and impacts addressed in the GSP PEIR. This analysis was used to determine: (1) whether the proposed project would result in any new impacts that were not covered in the GSP PEIR; and (2) whether any of the significant impacts of the PMA would be substantially more severe than those covered in the PEIR.

As indicated in Table 1, the proposed project would result in no new significant effects and would require no new mitigation measures; thus, the proposed project can be approved as being within the scope analyzed by the GSP PEIR. Therefore, none of the criteria for preparation of a subsequent CEQA document are met (State CEQA Guidelines Sections 15168(c)(2), 15162) and the proposed project would not require new or additional environmental review (e.g., EIR, negative declaration, or mitigated negative declaration).

TABLE 1
IMPACT ANALYSIS OF THE PROPOSED PROJECT

Impact Statement from the GSP PEIR	Does the Impact Apply to the Proposed Project?	Explanation	Applicable Mitigation Measure	Is the Impact within the Scope of the GSP PEIR?
Aesthetic and Visual Resources				
AES-1: Implementing PMAs under the Turlock Subbasin GSP could result in substantial degradation of visual qualities.	No	The proposed project would repurpose agricultural land with the construction of a passive stormwater capture and infiltration system. Construction activities are consistent with the typical agricultural operations and therefore would not change the local visual conditions. Once construction is completed, the visual character of the proposed project area would be consistent with existing conditions. Therefore, the proposed project would not degrade visual qualities and there would be no impact .	N/A	Yes
AES-2: Implementing PMAs under the Turlock Subbasin GSP could result in substantial adverse effects on scenic vistas and scenic resources.	No	There are no designated scenic vistas present within or adjacent to the proposed project area. Construction would be short-term and temporary. Construction elements would be removed after construction and therefore their presence would not cause permanent changes to local visual conditions. Following construction, the visual conditions would be similar to existing conditions. Therefore, there would be no impact .	N/A	Yes
AES-3: Implementing PMAs under the Turlock Subbasin GSP could result in new sources of substantial light or glare.	No	The proposed project would involve construction of a passive stormwater capture and infiltration system. Construction would occur during daylight hours. Therefore, construction and operation associated with the proposed project would not add new temporary or permanent sources of substantial light or glare, and there would be no impact .	N/A	Yes
Agriculture and Forestry Resources				
AG-1: Implementing PMAs under the Turlock Subbasin GSP could convert Special Designated Farmland to nonagricultural use or conflict with a Williamson Act contract or zoning for agricultural use.	Yes	The proposed project area is located in Prime Farmland and Farmland of Statewide Importance (DOC, 2026a). The proposed project site is not enrolled in any Williamson Act contracts (DOC, 2026b). The proposed project involves the repurpose of approximately 8 acres of irrigated agricultural land via the construction of a singular stormwater pond ranging from one to three feet in depth. This pond would be formed primarily through excavation and grading, capturing and retaining stormwater runoff from lands surrounding the project site. The agricultural land that is being converted is being repurposed and would continue to be available and contribute to active agricultural use. Therefore, the impact would be less than significant .	N/A	Yes
AG-2: Implementing PMAs under the Turlock Subbasin GSP could result in other changes in the existing environment that, because of their location or nature, indirectly result in the conversion of Special Designated Farmland to nonagricultural use or conversion of forestland to nonforest use.	Yes	The proposed project would not result in other changes in the existing environment that would indirectly result in the conversion of Special Designated Farmland to non-agricultural use or conversion of forestland to non-forest use because the proposed project area would continue to be in active agricultural use. Therefore, there would be no impact .	N/A	Yes
Air Quality				

Impact Statement from the GSP PEIR	Does the Impact Apply to the Proposed Project?	Explanation	Applicable Mitigation Measure	Is the Impact within the Scope of the GSP PEIR?
AIR-1: Implementing PMAs under the Turlock Subbasin GSP could result in conflict with or obstruct implementation of the applicable air quality plan.	Yes	The proposed project would involve the construction of a passive stormwater capture and infiltration system. Construction would involve minor excavation, earth disturbance, compacting and grading, and use of equipment. Construction would be short-term and temporary and would be consistent with the types of activities associated with agricultural practices currently occurring in the proposed project area. Therefore, the proposed project would not result in emission levels that would conflict with or obstruct implementation of the San Joaquin Valley Air Pollution Control District (SJVAPCD) air quality plans: 2022 Plan for the 2015 8-Hour Ozone Standard (SJVAPCD, 2022); 2023 Maintenance Plan and Redesignation Request for the Revoked 1-Hour Ozone Standard (SJVAPCD, 2023); and 2024 Plan for the 2012 PM2.5 Standards (SJVAPCD, 2024). Once constructed, air pollutant emitting activities (e.g., use of a diesel truck for routine monitoring and maintenance) would be similar to existing conditions. Therefore, impacts would be less than significant .	N/A	Yes
AIR-2: Implementing PMAs under the Turlock Subbasin GSP could result in a cumulatively considerable net increase of any criteria pollutant for which the region is non-attainment under an applicable federal or state ambient air quality standard.	Yes	The San Joaquin Valley Air Basin (SJVAB) is in nonattainment for the federal standards for ozone (8-hour) and PM2.5 and for the state standards of ozone (1-hour), ozone (8-hour), PM10, and PM2.5. The proposed project would involve the construction of a passive stormwater capture and infiltration system. Construction would be short-term and temporary, and once constructed, air pollutant emitting activities (e.g., use of a diesel truck for routine monitoring and maintenance) would be similar to existing conditions. However, excavation activities during construction and fallowed lands in general have the potential to result in criteria pollutant emissions that could exceed SJVAPCD's thresholds of significance (e.g., fugitive dust emissions of PM10 and PM2.5). This could create a significant impact on air quality. Mitigation Measure AIR-2 would require implementation of applicable best management practices (BMPs) to minimize dust from fallowed lands. Even though the scale of the proposed project is small, implementation of this mitigation measure would ensure that the proposed project would not result in a cumulatively considerable net increase of any air pollutant for which the region is non-attainment (e.g., PM10 and PM2.5). Therefore, impacts would be less than significant with mitigation .	Modified Mitigation Measure AIR-2: Minimize Dust from Fallowed Lands	Yes
AIR-3: Implementing PMAs under the Turlock Subbasin GSP could expose sensitive receptors to substantial pollutant concentrations.	Yes	The San Joaquin Valley Air Pollution Control District (SJVAPCD) defines sensitive receptors as "facilities that house or attract children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants," which include hospitals, schools, convalescent facilities, and residential areas (SJVAPCD 2015). The nearest sensitive receptor to the proposed project area is a rural residential property, located approximately 330 feet away. Construction would be short-term and temporary and would be consistent with the types of activities associated with agricultural practices currently occurring in the proposed project area. Therefore, substantial pollutant concentrations are not anticipated and therefore would not expose sensitive receptors. Once constructed, air pollutant emitting activities (e.g., use of a diesel truck for routine monitoring and maintenance) would be similar to existing conditions. Therefore, impacts would be less than significant .	N/A	Yes
AIR-4: Implementing PMAs under the Turlock Subbasin GSP could result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	No	The proposed project would not result in other emissions (e.g., odorous emissions) that would adversely affect a substantial number of people. There would be no impact .	N/A	Yes
Biological Resources				

Impact Statement from the GSP PEIR	Does the Impact Apply to the Proposed Project?	Explanation	Applicable Mitigation Measure	Is the Impact within the Scope of the GSP PEIR?
BIO-1: Implementing PMAs under the Turlock Subbasin GSP could result in a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.	Yes	The proposed project would involve the construction of a passive stormwater capture and infiltration system. Construction efforts would primarily involve earth disturbing activities including excavation and grading for the formation of the new stormwater pond. Once construction is completed, operations would be similar to existing conditions. In Spring 2026, a biological resources desktop search and reconnaissance-level field survey were conducted to identify the presence or potential presence of sensitive biological resources regulated by federal or state resource agencies, and the presence of habitat for special status species that should be considered during CEQA review. The records search found that several species known to occur in the vicinity of the proposed project area are regulated pursuant to federal and/or state endangered species laws or have been designated as Species of Special Concern by CDFW. As described in Appendix B, no special-status plants or wildlife were observed during the reconnaissance survey in the proposed project area. Furthermore, as described in Appendix B, the proposed project area was determined to not provide suitable habitat for any special-status listed wildlife. The proposed project area contained habitat suitable for nesting migratory birds. Project implementation would occur during nesting bird season, requiring a pre-construction survey for bird nests by a qualified biologist within seven (7) days of project construction to ensure compliance with the Migratory Bird Treaty Act (MBTA). With adherence to regulatory requirements in the MBTA, impacts would be less than significant.	N/A	Yes
BIO-2: Implementing PMAs under the Turlock Subbasin GSP could result in a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS.	Yes	A sensitive natural community is a biological community that is regionally rare, provides important habitat opportunities for wildlife, is structurally complex, or is in other ways of special concern to local, state, or federal agencies. As described in Appendix B, no sensitive natural communities are present in the proposed project area. While some aquatic habitat was observed along the agricultural drainage ditch, no riparian forest habitat was observed along these features. Therefore, impacts to sensitive natural communities would be less than significant.	N/A	Yes
BIO-3: Implementing PMAs under the Turlock Subbasin GSP could result in a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, and coastal) through direct removal, filling, hydrological interruption, or other means.	Yes	In spring 2026, a biological resources desktop search and reconnaissance-level field survey was conducted and included an assessment of potentially jurisdictional waters of the United States (U.S.) and/or of the state that occurs or has the potential to occur within or in the vicinity of the proposed project area. A formal aquatic resources delineation was not conducted as part of the reconnaissance survey. Review of the National Wetland Inventory (NWI), field survey, and aerial photos identified an agricultural drainage ditch, mapped on the NWI as “freshwater emergent wetland” is located just outside of the proposed project area (USFWS 2026). The proposed project would avoid impacts to the drainage ditch and would be located about 15 feet from the ditch. Given that the proposed project would disturb over 1 acre of land, the proposed project would be required to implement a Stormwater Pollution Prevention Plan (SWPPP), required under the Clean Water Act’s National Pollutant Discharge Elimination System (NPDES). The SWPPP would include runoff prevention measures and other best management practices (BMPs) that would prevent stormwater, erosion, or other pollutants from entering the drainage ditch. With adherence to SWPPP BMPs, the proposed project would have a minimal impact on the identified drainage ditch. Impacts would therefore be less than significant with mitigation.	Modified Mitigation Measure HYD-1: Implement Water Quality Protection Measures during Project Construction	Yes

Impact Statement from the GSP PEIR	Does the Impact Apply to the Proposed Project?	Explanation	Applicable Mitigation Measure	Is the Impact within the Scope of the GSP PEIR?
BIO-4: Implementing PMAs under the Turlock Subbasin GSP could interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.	Yes	As described in Appendix B, the proposed project area is located within existing farmland and bordered by agricultural operations with significant human activity. Project construction in the study areas would be short-term and temporary and would not have substantial interference with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife corridors. Therefore, impacts would be less than significant .	N/A	Yes
BIO-5: Implementing PMAs under the Turlock Subbasin GSP could conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	Yes	The proposed project involves the removal of approximately 9 acres of farmland on private agricultural land. Implementation of the proposed project would not conflict with any local policies or ordinances protecting biological resources. Impacts would be less than significant .	N/A	Yes
BIO-6: Implementing PMAs under the Turlock Subbasin GSP could conflict with the provisions of an adopted HCP, natural community conservation plan, or other approved local, regional, or state HCP.	No	The PG&E San Joaquin Valley Operation & Maintenance Habitat Conservation Plan (O&M HCP) overlaps the entire Turlock Subbasin, including the proposed project area. The activities described in the Turlock Subbasin GSP are not covered activities under the PG&E O&M HCP, which is applicable only to PG&E facilities. Therefore, the proposed project would not conflict with implementation of this HCP and therefore would be no impact .	N/A	Yes
Cultural Resources				
CUL-1: Implementing PMAs under the Turlock Subbasin GSP could cause a substantial adverse change in the significance of a historical resource as defined in State CEQA Guidelines Section 15064.5.	Yes	The proposed project would involve the repurposing of approximately 8 acres of irrigated agricultural land via the construction of a singular stormwater pond ranging from one to three feet in depth. This pond would be formed primarily through excavation and grading, capturing and retaining stormwater runoff from lands surrounding the project site. Once construction is completed, operations associated with the proposed project would be consistent with current operations. Removal of a historical or architectural resource as part of project construction would have a significant impact. In June 2026, a cultural resources assessment was conducted to evaluate the existing conditions of the proposed project area with regard to cultural resources. The purpose of the assessment was to inventory and evaluate the potential significance of cultural resources in the proposed project area, including architectural resources. As concluded in Appendix A, the proposed project area has low sensitivity for buried historic-era archeological resources. Therefore, impacts of the proposed project on historical and architectural resources would be less than significant.	N/A	Yes

Impact Statement from the GSP PEIR	Does the Impact Apply to the Proposed Project?	Explanation	Applicable Mitigation Measure	Is the Impact within the Scope of the GSP PEIR?
CUL-2: Implementing PMAs under the Turlock Subbasin GSP could cause a substantial adverse change in the significance of an archaeological resource pursuant to State CEQA Guidelines Section 15064.5.	Yes	The proposed project would repurpose approximately 8 acres of irrigated agricultural land via the construction of a singular stormwater pond ranging from one to three feet in depth. This pond would be formed primarily through earth disturbing activities (excavation and grading) to capture and retain stormwater runoff from land surrounding the project site. In June 2026 a cultural resources assessment was conducted to evaluate the existing conditions of the proposed project area with regard to cultural resources. The purpose of the assessment was to inventory and evaluate the potential significance of cultural resources in the proposed project area, including archeological resources. As concluded in Appendix A, the proposed project area has a low sensitivity for buried indigenous archaeological resources. However, ground disturbance in the proposed project area could potentially result in the inadvertent discovery of archeological resources. Implementation of Mitigation Measure CUL-3 requires the implementation of protection measures if cultural materials are inadvertently discovered during construction or operation of the proposed project. Protection measures include a stop work within 100 feet of a discovered resource. A qualified archeologist would be notified of the discovery. If the qualified archeologist determines that the resource is or is potentially indigenous in origin, the lead agency shall consult with culturally affiliated California Native American Tribes to assess the find and determine whether it is potentially a tribal cultural resource. The archeologist will also determine the proper treatment measures to protect the identified resource. With implementation of such measures, if required, impacts of the proposed project on archaeological resources would be less than significant with mitigation.	Mitigation Measure CUL-3: Implement Measures to Protect Archaeological Resources during Project Construction or Operation.	Yes
CUL-3: Implementing PMAs under the Turlock Subbasin GSP could disturb any human remains, including those interred outside of formal cemeteries.	Yes	The proposed project would repurpose approximately 8 acres of irrigated agricultural land via the construction of a singular stormwater pond ranging from one to three feet in depth. This pond would be formed primarily through earth disturbing activities (excavation and grading), capturing and retaining stormwater runoff from lands surrounding the project site. Once construction is completed, operations associated with the proposed project would be consistent with current operations. The proposed project would occur in a previously cultivated area; however, there could be unknown human remains, the disturbance of which would be a significant impact. Implementation of Mitigation Measure CUL-4 requires the implementation of measures to protect human remains if they are discovered during project construction and operation. Therefore, impacts would be less than significant with mitigation.	Mitigation Measure CUL-4: Implement Measures to Protect Human Remains during Project Construction or Operation.	Yes
Energy Resources				
ENE-1: Implementing PMAs under the Turlock Subbasin GSP could result in wasteful, inefficient, or unnecessary consumption of energy resources.	Yes	Construction and operation of the proposed project would involve direct energy use through the use of petroleum products and/or electricity to operate construction equipment (e.g., trucks, earthmoving equipment, and power tools). However, energy use would be limited and temporary and would not require the substantial long-term use of energy. Once constructed, operation of the proposed project would be consistent with existing conditions associated with current agricultural practices in the proposed project area. Therefore, impacts would be less than significant.	N/A	Yes
ENE-2: Implementing PMAs under the Turlock Subbasin GSP could conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	No	Energy use associated with construction activities would be limited and temporary and would not require the substantial long-term use of energy. Operations would be consistent with existing energy use associated with current agricultural practices occurring in the proposed project area. Therefore, the proposed project would not conflict with a state or local plan for renewable energy or energy efficiency. There would be no impact.	N/A	Yes
Geology, Soils, and Paleontological Resources				

Impact Statement from the GSP PEIR	Does the Impact Apply to the Proposed Project?	Explanation	Applicable Mitigation Measure	Is the Impact within the Scope of the GSP PEIR?
GEO-1: Implementing PMAs under the Turlock Subbasin GSP could directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.	Yes	The proposed project would involve the construction of a passive stormwater capture and infiltration system. There are no active faults located in the project area. While California is a seismically active state, the proposed project would not involve the construction of any permanent structures that would be subject to the effects of strong seismic ground shaking in the event of an earthquake. There would be no impact .	N/A	Yes
GEO-2: Implementing PMAs under the Turlock Subbasin GSP could directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction.	Yes	The proposed project would construct a passive stormwater capture and infiltration system. The Turlock Subbasin has areas of moderate liquefaction potential. However, the proposed project does not involve the construction of any permanent structures that would be subject to the effects of seismic-related ground failure, including liquefaction. Therefore, impacts would be less than significant.	N/A	Yes
GEO-3: Implementing PMAs under the Turlock Subbasin GSP could directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.	No	The proposed project is located on cultivated agricultural land and has a very low landslide potential as there are no steep slopes or hillsides. Additionally, the proposed project does not involve the construction of any permanent structures that would expose workers or residents to any adverse effects related to landslides. Therefore, impacts would be less than significant .	N/A	Yes
GEO-4: Implementing PMAs under the Turlock Subbasin GSP could result in substantial soil erosion or the loss of topsoil.	Yes	The proposed project would construct a passive stormwater capture and infiltration system. Construction efforts would primarily involve earth disturbing activities including excavation and grading for the new stormwater pond. These activities could result in soil erosion and the loss of topsoil but would eventually be repurposed with native and riparian vegetation that would stabilize the soil. Once construction is completed, operations would be similar to existing conditions. As discussed under impact HYD-1, because the proposed project would disturb one or more acres during construction, the project proponent would be subject to the requirements of the NPDES General Permit for Stormwater Discharge Associated with Construction and Land Disturbance Activities (Construction General Permit). The NPDES permit requires the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP), which would include Best Management Practices (BMPs) designed to control and reduce soil erosion. Therefore, impacts would be less than significant .	N/A	Yes
GEO-5: Implementing PMAs under the Turlock Subbasin GSP could result in new projects that could 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.	No	The proposed project does not involve the construction of any permanent structures that would be located on a geologic unit or soil that is unstable or would become unstable. Therefore, there would be no impact .	N/A	Yes
GEO-6: Implementing PMAs under the Turlock Subbasin GSP could result in new projects that could be located on expansive soils, creating substantial direct or indirect risks to life or property.	No	The proposed project is not located in an area with highly expansive soils exist (NRCS 2026). Additionally, the proposed project does not involve the construction of any permanent structures that could be located on any expansive soils. Therefore, there would be no impact .	N/A	Yes

Impact Statement from the GSP PEIR	Does the Impact Apply to the Proposed Project?	Explanation	Applicable Mitigation Measure	Is the Impact within the Scope of the GSP PEIR?
GEO-7: Implementing PMAs under the Turlock Subbasin GSP could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	Yes	The proposed project is located in a cultivated agricultural area. Construction would primarily involve earth disturbing activities including excavation and grading for the formation of the new stormwater pond. The proposed project area is located in an area with geological units with a high potential to contain significant paleontological resources. The Pleistocene-age Modesto and Riverbank formations are considered to have a high potential to contain significant paleontological resources. While the Modesto and Riverbank formations underly the proposed project area, excavation would not occur at depths of six or more feet (the typical depth where paleontological resources are encountered). Therefore, construction of the proposed project would not be anticipated to directly or indirectly destroy a unique paleontological resource or site, nor would it destroy a unique geologic feature. Therefore, impacts would be less than significant .	N/A	Yes
Greenhouse Gas Emissions				
GHG-1: Implementing PMAs under the Turlock Subbasin GSP could generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.	Yes	The proposed project would construct a passive stormwater capture and infiltration system. The use of construction equipment would be short-term and temporary and consistent with equipment types currently being used for routine agricultural practices. Once constructed, GHG emission generating activities (e.g., use of a diesel truck for routine maintenance) would be similar to existing conditions. Therefore, the proposed project would not generate greenhouse gas (GHG) emission levels that would have a significant impact on the environment; impacts would be less than significant .	N/A	Yes
GHG-2: Implementing PMAs under the Turlock Subbasin GSP could conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.	Yes	The applicable plan to the proposed project is the California Air Resources Board's (CARB's) 2022 Scoping Plan Update, which describes how the state plans to achieve carbon neutrality by 2045 through technologically feasible, cost-effective, and equity-focused strategies. As described above in Impact GHG-1 , the use of construction equipment would be short-term and temporary and would be consistent with the types of activities associated with agricultural practices currently occurring in the proposed project area. Once constructed, GHG emission generating activities (e.g., use of a diesel truck for routine maintenance) would be similar to existing conditions. Therefore, the proposed project would not generate greenhouse gas (GHG) emission levels that would have a significant impact on the environment. Therefore, the proposed project would not conflict with the applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Impacts would be less than significant .	N/A	Yes
Hazards and Hazardous Materials				
HAZ-1: Implementing PMAs under the Turlock Subbasin GSP could create a significant hazard to the public or the environment through the routine transport, use, disposal, or accidental release of hazardous materials.	Yes	Construction associated with the proposed project may involve the use of minor amounts of hazardous materials (e.g., for equipment maintenance). Any hazardous materials used during operation would be consistent with existing conditions. The use, transportation, and potential storage of hazardous materials would be done in accordance with all federal, state, and local laws. Therefore, impacts would be less than significant .	N/A	Yes
HAZ-2: Implementing PMAs under the Turlock Subbasin GSP could emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	No	There are no existing or proposed schools located within 0.25 miles of the proposed project area. Therefore, there would be no impact .	N/A	Yes

Impact Statement from the GSP PEIR	Does the Impact Apply to the Proposed Project?	Explanation	Applicable Mitigation Measure	Is the Impact within the Scope of the GSP PEIR?
HAZ-3: PMAs implemented under the Turlock Subbasin GSP could be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, could create a significant hazard to the public or the environment.	No	The proposed project would not be located on industrial or commercial property, and the proposed project is not located on a known hazardous materials site. Therefore, there would be no impact .	N/A	Yes
HAZ-4: PMAs implemented under the Turlock Subbasin GSP that could be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, could result in a safety hazard or excessive noise for people residing or working in the area.	No	The proposed project is located within two miles of Turlock Municipal Airport. However, there would be no construction of tall buildings or structures that would create a safety hazard for aircraft. No residences are proposed as part of the project. While project construction could potentially expose workers to noise related to the Turlock Municipal Airport, project construction would be temporary. Impacts would be less than significant .	N/A	Yes
HAZ-5: Implementing PMAs under the Turlock Subbasin GSP could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	No	Implementation of the proposed project would not result in any road closures and therefore would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. There would be no impact .	N/A	Yes
HAZ-6: Implementing PMAs under the Turlock Subbasin GSP could expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.	No	The proposed project is not located in an area with a high fire risk. Therefore, the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. There would be no impact .	N/A	Yes
Hydrology and Water Quality				
HYD-1: Implementing PMAs under the Turlock Subbasin GSP could result in a release of pollutants into surface water and/or groundwater, including in a flood zone as a result of project inundation, that could violate water quality standards or waste discharge requirements, substantially degrade water quality, or conflict with or obstruct implementation of a water quality control plan.	Yes	The proposed project would construct a passive stormwater capture and infiltration system. Construction efforts would include earth disturbance via excavation and grading. The use of equipment would involve minor amounts of pollutants that, if released, could degrade water quality. As discussed, an agricultural drainage ditch is located just outside of the project area. While the drainage ditch would not be disturbed during project construction, there could potentially be surface runoff from the project site during project construction that could potentially pollute the drainage ditch, resulting in a potentially significant impact. The proposed project would disturb one or more acres during construction and therefore the project proponent would be subject to the requirements of the NPDES General Permit for Stormwater Discharge Associated with Construction and Land Disturbance Activities (Construction General Permit). The NPDES permit requires the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP), which would include Best Management Practices (BMPs) designed to reduce pollutant release and to minimize surface runoff. Additionally, implementation of mitigation measure HYD-1 would implement water quality protection measures and BMPs that would reduce the potential for contaminated surface runoff. Therefore, impacts would be less than significant with mitigation.	Modified Mitigation Measure HYD-1: Implement Water Quality Protection Measures during Project Construction	Yes

Impact Statement from the GSP PEIR	Does the Impact Apply to the Proposed Project?	Explanation	Applicable Mitigation Measure	Is the Impact within the Scope of the GSP PEIR?
HYD-2: Implementing PMAs under the Turlock Subbasin GSP could result in substantial alteration of the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; result in flooding on- or off-site; 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; or impede or redirect flood flows.	Yes	The proposed project would construct a passive stormwater capture and infiltration system. These areas would be repurposed with a mix of dry and wet native vegetation, throughout the basin footprint providing both habitat structure and ground cover. Additionally, to protect against erosion, riparian vegetation would be established along the perimeter of the pond. Construction activities would alter the existing drainage patterns, but changes would be short-term and temporary. Once operational, the stormwater pond would reduce runoff, temporarily store stormwater and floodwater, and/or promote percolation to groundwater basin. The long-term effects of the proposed project on drainage patterns and flood flows would be expected to be beneficial or neutral, because the objective of the proposed project is to enhance regional groundwater sustainability, thereby improving on existing conditions. Therefore, while there would be changes in the existing drainage patterns associated with implementation of the proposed project, these changes would not result in substantial erosion or siltation on- or off-site, result in flooding on- or off-site, create or contribute runoff water that would exceed the existing stormwater drainage systems or provide substantial additional sources of polluted runoff, or impede or redirect flood flows. Therefore, impacts would be less than significant .	N/A	Yes
HYD-3: Implementing PMAs under the Turlock Subbasin GSP could result in substantial alteration of groundwater–surface water interactions.	Yes	As discussed, there is an agricultural drainage ditch located just outside of the proposed project area mapped as mapped on the NWI as “freshwater emergent wetland” is located just outside of the proposed project area. However, the proposed project would not interfere with these features or wetlands or any groundwater recharge associated with the agricultural drainage ditch. One of the objectives of the proposed project is to promote groundwater recharge by improving groundwater recharge. Impacts would be less than significant .	N/A	Yes
HYD-4: Implementing PMAs under the Turlock Subbasin GSP could result in conflicts with existing water rights (beneficial use and/or point of diversion).	No	The proposed project would construct a passive stormwater capture and infiltration system. The proposed project does not involve a change to existing water rights and therefore would not be expected to result in conflicts with existing water rights. There would be no impact .	N/A	Yes
HYD-5: Implementing PMAs under the Turlock Subbasin GSP could result in substantial alteration to groundwater conditions in adjacent basins.	No	The proposed project is not located in a portion of the Turlock Subbasin that is adjacent to another groundwater basin. Therefore, the proposed project would not be anticipated to alter groundwater conditions in an adjacent basin. There would be no impact .	N/A	Yes
Land Use and Planning				
LU-1: Implementing PMAs under the Turlock Subbasin GSP could conflict with a land use plan, policy, or regulation adopted to avoid or mitigate an environmental effect.	Yes	The proposed project would repurpose 8 acres of irrigated agricultural land via the construction of a singular stormwater pond ranging from one to three feet in depth. The project would not result in any land use conversions. Therefore, the impact would be less than significant .	N/A	Yes
LU-2: Implementing PMAs under the Turlock Subbasin GSP could physically divide an established community.	No	The proposed project is located on private property and would not result in any structures or infrastructure that would physically divide an established community. There would therefore be no impact .	N/A	Yes
Mineral Resources				

Impact Statement from the GSP PEIR	Does the Impact Apply to the Proposed Project?	Explanation	Applicable Mitigation Measure	Is the Impact within the Scope of the GSP PEIR?
MIN-1: Implementing PMAs under the Turlock Subbasin GSP would not 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 or locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.	No	The proposed project would be located on previously cultivated, private agricultural land and would not result in the loss of availability of known mineral resources. There would be no impact .	N/A	Yes
Noise				
NOI-1: Implementing PMAs under the Turlock Subbasin GSP could generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	Yes	The proposed project would involve construction that would use heavy equipment such as excavators and haul trucks. Construction of the proposed project would not require piledriving, nor would the project be located within 100 feet of a sensitive receptor such as a residence, school, or hospital; therefore, Mitigation Measure NOI-1 would not apply. Furthermore, the proposed project is located outside of the city limits of the City of Turlock, and therefore Mitigation Measure NOI-2 would not apply. Construction would occur during normal daylight hours and would be temporary. Noise levels both during construction and operation would be at similar levels to existing conditions. No wells would be installed as part of the proposed project. Therefore, Mitigation Measure NOI-3 would not apply. Impacts would be less than significant .	N/A	Yes
NOI-2: Implementing PMAs under the Turlock Subbasin GSP could generate excessive groundborne vibration or groundborne noise levels.	No	As discussed, heavy equipment would be utilized during construction; however, the equipment is the same as generally used for existing agricultural practices and therefore would generate similar noise and vibrations compared to existing conditions, would be temporary, and would occur during daylight hours. Therefore, impacts would be less than significant .	N/A	Yes
Population and Housing				
POP-1: Implementing PMAs under the Turlock Subbasin GSP could induce substantial unplanned population growth in the area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).	No	The proposed project would not result in additional housing or work opportunities that would create population growth in the area. There would be no impact .	N/A	Yes
POP-2: Implementing PMAs under the Turlock Subbasin GSP could result in the displacement of substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.	No	The proposed project is located on agricultural land and would not result in the displacement of housing. There would be no impact .	N/A	Yes
Recreation				
REC-1: Implementing PMAs under the Turlock Subbasin GSP could 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.	No	The proposed project would be located on previously cultivated, private agricultural land and therefore would not alter the use of existing neighborhood and regional parks or other recreational facilities. There would be no impact .	N/A	Yes

Impact Statement from the GSP PEIR	Does the Impact Apply to the Proposed Project?	Explanation	Applicable Mitigation Measure	Is the Impact within the Scope of the GSP PEIR?
REC-2: Implementing PMAs under the Turlock Subbasin GSP could include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.	No	The proposed project does not involve recreational facilities or require the construction or expansion of recreational facilities. There would be no impact .	N/A	Yes
Transportation				
TRANS-1: Implementing PMAs under the Turlock Subbasin GSP could conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	Yes	The proposed project area would be accessed using existing paved and unpaved roads. Staging areas would occur adjacent to the proposed project area and would be located on private property. Equipment would primarily use private ranch roads during construction. While the proposed project would temporarily require the use of construction equipment that may use public roads, the proposed project would be temporary and would be minimal in scale. Additionally, equipment would be similar to those used in the area for agricultural operations. Therefore, construction and operation activities would not significantly increase traffic on roads surrounding the proposed project area compared to existing conditions. There would be no road closures associated with the proposed project; thus, the proposed project would also not conflict with the existing circulation system. Impacts would be less than significant .	N/A	Yes
TRANS-2: Implementing PMAs under the Turlock Subbasin GSP could conflict with or be inconsistent with State CEQA Guidelines Section 15064.3(b).	Yes	The proposed project may involve a nominal increase in vehicle miles traveled during project construction, however, most of the equipment and materials needed for construction would be sourced on-site (e.g., excavator for the creation of the new stormwater pond). Once constructed, operations would be similar to existing conditions. Therefore, implementation of the proposed project would not conflict with or be inconsistent with State CEQA Guidelines Section 15064.3(b). Impacts would be less than significant .	N/A	Yes
TRANS-3: Implementing PMAs under the Turlock Subbasin GSP could substantially increase hazards due to a geometric design feature or incompatible uses.	No	The proposed project involves repurposing approximately 8 acres of irrigated agricultural land via the construction of a singular stormwater pond ranging from one to three feet in depth. The stormwater pond would be constructed entirely on private property and would not impact any public roads; therefore, there would be no impact .	N/A	Yes
TRANS-4: Implementing PMAs under the Turlock Subbasin GSP could result in inadequate emergency access.	Yes	The proposed project is located on private agricultural land. Construction and operation of the proposed project would not result in any road closures or increase traffic such that it would result in inadequate emergency access. Therefore, impacts would be less than significant .	N/A	Yes
Tribal Cultural Resources				

Impact Statement from the GSP PEIR	Does the Impact Apply to the Proposed Project?	Explanation	Applicable Mitigation Measure	Is the Impact within the Scope of the GSP PEIR?
TCR-1: Implementing PMAs under the Turlock Subbasin GSP could cause a substantial adverse change in the significance of a tribal cultural resource, as defined in PRC Section 21074.	Yes	Tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are listed, or determined to be eligible for listing, in the national, state, or local register of historical resources. The proposed project would require the construction of a stormwater basin. Construction would involve earth disturbance, grading, and compaction to construct the basin. Once construction is completed, operations associated with the proposed project would be consistent with current operations. Construction activities could result in adverse changes in the significance of a tribal cultural resource. This would have a potentially significant impact. In June 2026, a cultural resources assessment was conducted to evaluate the existing conditions of the proposed project area with regard to cultural resources. The purpose of the assessment was to inventory and evaluate the potential significance of cultural resources in the proposed project area, including archeological resources. As concluded in Appendix A, the proposed project area has a low sensitivity for buried indigenous archaeological resources. If archeological resources are discovered, implementation of Mitigation Measure CUL-3 would require measures to protect those resources during construction and operation. Implementation of Mitigation Measure CUL-4 would require the implementation of measures to protect human remains if they are discovered during project construction and operation. Therefore, impacts on tribal cultural resources from implementation of the proposed project would be less than significant with mitigation.	Mitigation Measure: Implement Mitigation Measure CUL-3. Mitigation Measure: Implement Mitigation Measure CUL-4.	Yes
Utilities and Service Systems and Public Services				
UTIL-1: Implementing PMAs under the Turlock Subbasin GSP could result in the construction or relocation of new water or expanded water, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.	No	The proposed project would construct a passive stormwater capture and infiltration system. The proposed project would not result in the construction or relocation of new water or expanded water, stormwater drainage, electric power, natural gas, or telecommunication facilities. Therefore, there would be no impact .	N/A	Yes
UTIL-2: Implementing PMAs under the Turlock Subbasin GSP could result in a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs and fail to comply with federal, state, and local statutes and regulations related to solid waste.	No	The proposed project would not create solid waste that would need to be disposed of in a landfill. Excavated soil would be dispersed across the remainder of the owner's property. Therefore, the proposed project would not produce waste that would result in a landfill with insufficient permitted capacity to accommodate solid waste disposal needs. There would be no impact .	N/A	Yes
UTIL-3: Implementing PMAs under the Turlock Subbasin GSP could result in substantial adverse physical impacts associated with construction of new or modified fire protection, police protection, schools, and other public facilities.	No	The proposed project would not result in substantial adverse physical impacts associated with construction of new or modified fire protection, police protection, schools, and other public facilities, as none are proposed as part of the project, and the proposed project would not result in population growth. There would be no impact .	N/A	Yes
Wildfire				
WILD-1: Implementing PMAs under the Turlock Subbasin GSP could substantially impair an adopted emergency response plan or emergency evacuation plan.	Yes	The proposed project is located on private agricultural land. Construction and operation of the proposed project would not result in any road closures or increase traffic such that it would impair an adopted emergency response plan or emergency evacuation plan. Therefore, impacts would be less than significant .	N/A	Yes

Impact Statement from the GSP PEIR	Does the Impact Apply to the Proposed Project?	Explanation	Applicable Mitigation Measure	Is the Impact within the Scope of the GSP PEIR?
WILD-2: Implementing PMAs under the Turlock Subbasin GSP could, 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.	No	The proposed project is not located in an area of very high fire hazard severity (CalFIRE 2026). Additionally, the proposed project would not result in the construction of any occupied structures. The proposed project area is a fallowed agricultural field with minimal changes in slope or sources of fuel. The proposed project would not increase wildfire risk through changes in slope or the addition of fuel, nor would the proposed project introduce additional occupants or residents to a fire hazard severity zone. Therefore, there would be no impact .	N/A	Yes
WILD-3: Implementing PMAs under the Turlock Subbasin GSP could 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.	Yes	The proposed project involves the construction of a new stormwater pond, the installation and maintenance of which would not introduce any additional infrastructure such as utility lines, fuel brakes, etc. As discussed, the proposed project would not be expected to exacerbate fire risk through the alteration of project area slope, additional fuel sources, or through the introduction of potential ignition sources. Therefore, impacts would be less than significant .	N/A	Yes
WILD-4: Implementing PMAs under the Turlock Subbasin GSP could 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.	Yes	The proposed project is located on previously cultivated agricultural land and has a very low landslide potential as there are no steep slopes or hillsides. The proposed project is also not located in an area of very high fire hazard severity (CalFIRE 2026). While construction of the small water retention structures would change the drainage patterns of the site, these changes would collect water and promote percolation into the groundwater system. Therefore, the proposed project would not expose people or structures to significant risks and impacts would be less than significant .	N/A	Yes

Cumulative Impacts

Cumulative impacts of PMAs covered in the GSP PEIR are evaluated in Chapter 4, *Cumulative Impacts*. In this discussion, the geographic area reviewed for projects with related impacts that could contribute to a cumulatively significant impact (i.e., “related impacts”) is outlined in Section 4.3, *Geographic Scope of the Effects of the PMAs*. The cumulative scenario for the proposed project is covered by the same geographic area because the proposed project is located within the Turlock Subbasin.

The GSP PEIR used a list approach to evaluate potential cumulative impacts of related projects, as outlined in Section 4.5, *Methodology and Assumptions for the Cumulative Impacts Analysis*. The GSP PEIR analyzed the incremental effects of past, present, and reasonably foreseeable projects and PMAs in the Turlock Subbasin. In Section 4.6, *Cumulative Impact Analysis*, the GSP PEIR found that cumulative impacts from related projects and PMAs associated with aesthetics, energy, geology, soils, and paleontological resources, hazards and hazardous materials, hydrology and water quality, mineral resources, noise, population and housing, recreation, transportation, public services, and wildfire would be less than significant, regardless of location. Cumulative impacts of related projects and PMAs associated with agricultural resources, air quality, biological resources, cultural resources, greenhouse gas emissions, land use and planning, tribal cultural resources, and utilities were found to be significant and unavoidable due to the unknown extent and location of PMAs implemented under the Turlock Subbasin GSP.

As part of achieving groundwater sustainability in the Turlock Subbasin, the ETSGSA and WTSGSA are constructing or pursuing funding opportunities for various urban, municipal, and agricultural water supply projects and PMAs described in the GSP PEIR. Additional projects and PMAs in the Turlock Subbasin include but are not limited to agricultural land repurposing, habitat restoration, and floodplain restoration. Construction and operations associated with PMAs described in the GSP PEIR and the additional project types could require construction of new features, changes in groundwater use, and routine monitoring in the vicinity of the proposed project. For example, the Agricultural Recharge Project discussed in Table 2-2 of Chapter 2, *Description of the Types of Projects and Management Actions to be Implemented under the Turlock Subbasin Groundwater Sustainability Plan*, in the GSP PEIR would include similar groundwater recharge components to the proposed project, such as basins or tile drain arrays. The Agricultural Recharge Project requires similar construction, operation, and maintenance activities, such as earthwork, construction of water features, and monitoring. Like the proposed project, these projects would be required to adhere to applicable local, state and federal regulations, as well as implement applicable mitigation measures to avoid environmental impacts.

As presented in Table 1, implementation of the proposed project would result in potential impacts to air quality, biological resources, cultural resources, and hydrology and water quality. The proposed project could therefore make a considerable contribution to significant cumulative effects of the related projects evaluated in Section 4.6 of the GSP PEIR. Mitigation measures AIR-2, BIO-3, CUL-3, CUL-4, and HYD-1 would be applied to the proposed project and require management of dust from fallowed fields, avoidance of aquatic resources, implementation of a SWPPP, and protection of cultural resources in the case of an incidental discovery. These mitigation measures reduce the potential impacts of the proposed project such that the remaining contribution (after mitigation) to significant cumulative impacts would be less than cumulatively considerable. Cumulative impacts would therefore be **less than significant**.

Groundwater Sustainability Benefits of the Proposed Project

The proposed project would benefit groundwater sustainability in the Turlock Subbasin through groundwater demand reduction and direct groundwater recharge. Removal of these orchards (previously irrigated with groundwater) would reduce groundwater demand for the subject property. Construction of water retention structures would promote deep percolation to the groundwater system. In accordance with ETSGSA's Rules and Regulations, the reduced groundwater demand achieved through this MLRP project would not be available for other uses and users within the Turlock Subbasin but rather would comprise a net reduction in demand. As discussed in Section 2.2.1, *Projects Identified*, projects covered in the GSP PEIR would primarily support groundwater recharge (direct or in-lieu). Additionally, projects covered in the GSP PEIR are intended to offer additional benefits such as habitat enhancement, water quality improvement, and improved water supply resilience. Given that the proposed project would create direct and in-lieu groundwater recharge and would also offer habitat enhancement through the varied water levels in the stormwater pond, the proposed project would be consistent with the projects covered under the GSP PEIR.

Environmental Determination

The ETSGSA finds that the proposed project meets the definition of a PMA as defined in the GSP PEIR and that all of the effects of the proposed project have been covered in the GSP PEIR. Mitigation measures from the GSP PEIR that are applicable to the proposed project are presented in **Appendix C**, *Mitigation Monitoring and Reporting Program*.

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Appendix A

Cultural Resources Assessment



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memorandum

date June 15, 2026

to Mike Tietze, Formation Environmental, LLC

cc Emily Kline, ESA; Kelley Sterle ESA

from Heidi Koenig, M.A. RPA – ESA Cultural Resources Group

subject 2026 Cultural Resources Assessment for Multibenefit Agricultural Land Repurposing Plan Projects in the Turlock Subbasin, Merced and Stanislaus Counties, California

Environmental Science Associates (ESA) prepared this memorandum for the East Turlock Subbasin Groundwater Sustainability Agency (ETSGSA) to document the methods and results of a cultural resources assessment completed for the Multibenefit Agricultural Land Repurposing Plan Projects (Projects) in Merced and Stanislaus Counties, California. The Projects comprise eight separate potential projects; these locations comprise the Study Area.

This document records the existing conditions of the Study Area with regard to cultural resources. Work consisted of a records search of the California Historical Resources Information System (CHRIS); research on existing cultural resources literature; a review of historic maps and aerial imagery; a desktop geoarchaeological sensitivity analysis; and recommendations for future cultural resources studies for the Study Area. All maps are provided in **Attachment A**.

Preparer's Qualifications

ESA Archaeologist Heidi Koenig, MA, conducted this analysis. Koenig is on the Register of Professional Archaeologists, meets the *U.S. Secretary of the Interior's Historic Preservation Professional Qualification Standards* for Archeology (62 Federal Register 33708–33723), and meets the Society for California Archaeology standards for Principal Investigator.

Study Area

The Study Area is in Merced and Stanislaus Counties, California, and consists of the areas within which the eight Projects would potentially occur. **Table 1** provides locational details for the Study Area.

TABLE 1. PROJECT LOCATIONS AND TYPES

No.	Project Name	Project Type	Acres
1	Asai Pond	Stormwater pond	
6	Mast Basin	Construction Basin	1.0

No.	Project Name	Project Type	Acres
8	Johnson Brothers	Extended MLRP Fallowing	37.1
9	Naraghi (CB)	Construction Basin	15.5
13	EliJen	Extended MLRP Fallowing	30.2
15	Espinosa	Construction Basin	5.0
17	Burroughs	Construction Basin	9.0

Background Research

ESA requested that staff of the Central California Information Center (CCIC), the CHRIS repository covering the Study Area and vicinity, conduct a cultural resources records search for the Study Area and areas within 0.25-mile; ESA received the CCIC results on April 30, 2026 (CCIC File No. 13733IN). The purpose of the records search was to: (1) determine whether known cultural resources have been recorded within or in the vicinity of the Study Area; (2) assess the likelihood for unrecorded cultural resources to be present based on historical references and the distribution of nearby sites; and (3) develop a context for the identification and preliminary evaluation of cultural resources. ESA also reviewed historic maps, aerial imagery, and geology/soils maps for each Project location. **Table 2** provides the details of the results of the background research.

TABLE 2. RESULTS OF THE BACKGROUND RESEARCH

No.	Name	CHRIS Search Results	Map/Aerial Review	Surficial Geology	Primary Soils Type (age)
1	Asai Pond	No documented cultural resources	Aerials 1946-present: Continuous agricultural Topographic 1916-2021: No structures; near intermittent stream	Quaternary alluvium and marine deposits	Honcut Silt Loam (Holocene)
6	Mast Basin	No documented cultural resources	Aerials 1946-present: Continuous agricultural Topographic 1916-2021: No structures	Quaternary alluvium and marine deposits	Madera Sandy Loam (Holocene)
8	Johnson Brothers	No documented cultural resources	Aerials 1946-present: Vacant 1946-1958; Continuous agriculture 1961-present Topographic: 1916-2021 No structures; adjacent to intermittent stream	Quaternary alluvium and marine deposits	Madera, Whitney, Rocklin Sandy Loam (Holocene)
9	Naraghi (CB)	No documented cultural resources	Aerials 1957-present: Vacant 1957-1967; Continuous agriculture 1984-present Topographic: 1916-2021 No structures; adjacent to confluence of intermittent streams	Quaternary alluvium and marine deposits	Madra, Greenfield Sandy Loam (Holocene)
13	EliJen	No documented cultural resources	Aerials 1957-present: Continuous agricultural Topographic: 1916-2021 No structures; steep topography	Quaternary alluvium and marine deposits	Whitney Sandy Loam (Holocene)

No.	Name	CHRIS Search Results	Map/Aerial Review	Surficial Geology	Primary Soils Type (age)
15	Espinosa	No documented cultural resources	Aerials 1946-present: Continuous agricultural Topographic 1916-2021: No structures	Quaternary alluvium and marine deposits	Dehli Loamy Sand (Holocene)
17	Burroughs	No documented cultural resources	Aerials 1940-present: Continuous agricultural, adjacent to Dry Creek Topographic 1917-2021: No structures	Quaternary alluvium and marine deposits	Honcut Silt Loam (Holocene)

Sensitivity Assessment

Indigenous Resources

As presented above, the surficial geology and soils mapped in the Study Area is Quaternary-age alluvium. Based on the age of the surficial geology and soils in the Study Area, there is the potential for buried pre-contact archaeological deposits in undisturbed portions of the Study Area, as these soils could have buried potential habitation surfaces from the late Pleistocene through Holocene (Meyer and Rosenthal, 2008). Historic-era and modern improvement activities, specifically agricultural activities, have disturbed virtually the entire Study Area. These activities have reduced the potential for intact shallow buried indigenous deposits and surficial indigenous archaeological deposits. Also, indigenous surficial resources that may have been present prior to historic-era and modern use of the Study Area could have been covered, thus capped, by the historic-era and modern ground-disturbing activities in the Study Area. However, these same activities may also have damaged or destroyed any such indigenous surficial resources.

In addition to soil and geology, other criteria used to measure archaeological sensitivity includes the distance to perennial water sources as well as the historic terrain and slope. Based on this assessment, this study concludes that Projects **1, 6, 13, and 15** have a low sensitivity for surface and buried indigenous archaeological resources and **Projects 8, 9, and 17** have a moderate sensitivity for surface buried indigenous archaeological resources.

Historic-era Resources

Historic-era agricultural activities appear to have occurred throughout the Study Area since at least the early 20th century. Some sparse settlement and likely agricultural-related building construction also occurred throughout the Study Area from the early 20th century. Though such construction and use may have resulted in buried archaeological deposits (e.g., foundations, artifact deposits), the potential for such resources to be significant is fairly low, as they would likely be associated with common settlement and agricultural practices of the time. Therefore, this study concludes that the Study Area has a low sensitivity for buried historic-era archaeological resources.

Summary

This study concludes that there are no previously recorded cultural resources in the Study Area, though no previous cultural resources studies that included field surveys appear to have been conducted in the Study

Area. ESA's archaeological sensitivity analysis concludes that the Study Area has some degree of sensitivity for surface and buried indigenous archaeological resources. With other environmental factors such as distance to natural water sources and slope taken into consideration, **Projects 8, 9, and 17** have a higher sensitivity for buried archaeological resources. At Project 8, project plans include reseeded with no tilling. Ground disturbance is planned for Projects 9 and 17.

Based on a review of the environmental context, distance to former and/or current drainage features that would have been amendable for indigenous populations, and project understanding, ESA recommends a pedestrian survey for **Projects 9 and 17**, according to the requirements of the Turlock Subbasin Groundwater Sustainability Plan (GSP) Program Environmental Impact Report (PEIR) Mitigation Measure CUL-2. The purpose of the pedestrian survey is to verify the presence/absence of cultural resources. Based on the existing information, a subsurface survey to test for buried archaeological resources does not appear necessary at this time. If, based on the pedestrian survey results, a subsurface survey is deemed necessary, ESA will provide documentation for this assessment in the survey results memorandum as well as any additional recommendations regarding Project implementation.

In addition, the requirements of Assembly Bill 52 and the GSP PEIR Mitigation Measure CUL-2 include outreach to the California Native American Heritage Commission and California Native American tribes who may be culturally and geographically affiliated with the Study Area to determine if there are any cultural or tribal cultural resources of which such tribes may be aware that could be impacted by implementation of the Projects. ESA recommends outreach and engagement with tribes regarding the Projects.

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Appendix B

Biological Resources Reconnaissance Survey Report



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memorandum

date July 28, 2026

to Mike Tietze, General Manager, East Turlock Subbasin Groundwater Sustainability Agency

from Angelica Oregel, Project Biologist, ESA

subject Biological Resources Reconnaissance Survey Memorandum for Multibenefit Agricultural Land Repurposing Plan Projects in the Turlock Subbasin, Merced and Stanislaus Counties, California

Introduction

Environmental Science Associates (ESA) prepared this memorandum for the East Turlock Subbasin Groundwater Sustainability Agency to document the methods and results of a biological resources reconnaissance survey completed for the Multibenefit Agricultural Land Repurposing Plan Projects (Project[s]) in Merced and Stanislaus counties, California. Broadly, land repurposing projects may involve fallowing and removing orchard trees, constructing retention basins and ponds, and rewilding previously irrigated farmland with native vegetation. The purpose of this memorandum is to document information on current site conditions and identify biological resources with potential to occur within the proposed Project area, which includes the footprint for three Project sites (Asai, EliJen, and Espinosa) and a 250-foot buffer. Additionally, this report provides information on potential biological constraints associated with land repurposing.

Proposed Project Area

The proposed Project area is defined as the proposed Project area and surrounding vicinity associated with each of the three Projects.

- **001 – Asai** – This proposed Project would repurpose up to approximately 8 acres of irrigated agricultural land through the construction of a passive stormwater capture and infiltration pond system. An agricultural drainage ditch is located approximately 15 feet from the proposed basin. The general land use surrounding the proposed Project area consists of a sweet potato ranch and other agricultural land (**Attachment E, Photo 1 and Photo 2**).
- **0013 – EliJen** – This proposed Project would repurpose approximately 34.7 acres of the Project property through two land repurposing practices: (1) extended multibenefit fallowing and (2) a constructed basin. Under the proposed Project, 34.7 acres of previously irrigated orchard would be fallowed and replaced with multibenefit cover crops. An existing 1.4-acre recharge basin would be used for groundwater recharge under the proposed Project. The general land use surrounding the proposed Project primarily consists of almond orchards (**Attachment E, Photo 3 and Photo 4**).

- **0015 – Espinosa** – This proposed Project area includes a 5-acre basin constructed in a fallowed orchard. The basin would be connected to the Highline Canal by a new below-ground 24-inch pipeline constructed through almond orchards along a ranch road, passing at one point beneath a public road (Cortez Avenue) The surrounding land use consists of almond and walnut orchards (**Attachment E, Photo 11**).

Biological Resources Assessment

Methods

ESA Biologists Jessica Orsolini and Missy Zepeda, and ESA Environmental Scientist Emily Kline surveyed for and evaluated biological resources within the proposed Project area, focusing on identifying the presence or potential presence of sensitive biological resources regulated by federal or state resource agencies, and the presence of habitat for special-status species that should be considered during California Environmental Quality Act (CEQA) review. The information and analysis presented in this section focus on special-status species,¹ wildlife habitat, vegetation communities, and potentially jurisdictional waters of the United States and/or the state that occur or have the potential to occur within or in the vicinity of the three proposed Project areas. The results of the assessment presented in this section are based on literature review and database queries as well as a reconnaissance-level field survey conducted within each proposed Project area.

Data sources reviewed prior to perform the reconnaissance biological survey for this evaluation included the following:

- U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) list (Project code: 2025-0046149) (USFWS 2026a) (see **Attachment A**).
- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) (CDFW 2026) (see **Attachment B**).
- California Native Plant Society (CNPS) Inventory of Rare Plants and Endangered Plants known to occur within the Project area in U.S. Geological Survey 7.5-minute topographic quadrangle codes Montpelier (3712056); Turlock Lake (3712055); Turlock (3712047); Cressey (3712046); and Winton (3712045) (CNPS 2026) (see **Attachment C**).

On Thursday, May 28, 2026, and Friday, May 29, 2026, a pedestrian biological resources reconnaissance survey was conducted at each proposed Project site by ESA biologists. The weather conditions were overcast and consisted of a maximum temperature of 72 degrees Fahrenheit (°F), a minimum temperature of 55°F, and a maximum wind speed of 8 miles per hour. Brief periods of intense precipitation (a total of 0.15 inches) occurred Thursday, May 28th. The reconnaissance survey consisted of traveling throughout the Project areas and along the proposed access roads. The survey also consisted of surveying areas within 250 feet of each Project area with 10x42 binoculars. At the time of the reconnaissance survey, the proposed Project areas were being used as an agricultural orchard, irrigated agricultural land, and recently cleared, fallowed land. All surrounding areas were also agricultural properties.

¹ Species that are protected pursuant to federal or state endangered species laws or have been designated as Species of Special Concern by CDFW, or species that are not included on any agency listing but meet the definition of rare, endangered, or threatened species of the CEQA Guidelines Section 15380(b), are collectively referred to as “special-status species.”

Results

Several species known to occur in the vicinity of the Project areas are regulated pursuant to federal and/or state endangered species laws or have been designated as Species of Special Concern by CDFW. In addition, Section 15380(b) of the *CEQA Guidelines* provides a definition of rare, endangered, or threatened species. **Attachment D** contains a map of CNDDB special-status species occurrences within 5 miles of each of the proposed Project areas.

Special-Status Plants

All Proposed Project Areas

Special-status plants known to occur in the vicinity of the proposed Project areas based on the query of the CNPS inventory are listed in **Attachment C**. **No special-status plants were observed during the reconnaissance-level survey at the Asai, EliJen, and Espinosa proposed Project sites.**

The northeastern corner of the EliJen site is located within final designated critical habitat for Hoover's spurge (*Chamaesyce hooveri*), Colusa grass (*Neostapfia colusana*), and hairy Orcutt grass (*Orcuttia pilosa*) (see **Attachment A**) (USFWS 2026a). The proposed Project area has been significantly disturbed due to regular weed management and orchard activities. None of the identified special-status plant species have the potential to occur in the Project areas due to this disturbance.

Special-Status Wildlife

All Proposed Project Areas

Based on the field and desktop review, four special-status wildlife species were determined to have the potential to occur within or adjacent to the proposed Project areas (**Table 1**). **Attachment G** contains a table of species reviewed for potential to occur in the proposed Project areas. The species determined to have some potential to occur and their corresponding listings include the following:

TABLE 1
SPECIAL-STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR IN THE PROPOSED PROJECT AREAS

Project Area	Species	Status
001 – Asai; 0013 – EliJen; 0015 – Espinosa	Swainson's hawk <i>Buteo swainsoni</i>	State-listed
001 – Asai; 0013 – EliJen	Burrowing owl <i>Athene cunicularia</i>	California species of special concern; state candidate
0013 – EliJen	Valley elderberry longhorn beetle <i>Desmoceris californicus dimorphus</i>	Federally listed
	Western spadefoot <i>Spea hammondi</i>	State-listed; federally proposed

Source: Data compiled by Environmental Science Associates in 2026.

Critical habitat for vernal pool fairy shrimp (*Branchinecta lynchi*) is mapped on the northeastern corner of the EliJen site; however, the site has been heavily disturbed for agricultural activities for decades and does not contain vernal pools or other suitable habitat for these species (**Attachment A**) (USFWS 2026a). No vernal pool

branchiopods were observed during the reconnaissance survey. No critical habitat features were identified at the Project site. Given the extent of ongoing disturbance and the lack of necessary habitat characteristics, vernal pool fairy shrimp and vernal pool tadpole shrimp do not have the potential to occur.

The most recent observation for special-status species within 5 miles of the proposed Project areas include California tiger salamander (CTS), which was recorded in 2003; western spadefoot (WSFT), which was recorded in 2018; Swainson's hawk (SWHA), which was recorded in 2007; burrowing owl (BUOW), which was recorded northwest and southeast as recently as 2017; vernal pool fairy shrimp, which was recorded to have an occurrence in 1986; and vernal pool tadpole shrimp, which was recorded to have an occurrence in 1986. A CNDDDB record for CTS near the EliJen site includes an observation of two individuals observed along Lake Road in November 2003 within 1 mile of EliJen, presumed to be migrating to or from a vernal pool. Although CNDDDB considers this occurrence extant, the site condition/population viability is considered of poor quality. No suitable vernal pools for vernal pool fairy shrimp or vernal pool tadpole shrimp were observed at any of the Projects; the 1986 CNDDDB records near EliJen are also possibly extirpated due to agricultural conversion that reduced vernal pool habitat since 1998. **No federal or state-listed wildlife species were observed during the reconnaissance survey at any of the proposed Project areas.**

During the reconnaissance-level survey, marginally suitable habitat was observed for the following sensitive species: valley elderberry longhorn beetle, WSFT, BUOW, and SWHA. Although no habitat is present for CTS, vernal pool fairy shrimp, and vernal pool tadpole shrimp at the proposed Project sites, a discussion is included below due to these species' sensitivities, federal listing status, and records in the Project vicinities.

California Tiger Salamander

Minimal small mammal burrows were observed on-site as suitable habitat for CTS at Asai and Espinosa. Although multiple small mammal burrows were observed around the EliJen site, this site is subject to ongoing disturbance from agricultural activity reducing burrow suitability (**Attachment E, Photo 5 and Photo 6**). A 1973 CTS record is approximately 8.5 miles northeast from the Asai site and approximately 9.4 miles east from the Espinosa site. The record describes that the species is possibly extirpated due to the conversion of the site for agricultural purposes. This would make CTS unlikely at the Asai and Espinosa site, both of which are also surrounded by Highland Canal, which is impassible for CTS. A 2003 CTS CNDDDB record describes two individuals being observed on Lake Road less than 1 mile east from the EliJen site. The existing basin at the EliJen site is low quality breeding habitat for CTS. When this feature was fully inundated, it was surrounded by orchard habitat minimizing the potential for CTS to be able to reach the pond and use adjacent uplands during summer months. In recent years, water levels have been low and inconsistent, reducing the suitability as breeding habitat, along with disking activities disturbing the adjacent uplands. Thus, CTS have a low potential to occur within the proposed EliJen Project area.

Swainson's Hawk

Suitable nesting trees and utility towers are present at all three proposed Project areas, including within the 250-foot buffer; however, no SWHA were observed at the time of the survey. At Asai, the suitable nesting trees lie outside of the Project area but within the 250-foot buffer at the northern canal. Suitable nesting trees at EliJen primarily consist of a stand of eucalyptus just north of the existing basin and around the house and structures south of the existing basin. Other suitable nesting trees within the 250-foot buffer consist of trees in the surrounding orchards (**Attachment E, Photo 7**). Finally, Espinosa is an orchard with nesting trees, and the 250-foot buffer is surrounded by orchards, which could also provide suitable nesting trees (**Attachment E, Photo 9**).

Much of the proposed Project areas consist of orchards, dirt roads, and processing buildings. The vegetation along the orchard alleys at each of the proposed Project areas are managed and maintained regularly making it difficult for nests to be built successfully. A CNDDDB record from 1994, occurrence number 2443, describes two adult SWHA observed in cottonwood trees. Although the record is 32 years old, the species is presumed extant and known to inhabit the area seasonally. This occurrence location is 4.5 miles from Asai, 8.5 miles from EliJen, and 5 miles from Espinosa. No nesting activity at this location has been recorded for many years, and the nest site is considered threatened by recreational use from humans according to the CNDDDB record. In summary, it is possible for SWHA to occur within the 250-foot buffer of Asai, EliJen, and the proposed Project area of Espinosa.

Western Spadefoot

Minimal small mammal burrows were observed on-site as suitable habitat for WSFT at Asai and Espinosa. There were suitable small mammal burrows and a saturated basin observed at EliJen that could provide habitat for WSFT (**Attachment E, Photo 6**). Two WSFT CNDDDB records from 1973 are 6 and 7 miles northeast from the Asai and Espinosa proposed Project sites, respectively. CNDDDB occurrence number 642 is possibly extirpated due to land use changes and loss of breeding habitat while the 647 record is presumed extant; however, the description indicates it could be extirpated due to the same reasons. CNDDDB occurrence number 53 is less than 1 mile from the EliJen site, and although the last observation recorded was in 1991, the basin still provides breeding habitat for the species, and the surrounding areas provide suitable small mammal burrow habitat for the species. During the site visit, other amphibian species, California tree frog (*Pseudacris cadaverine*) and western toad (*Anaxyrus boreas*), were observed within the basin (**Attachment E, Photo 11**). In summary, it is possible for WSFT to occur within the EliJen proposed Project area.

Burrowing Owl

No white wash, prey remains, or sign of BUOW was observed at any proposed Project sites. The two closest CNDDDB records to Asai and Espinosa are each approximately 15 miles southwest (occurrence number 2012 and 2013) and northwest (occurrence number 283) from either site, respectively. The aforementioned CNDDDB occurrence numbers 2012 and 2013 are in the former castle air force base where one adult flushed along multiple ground squirrel burrows in 2017, and another was observed in 2009 next to a burrow. The northwestern record was of an owl observed near the riverbank in 1994 and provided no other details. The closest record to EliJen is CNDDDB occurrence number 283 near the riverbank. Although all the records are more than 5 miles away from all sites, there is suitable habitat for nesting and overwintering at the Asai and EliJen Project sites. Asai's suitable habitat occurs outside of the proposed Project area but within the 250-foot buffer at the drainage ditch (**Attachment E, Photo 2**). At EliJen, suitable small mammal burrows are scattered throughout the fallow field and around the edges of the existing basin that could serve as habitat (**Attachment E, Photo 5 and Photo 6**). In summary, it is possible for BUOW to occur within the proposed EliJen Project area.

Valley Elderberry Longhorn Beetle

The host plant, blue elderberry (*Sambucus mexicana*), for valley elderberry longhorn beetle (VELB) was only present at the proposed EliJen Project site along the edges of the existing basin (**Attachment E, Photo 9**). VELB are typically associated with elderberry shrubs located within contiguous riparian habitats. VELB typically stay within the local elderberry clump from which they emerge. VELB may occupy non-riparian elderberry shrubs when they are reasonably close to riparian areas or known VELB populations. Isolated, non-riparian elderberry clumps are less likely to be occupied or become colonized by VELB, and those beyond 2,526 feet (0.48 mile) from the nearest VELB record become increasingly less likely to be occupied. The elderberry shrubs at EliJen are

isolated and not part of a larger riparian community. During the survey, the elderberry shrubs were inspected for the presence of VELB exit holes and none were found. There is a CNDDDB record of this species observed in 1991, and although it is more than 2 decades old, it is presumed extant. The record is approximately 7 miles west of the EliJen site along the Tuolumne River. Based on the lack of riparian habitat at EliJen, the isolation of the shrub, the distance to known records, and the lack of exit holes observed, it is unlikely that VELB are occupying the elderberry shrubs on-site. In non-riparian habitats, the USFWS *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle* (USFWS 2017) assumes that a project may affect VELB if project activities occur within 165 feet of an elderberry shrub with exit holes or disturbs elderberry shrubs reasonably close to riparian areas or known VELB populations, and further specifies that no trenching, paving, or other activities that may kill an elderberry shrub should occur within 20 feet. In summary, it is unlikely that VELB occur within the proposed EliJen Project area, though because elderberries are the sole host plant for VELB, activities that adversely affect elderberry shrubs could also affect VELB. Therefore, trenching and excavation within 20 feet of the shrubs should be avoided to minimize the potential of killing the elderberry shrubs.

Vernal Pool Fairy Shrimp

Vernal pool fairy shrimp CNDDDB records in the area are mostly limited to the San Luis National Wildlife Refuge, the San Joaquin River National Wildlife Refuge, and to the start of the grasslands to the east. Asai and Espinosa did not have any suitable vernal pool features that could support the species since they have undergone significant conversion into agricultural land and experience ongoing disturbance. EliJen also does not have any suitable vernal pool habitat, though the northeastern corner is located within designated critical habitat. One CNDDDB record from 1986 located approximately 2.4 miles southeast of EliJen states the species was observed in natural seasonal wetlands just south of the Hickman vernal pools. However, the record provides that threats from conversion into agriculture land should have the record updated to possibly extirpated. Although the orchard at EliJen has been removed, the area within the critical habitat has not reverted to vernal pool habitat or other habitat suitable for vernal pool fairy shrimp. No vernal pool or seasonal wetland indicators were observed during the site visit, and a March 2026 aerial shows no evidence of inundation. In summary, there is no habitat for vernal pool fairy shrimp within any of the proposed Project areas, and this species is unlikely to occur.

Vernal Pool Tadpole Shrimp

Vernal pool tadpole shrimp occurred in the same CNDDDB record as the vernal pool fairy shrimp described above. Asai and Espinosa did not have any suitable vernal pool features that could support the species since they have undergone significant conversion into agricultural land and experience ongoing disturbance. EliJen also does not have any suitable vernal pool habitat, though the northeastern corner is located within designated critical habitat. CNDDDB occurrence number 215 is less than 1 mile from the Espinosa site. One of the polygons mapped for this record occurs approximately 350 feet northeast of EliJen, on the north side of Lake Road. Although the orchard at EliJen has been removed, the area within the critical habitat has not reverted to vernal pool habitat or other habitat suitable for vernal pool tadpole shrimp. No vernal pool or seasonal wetland indicators were observed during the site visit, and a March 2026 aerial shows no evidence of inundation. In summary, there is no habitat for vernal pool tadpole shrimp within any of the proposed Project areas, and this species is unlikely to occur.

To avoid potential impacts on listed and special-status wildlife, measures are recommended for each of the Projects, including preconstruction raptor nesting surveys by a qualified biologist and a worker environmental awareness program.

Nesting Migratory Birds

Potential impacts on nesting birds listed under the Migratory Bird Treaty Act (MBTA) could occur depending on the timing of construction activities. For example, if activities are expected to occur during bird nesting season (approximately February 1 to September 1), there may be impacts on nesting birds. The nesting season may begin earlier or end later depending on species and weather conditions, and protection measures would need to be implemented to avoid potential impacts on active bird nests. These measures may include preconstruction surveys and avoidance of identified nesting sites with a suitable buffer until the young have fledged, as well as removing trees outside of nesting season.

The proposed Project areas and surrounding areas contain many trees, several of them large, as well as herbaceous vegetation and building structures. All of these areas are suitable for nesting migratory birds. During the reconnaissance-level survey, numerous MBTA species were observed. No active MBTA nests were observed at the Asai Project site, the Espinosa Project site, or the EliJen Project site.

Sensitive Natural Communities

A sensitive natural community is a biological community that is regionally rare, provides important habitat opportunities for wildlife, is structurally complex, or is in other ways of special concern to local, state, or federal agencies. Most sensitive natural communities are given special consideration because they perform important ecological functions, such as maintaining water quality and providing essential habitats for plants and wildlife. Some plant communities support a unique or diverse assemblage of plant species and therefore are considered sensitive from a botanical standpoint. Sensitive natural communities include the following: (a) habitats and natural communities that are regulated by federal and state resource agencies; (b) natural communities ranked S1, S2, or S3 by CDFW (2018); and (c) areas protected by County ordinance. The elimination of such communities would be considered a significant CEQA impact.

Asai Project

No sensitive natural communities are present in the proposed Project area.

Espinosa Project

No sensitive natural communities are present in the proposed Project area.

EliJen Project

No sensitive natural communities are present in the proposed Project area. The constructed basin would likely not be considered a waters of the United States or state because it is an artificial feature excavated in uplands with the purpose of serving as a stormwater basin.

Aquatic Resources

Aquatic resources include features that may be subject to federal regulation under Section 404 of the Clean Water Act (CWA) as well as State of California regulation under the Porter-Cologne Water Quality Control Act, *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*, and California Fish and Game Code Section 1600. Based on a review of the National Wetlands Inventory database (NWI), field survey, and aerial photographs, no features flow through the three proposed Project areas, described in more detail below (USFWS 2026b).

Asai

There is an agricultural ditch that runs along the proposed stormwater basin at the Asai Project site. The ditch is offset from the proposed Project area by a ranch road that is approximately 20 feet wide. No other aquatic features were identified at the Project site. The NWI database identifies the agricultural ditch as “freshwater emergent wetland” and a portion of the north side “freshwater pond.” Because these features are not tributaries that drain into other waterbodies and are only temporarily flowing throughout the year, they would not meet the definition of a waters of the United States. All features are shown in the NWI and therefore would need further analysis to determine whether they were potentially waters of the state (**Attachment F, Photo 2**). However, the agricultural drainage ditch is not located in the Project area and would not be affected by Project implementation; therefore, no further analysis is required.

EliJen

No mapped aquatic features are listed in the NWI database at the EliJen Project site. The Project site is primarily fallowed orchard. Aerial imagery shows seasonal agricultural flooding in 2023, likely caused by agricultural irrigation as the saturation runs throughout the site. This flooding is not anticipated to occur since the agricultural irrigation system has been removed. The constructed basin on-site is not mapped as an aquatic feature on the NWI database. The constructed basin would likely not be considered a waters of the United States or state because it is an artificial feature excavated in uplands with the purpose of serving as a retention basin (**Attachment F, Photo 4 and Photo 10**).

Espinosa

All aquatic features within the proposed Project area are canals that are humanmade, lined, and do not connect to other waterbodies. No potentially jurisdictional aquatic resources are present within the proposed Project area.

Wildlife Movement Corridors

Each of the proposed Project areas lie within orchards or fallowed fields and are bordered by agricultural orchards with significant human activity, making it unlikely for species to reside there, including special-status species. However, the areas surrounding the orchards and fallowed fields can provide habitat. Several special-status species have known ranges within the Central Valley that may overlap with the proposed Project area, the areas do provide suitable habitat or forage for these species, as previously noted. Therefore, wildlife in the area is likely to be passing through rather than residing within the proposed Project areas.

Potential Resource Agency Approvals

The Projects may require approval from the resource agencies for impacts on biological resources. Below is a discussion on what permit(s), if any, may be required for implementation of the Projects.

Aquatic Resource Permits

The NWI features identified across select proposed project properties do not overlap with the proposed Project areas and will not need further analysis during CEQA review to determine whether it is assumed to be jurisdictional under the CWA and State of California regulations. Thus, the proposed Project will not require a CWA Section 404 permit from the U.S. Army Corps of Engineers, a CWA Section 401 Water Quality Certification from the Central Valley Regional Water Quality Control Board, or a California Fish and Game Code Section 1602 Streambed Alteration Agreement from CDFW.

Special-Status Species

Permits are required for impacts on listed wildlife species under Sections 7 or 10 of the federal Endangered Species Act, Section 2081 of the California Endangered Species Act, and the California Fish and Game Code.

Federal Permits

The three Project sites do not provide suitable habitat for federally listed species. EliJen provides potentially suitable habitat for WSFT, a federally proposed as threatened species. Projects with the potential to adversely affect species listed under the federal Endangered Species Act require coordination with the USFWS through federal Endangered Species Act Section 7 or Section 10 consultation. When the Project has a federal nexus (such as through CWA Section 404 permitting or federal funding), consultation would occur through the Section 7 process, and a biological opinion with an incidental take permit (ITP) may be issued if it is determined that take of a federally listed species may occur. If no other federal permit is required, take of a listed species could still occur using a federal Endangered Species Act Section 10 ITP; however, a Section 10 permit would also require submittal of a Habitat Conservation Plan and a finding from USFWS that the permittee has “to the maximum extent practicable, minimized and mitigated the impacts of the taking” among other findings (U.S. Code Title 16, Section 1539[a][2][B]). The Section 10 process is more complicated and time-consuming than the Section 7 process; thus, having a federal nexus for Section 7 consultation would be preferable. The nexus for Section 7 consultation is normally triggered by the Section 404 permit (which is not assumed to be needed for the proposed Project) but could also be triggered by federal funding for the proposed Project. Depending on the species, likelihood of near-term listing, and the potential effect, USFWS may or may not consult on a federally proposed species.

The likelihood of federally listed species occurring at the three proposed Project areas is low due to the lack of suitable habitat, ongoing disturbances, and distances from known occurrences. The Asai and Espinosa Projects and surrounding areas are managed and maintained to allow for agricultural production; thus, only a handful of small mammal burrows were observed, and no elderberry shrubs or vernal pools were observed. The lack of breeding ponds and vernal pools as well as the minimal number of burrows in the area also precludes potential for CTS, VELB, vernal pool fairy shrimp, and vernal pool tadpole shrimp to be present. Although an excavated basin occurs at EliJen, it is not expected to provide suitable breeding habitat for CTS due to disturbance from the orchard previously on-site and the inconsistent water in recent years. Regular disturbance in the surrounding uplands also reduces habitat suitability. The blue elderberry present along the edge of the existing basin is not likely occupied by VELB due to its location outside of a riparian corridor, its isolation, distance from known records, and lack of observed exit holes. USFWS could still consider trenching or paving activities within 20 feet of the elderberry shrubs a potential impact on VELB. Additionally, EliJen did not contain vernal pool or seasonal wetland features suitable for vernal pool fairy shrimp and vernal pool tadpole shrimp. The excavated basin and surrounding uplands may provide suitable habitat for WSFT at EliJen. Proposed construction activities are not expected to result in the take of federally listed or proposed species. Implementation of mitigation measures listed in the *Turlock Subbasin Groundwater Sustainability Plan Programmatic Environmental Impact Report* (GSP PEIR) and included as **Attachment F** as applicable would reduce the potential for take. Thus, Section 7 consultation would likely be unnecessary for the proposed Project sites.

California Department of Fish and Wildlife

The Project provides marginally suitable habitat for two state-listed species: SWHA (state threatened) and BUOW (state candidate endangered). For any incidental take of species listed under the California Endangered Species Act, a Section 2081 permit would be required from CDFW. The focus of CDFW's permit would be "full mitigation" of the impacts, ensuring that mitigation is "roughly proportional" to impacts, and ensuring funding for mitigation is adequate (California Fish and Game Code Sections 2081[b][c]).

As described above, there is low likelihood of CTS being present at the three proposed Project sites. Potential for SWHA to occur in or adjacent to the proposed Project areas is low for Asai but moderate for Espinosa and EliJen since orchard trees remain within the proposed Project site at Espinosa, and a stand of eucalyptus trees occurs along the northern edge of the constructed basin at EliJen. The likelihood of BUOW occurring at Asai and Espinosa is low while the likelihood of presence at EliJen is moderate. Proposed construction activities could result in take of either species. Implementation of mitigation measures listed in **Attachment F** as applicable would reduce the potential for take. As a result, a 2081 ITP would likely be unnecessary.

Summary

In summary, the proposed Project areas for all the proposed Projects have low to moderate biological sensitivity for both federally proposed and state-listed species. With implementation of mitigation measures, no ITPs are anticipated to be necessary for implementation of the Projects. Implementation of mitigation measures as presented in the GSP PEIR and included as **Attachment F** would require measures to reduce potential impacts on biological resources by conducting activities such as preconstruction raptor, nesting, and special-status species survey and biological construction monitoring for initial activities. The following provides a Project-specific summary of the findings presented in this memorandum.

Asai

No special-status plants, special-status wildlife, sensitive natural communities, or wildlife corridors were observed during the reconnaissance-level survey of the proposed Project area. MBTA species were observed throughout the proposed Project area and could nest on-site.

Espinosa

No special-status plants, special-status wildlife, sensitive natural communities, or wildlife corridors were observed during the reconnaissance-level survey of the proposed Project area. Based on the survey and desktop analysis, it was determined that SWHA has a moderate potential to occur at this proposed Project site. MBTA species were observed throughout the proposed Project area and could nest on-site.

EliJen

No special-status plants, special-status wildlife, sensitive natural communities, or wildlife corridors were observed during the reconnaissance-level survey of the proposed Project area. Based on the survey and desktop analysis, it was determined that WSFT and BUOW have a moderate potential to occur at this proposed Project site. Elderberry shrubs on-site provide habitat for VELB, though their presence is unlikely. MBTA species were observed throughout the proposed Project area and could nest on-site.

References

- CDFW (California Department of Fish and Wildlife). 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. Accessed July 2026. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>.
- CDFW. 2026. California Natural Diversity Data Base (CNDDB). “BIOS viewer 5.108.119 database for 7.5-minute U.S. Geological Survey (USGS) quadrangles code 3712056; 3712046: 3712047: 3712057: 371045, Stanislaus County, CA.” Accessed April 2025. <https://wildlife.ca.gov/Data/CNDDB>.
- CNPS (California Native Plant Society). 2026.” California Rare Plant Ranking Inventory of Rare and Endangered Plants for USGS 7.5-minute quadrangle code 3712056; 3712046: 3712047: 3712057: 371045, Stanislaus County, CA.” Accessed June 2026. <http://www.rareplants.cnps.org/>.
- USFWS (U.S. Fish and Wildlife Service). 2017. *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (Desmocerus californicus dimorphus)*. U.S. Fish and Wildlife Service, Sacramento, CA. May 2017.
- USFWS. 2026a.” IPaC, USFWS Information for Planning and Consultation online system. Official Species List. Tuolumne County, California.” May. Accessed June 2026. <https://ecos.fws.gov/ipac/>.
- USFWS. 2026b. “National Wetlands Inventory.” [Online database.] Accessed June 2026. <https://www.fws.gov/wetlands/data/Mapper.html>.

Attachment A



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To:

07/20/2026 16:06:15 UTC

Project Code: 2026-0118316

Project Name: Multibenefit Agricultural Land Repurposing Plan Projects in the Turlock Subbasin

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2))

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

PROJECT SUMMARY

Project Code: 2026-0118316

Project Name: Multibenefit Agricultural Land Repurposing Plan Projects in the Turlock Subbasin

Project Type: Acquisition of Lands

Project Description: The Multibenefit Agricultural Land Repurposing Plan Projects (Projects) in Merced and Stanislaus Counties, California broadly, can involve fallowing and removing orchard trees, constructing retention basins and ponds, and rewilding areas with native vegetation.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@37.619950700000004,-120.66467240399254,14z>



Counties: Merced and Stanislaus counties, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 15 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
San Joaquin kit fox <i>Vulpes macrotis mutica</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2873 General project design guidelines: https://ipac.ecosphere.fws.gov/project/7VVEJWCWIXZDD7NAFNX4KOU5ROM/documents/generated/11271.pdf	Endangered

REPTILES

NAME	STATUS
Northwestern Pond Turtle <i>Actinemys marmorata</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1111 General project design guidelines: https://ipac.ecosphere.fws.gov/project/7VVEJWCWIXZDD7NAFNX4KOU5ROM/documents/generated/11271.pdf	Proposed Threatened

AMPHIBIANS

NAME	STATUS
California tiger Salamander <i>Ambystoma californiense</i> Population: U.S.A. (Central CA DPS) There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076 General project design guidelines: https://ipac.ecosphere.fws.gov/project/7VVEJWCWIXZDD7NAFNX4KOU5ROM/documents/generated/11271.pdf	Threatened
Western spadefoot <i>Spea hammondi</i> Population: Northern DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5425 General project design guidelines: https://ipac.ecosphere.fws.gov/project/7VVEJWCWIXZDD7NAFNX4KOU5ROM/documents/generated/11271.pdf	Proposed Threatened

INSECTS

NAME	STATUS
Monarch butterfly <i>Danaus plexippus</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743 General project design guidelines: https://ipac.ecosphere.fws.gov/project/7VVEJWCWIXZDD7NAFNX4KOU5ROM/documents/generated/11271.pdf	Proposed Threatened

NAME	STATUS
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7850	Threatened

CRUSTACEANS

NAME	STATUS
Conservancy fairy shrimp <i>Branchinecta conservatio</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8246 General project design guidelines: https://ipac.ecosphere.fws.gov/project/7VVEJWCWIXZDD7NAFNX4KOU5ROM/documents/generated/11271.pdf	Endangered
Vernal pool fairy shrimp <i>Branchinecta lynchi</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498 General project design guidelines: https://ipac.ecosphere.fws.gov/project/7VVEJWCWIXZDD7NAFNX4KOU5ROM/documents/generated/11271.pdf	Threatened
Vernal pool tadpole shrimp <i>Lepidurus packardii</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2246 General project design guidelines: https://ipac.ecosphere.fws.gov/project/7VVEJWCWIXZDD7NAFNX4KOU5ROM/documents/generated/11271.pdf	Endangered

FLOWERING PLANTS

NAME	STATUS
Colusa grass <i>Neostapfia colusana</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5690	Threatened
Fleshy owl's-clover <i>Castilleja campestris ssp. succulenta</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8095	Threatened
Greene's tuctoria <i>Tuctoria greenei</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1573	Endangered
Hairy Orcutt grass <i>Orcuttia pilosa</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2262	Endangered
Hoover's spurge <i>Chamaesyce hooveri</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3019	Threatened

NAME	STATUS
San Joaquin Valley Orcutt grass <i>Orcuttia inaequalis</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5506	Threatened

CRITICAL HABITATS

There are 4 critical habitats wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Colusa grass <i>Neostapfia colusana</i> https://ecos.fws.gov/ecp/species/5690#crithab	Final
Hairy Orcutt grass <i>Orcuttia pilosa</i> https://ecos.fws.gov/ecp/species/2262#crithab	Final
Hoover's spurge <i>Chamaesyce hooveri</i> https://ecos.fws.gov/ecp/species/3019#crithab	Final
Vernal pool fairy shrimp <i>Branchinecta lynchi</i> https://ecos.fws.gov/ecp/species/498#crithab	Final

IPAC USER CONTACT INFORMATION

Agency: East Turlock Subbasin Groundwater Sustainability Agency
Name: Angelica Oregel
Address: 2600 Capitol Ave #200
City: Sacramento
State: CA
Zip: 95816
Email: aoregel@esassoc.com
Phone: 7146104325

Attachment B



Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad< IS (Montpelier (3712056) OR Cressey (3712046) OR Turlock (3712047) OR Denair (3712057) OR Winton (3712045))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
American bumble bee <i>Bombus pensylvanicus</i>	IIHYM24260	None	None	G3G4	S2	
Antioch multilid wasp <i>Myrmosula pacifica</i>	IIHYM15010	None	None	GH	SH	
burrowing owl <i>Athene cunicularia</i>	ABNSB10010	None	Candidate Endangered	G4	S2	SSC
California linderiella <i>Linderiella occidentalis</i>	ICBRA06010	None	None	G2G3	S2S3	
California tiger salamander - central California DPS <i>Ambystoma californiense pop. 1</i>	AAAAA01181	Threatened	Threatened	G3T3	S3	WL
Colusa grass <i>Neostapfia colusana</i>	PMPOA4C010	Threatened	Endangered	G1	S1	1B.1
Crotch's bumble bee <i>Bombus crotchii</i>	IIHYM24480	None	Candidate Endangered	G2	S2	
Greene's tuctoria <i>Tuctoria greenei</i>	PMPOA6N010	Endangered	Rare	G1	S1	1B.1
hairy Orcutt grass <i>Orcuttia pilosa</i>	PMPOA4G040	Endangered	Endangered	G1	S1	1B.1
hardhead <i>Mylopharodon conocephalus</i>	AFCJB25010	None	None	G3	S3	SSC
heartscale <i>Atriplex cordulata var. cordulata</i>	PDCHE040B0	None	None	GNRT2	S2	1B.2
hoary bat <i>Lasiurus cinereus</i>	AMACC05032	None	None	G3G4	S4	
Hoover's calycadenia <i>Calycadenia hooveri</i>	PDAST1P040	None	None	G2	S2	1B.3
Hoover's spurge <i>Euphorbia hooveri</i>	PDEUP0D150	Threatened	None	G1	S1	1B.2
least Bell's vireo <i>Vireo bellii pusillus</i>	ABPBW01114	Endangered	Endangered	G5T2	S3	
Merced kangaroo rat <i>Dipodomys heermanni dixonii</i>	AMAFD03062	None	None	G4T2	S2	
Merced monardella <i>Monardella leucocephala</i>	PDLAM180C0	None	None	GX	SX	1A
midvalley fairy shrimp <i>Branchinecta mesocephala</i>	ICBRA03150	None	None	G2	S2S3	
molestan blister beetle <i>Lytta molesta</i>	IICOL4C030	None	None	G2	S2	



Selected Elements by Common Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Northern California legless lizard <i>Anniella pulchra</i>	ARACC01020	None	None	G3	S2S3	SSC
Northern Hardpan Vernal Pool <i>Northern Hardpan Vernal Pool</i>	CTT44110CA	None	None	G3	S3.1	
northwestern pond turtle <i>Actinemys marmorata</i>	ARAAD02031	Proposed Threatened	None	G2	SNR	SSC
pallid bat <i>Antrozous pallidus</i>	AMACC10010	None	None	G4	S3	SSC
Sacramento hitch <i>Lavinia exilicauda exilicauda</i>	AFCJB19012	None	None	G4T3	S3	SSC
San Joaquin Valley Orcutt grass <i>Orcuttia inaequalis</i>	PMPOA4G060	Threatened	Endangered	G1	S1	1B.1
steelhead - Central Valley DPS <i>Oncorhynchus mykiss irideus pop. 11</i>	AFCHA0209K	Threatened	None	G5T2Q	S2	SSC
subtle orache <i>Atriplex subtilis</i>	PDCHE042T0	None	None	G1	S1	1B.2
succulent owl's-clover <i>Castilleja campestris var. succulenta</i>	PDSCR0D3Z1	Threatened	Endangered	G4?T2T3	S2S3	1B.2
Swainson's hawk <i>Buteo swainsoni</i>	ABNKC19070	None	Threatened	G5	S4	
tricolored blackbird <i>Agelaius tricolor</i>	ABPBXB0020	None	Threatened	G3	S2	SSC
valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	IICOL48011	Threatened	None	G3T3	S3	
vernal pool fairy shrimp <i>Branchinecta lynchi</i>	ICBRA03030	Threatened	None	G3	S3	
vernal pool tadpole shrimp <i>Lepidurus packardii</i>	ICBRA10010	Endangered	None	G3	S3	
western mastiff bat <i>Eumops perotis californicus</i>	AMACD02011	None	None	G4G5T4	S3S4	SSC
western red bat <i>Lasiurus frantzii</i>	AMACC05080	None	None	G4	S3	SSC
western spadefoot <i>Spea hammondi</i>	AAABF02020	Proposed Threatened	None	G2G3	S3S4	SSC
Yuma myotis <i>Myotis yumanensis</i>	AMACC01020	None	None	G5	S4	

Record Count: 37

Attachment C



CNPS Rare Plant Inventory

Search Results

11 matches found. Click on scientific name for details

Search Criteria: , Quad is one of [3712056:3712046:3712047:3712057:3712045]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
<i>Atriplex cordulata</i> var. <i>cordulata</i>	heartscale	Amaranthaceae	annual herb	Apr-Oct	None	None	GNRT2	S2	1B.2	Yes	1988-01-01	 © 1994 Robert E. Preston, Ph.D.
<i>Atriplex subtilis</i>	subtle orache	Amaranthaceae	annual herb	(Apr)Jun-Sep(Oct)	None	None	G1	S1	1B.2	Yes	1994-01-01	 © 2000 Robert E. Preston, Ph.D.
<i>Calycadenia hooveri</i>	Hoover's calycadenia	Asteraceae	annual herb	Jul-Sep	None	None	G2	S2	1B.3	Yes	1980-01-01	No Photo Available
<i>Castilleja campestris</i> var. <i>succulenta</i>	succulent owl's-clover	Orobanchaceae	annual herb (hemiparasitic)	(Mar)Apr-May	FT	CE	G4? T2T3	S2S3	1B.2	Yes	1984-01-01	No Photo Available
<i>Euphorbia hooveri</i>	Hoover's spurge	Euphorbiaceae	annual herb	(May-Jun)Jul-Sep(Oct)	FT	None	G1	S1	1B.2	Yes	1974-01-01	 © 2020 Neal Kramer

<i>Fritillaria agrestis</i>	stinkbells	Liliaceae	perennial bulbiferous herb	Mar-Jun	None	None	G3	S3	4.2	Yes	1980- 01-01	 © 2016 Aaron Schusteff
<i>Monardella leucocephala</i>	Merced monardella	Lamiaceae	annual herb	May-Aug	None	None	GX	SX	1A	Yes	1974- 01-01	 © 2020 Hannah Kang
<i>Neostapfia colusana</i>	Colusa grass	Poaceae	annual herb	May-Aug	FT	CE	G1	S1	1B.1	Yes	1974- 01-01	No Photo Available
<i>Orcuttia inaequalis</i>	San Joaquin Valley Orcutt grass	Poaceae	annual herb	Apr-Sep	FT	CE	G1	S1	1B.1	Yes	1974- 01-01	No Photo Available
<i>Orcuttia pilosa</i>	hairy Orcutt grass	Poaceae	annual herb	May-Sep	FE	CE	G1	S1	1B.1	Yes	1980- 01-01	 © 2003 George W. Hartwell
<i>Tuctoria greenei</i>	Greene's tuctoria	Poaceae	annual herb	May- Jul(Sep)	FE	CR	G1	S1	1B.1	Yes	1974- 01-01	 ©2008 F. Gauna

Showing 1 to 11 of 11 entries

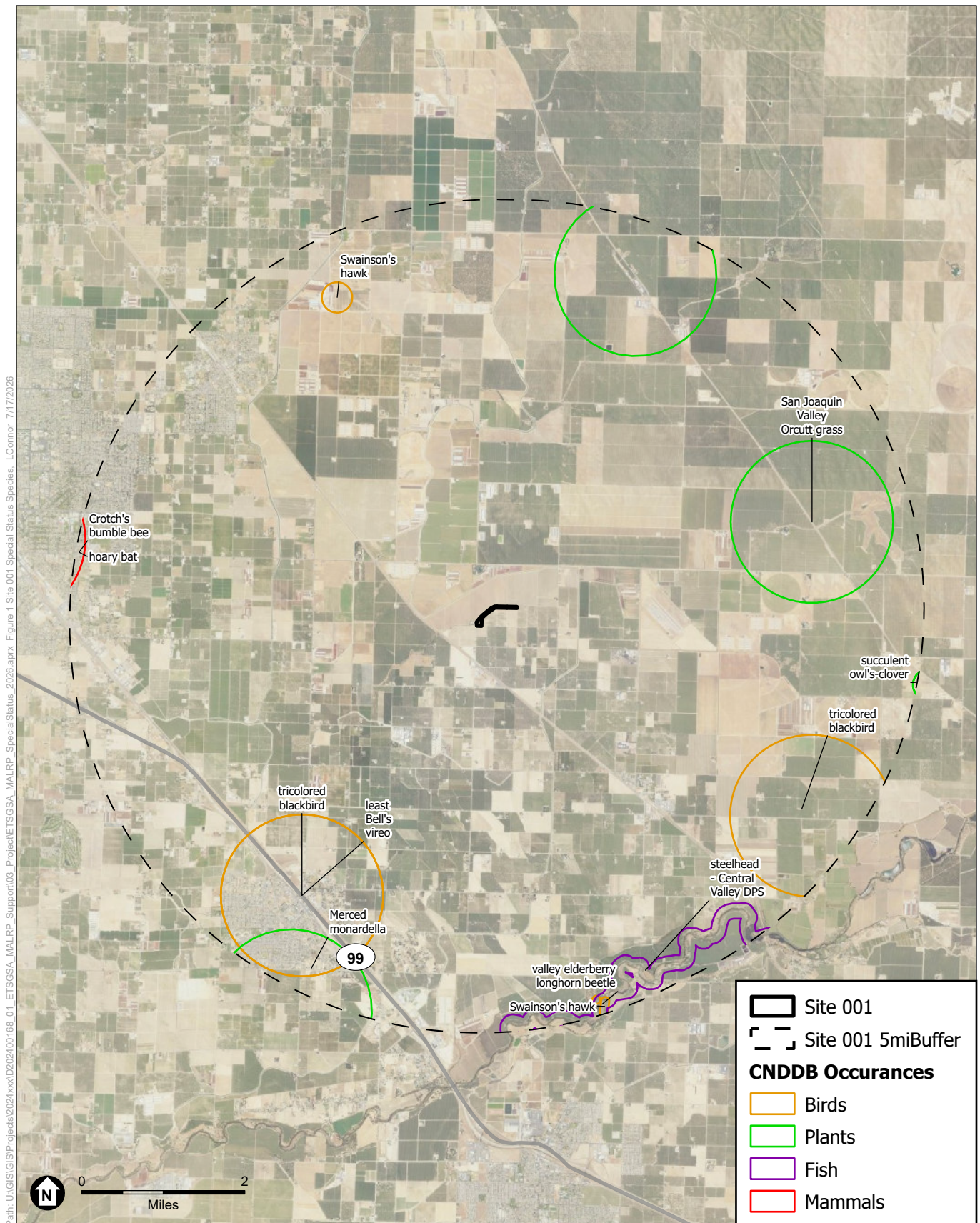
Go to top

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2026. Rare Plant Inventory (online edition, v9.5.1). Website <https://www.rareplants.cnps.org> [accessed 24 June 2026].

}

Attachment D

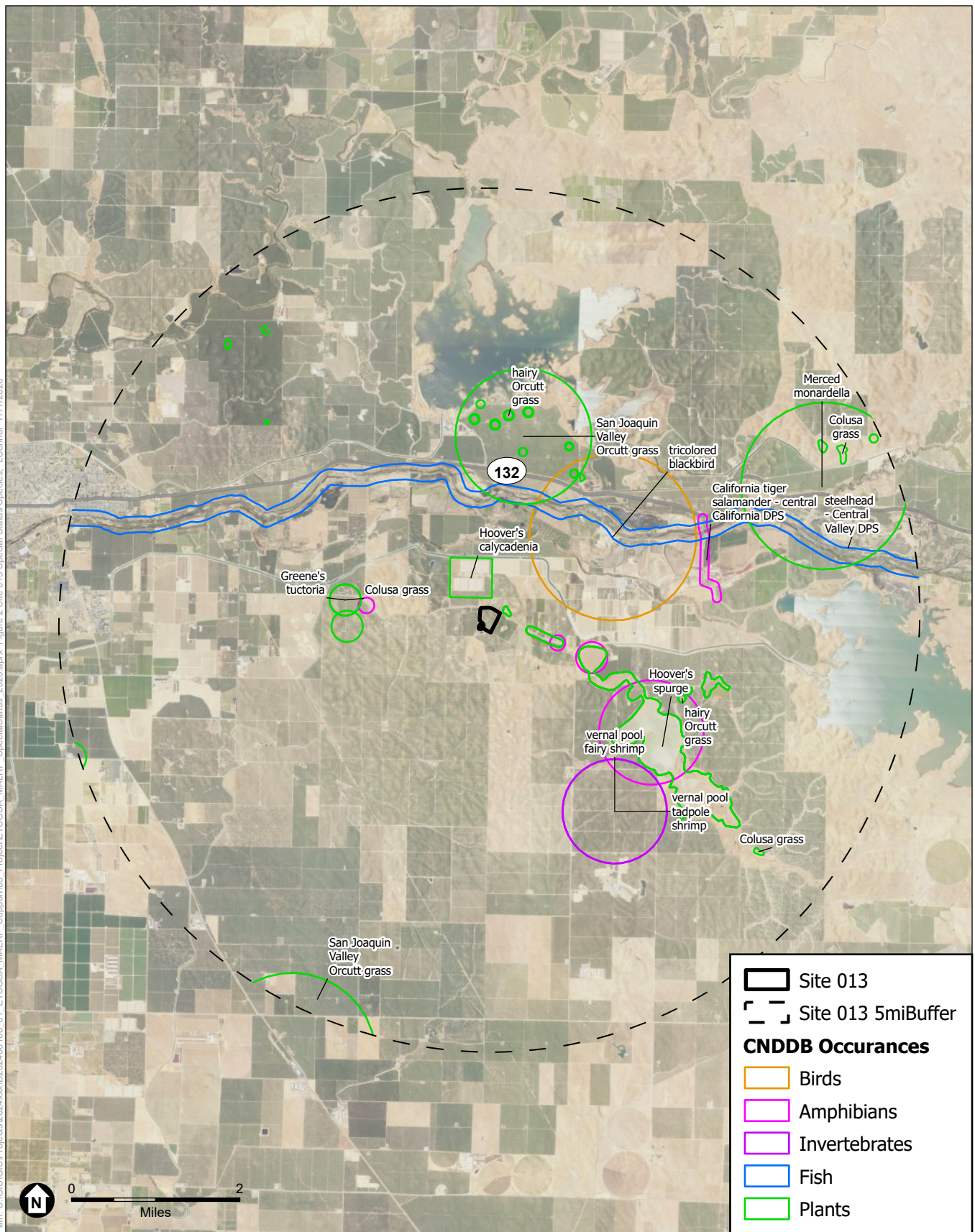


SOURCE: NAIP, 2026; CNDDDB, 2026; ESA, 2026

East Turlock Subbasin Land Repurposing Project

Figure 1
Site 001 Special Status Species

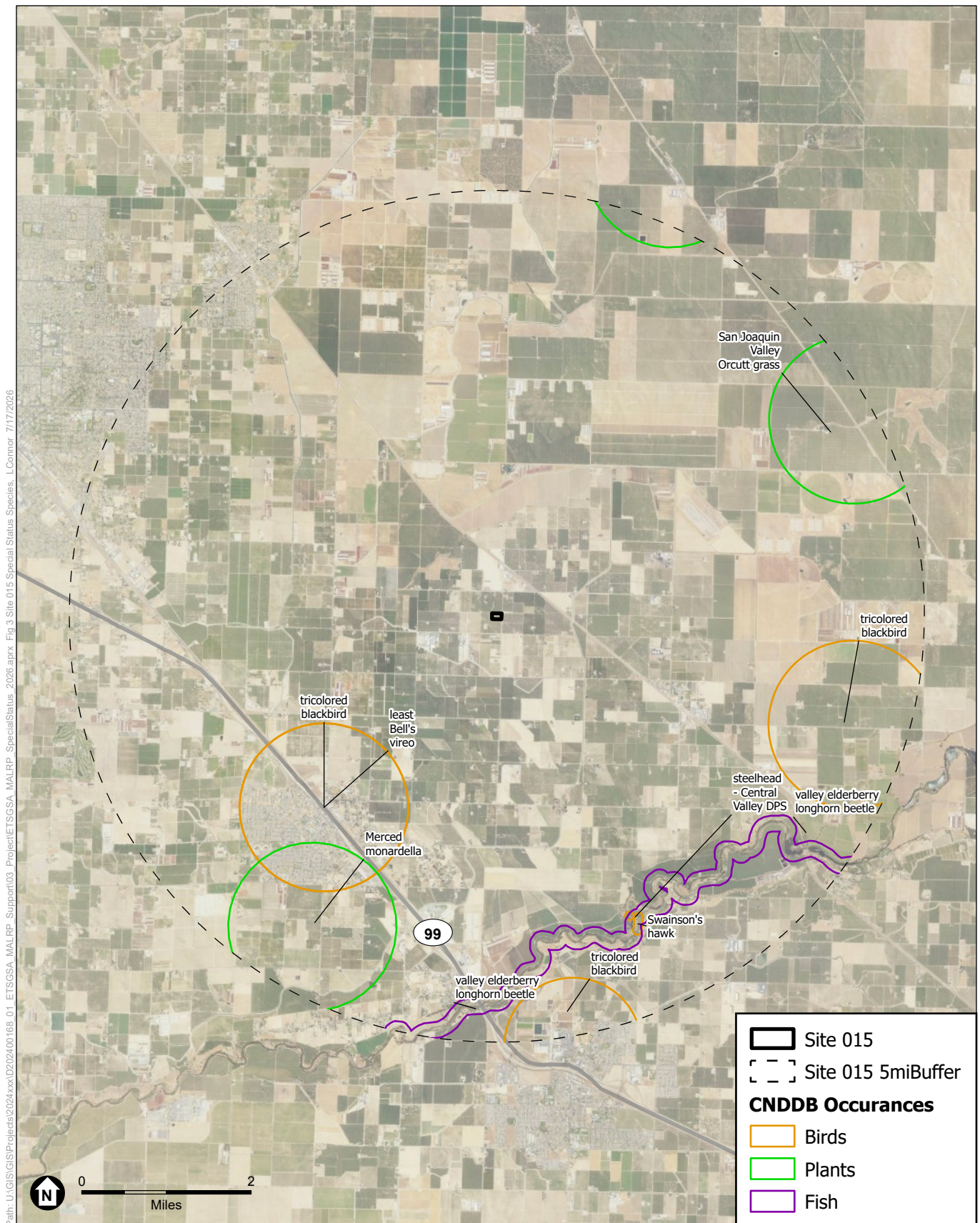
Path: U:\GIS\GISProjects\2024\001\202400168_01_ETSGSA_MALRP_Support\03_Project\ETSGSA_MALRP_Support\03_Site 013 Special Status Species_LC\001 7/17/2026



SOURCE: NAIP, 2026; CNDDDB, 2026; ESA, 2026

East Turlock Subbasin Land Repurposing Project

Figure 2
Site 013 Special Status Species



SOURCE: NAIP, 2026; CNDDDB, 2026; ESA, 2026

East Turlock Subbasin Land Repurposing Project

Figure 3
Site 015 Special Status Species

Attachment E



Photo 1. Agricultural land feature at Asai Farms, facing west



Photo 2. Drainage ditch at Asai farms, photo facing west



Photo 3. Fallowed field at EliJen farms, photo facing northeast



Photo 4. Existing basin at EliJen, facing southeast



Photo 5. Representative photo of a small burrow at EliJen Farms, photo facing west



Photo 6. Representative photo of a small mammal burrow at EliJen Farms, photo facing northwest.



Photo 7. Suitable Swainson's hawk nesting trees at the EliJen Farms proposed project area 250-foot buffer, photo facing east.



Photo 8. Representative photo of the California tree frogs observed in the existing basin at EliJen Farms, photo facing south.



Photo 9. Representative photo of Blue Elderberry observed along the western edge of the constructed basin at EliJen Farms, photo facing north.



Photo 10. The northeastern bottom slope of the fallowed field observed at EliJen Farms, photo facing north.



Photo 11. Suitable Swainson's hawk nesting trees at the EliJen Farms proposed project area 250-foot buffer, photo facing east.

Attachment F



U.S. Fish and Wildlife Service
National Wetlands Inventory

001- Asai



U.S. Fish and Wildlife Service, National Standards and Support Team
wetlands_team@fws.gov

July 20, 2026

Wetlands

 Estuarine and Marine Deepwater	 Freshwater Emergent Wetland	 Lake
 Estuarine and Marine Wetland	 Freshwater Forested/Shrub Wetland	 Other
	 Freshwater Pond	 Riverine

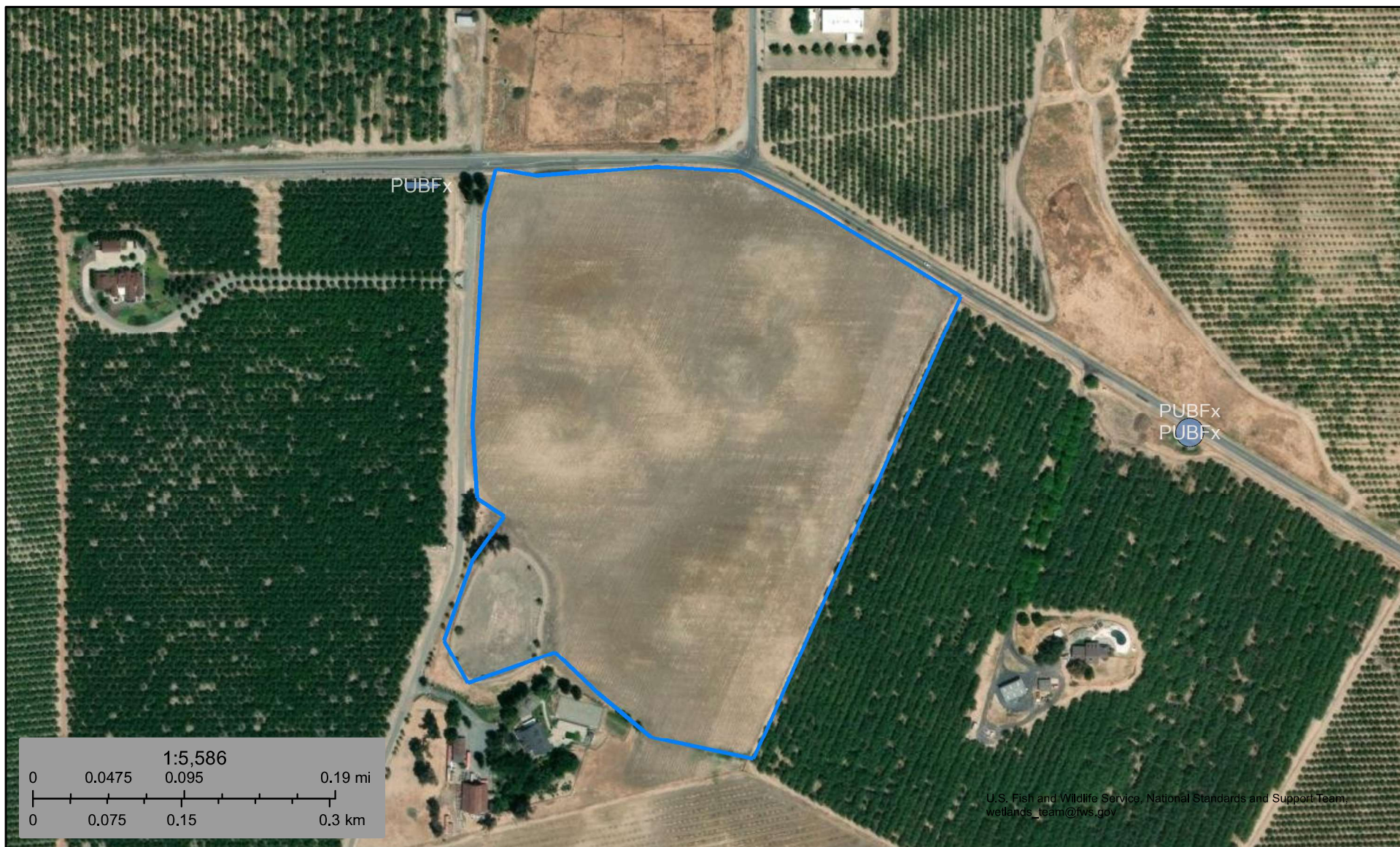
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



U.S. Fish and Wildlife Service

National Wetlands Inventory

0013 - Elijen



U.S. Fish and Wildlife Service, National Standards and Support Team,
wetlands_team@fws.gov

July 20, 2026

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



U.S. Fish and Wildlife Service
National Wetlands Inventory

0015 - Espinosa



U.S. Fish and Wildlife Service, National Standards and Support Team.
wetlands_team@fws.gov

July 20, 2026

Wetlands



Estuarine and Marine Deepwater



Estuarine and Marine Wetland



Freshwater Emergent Wetland



Freshwater Forested/Shrub Wetland



Freshwater Pond



Lake



Other



Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Attachment G

**TABLE G-1
SPECIAL-STATUS SPECIES CONSIDERED IN THE PROJECT AREA**

Organism	Taxonomy	Common Name Scientific Name	Status Federal/ State	CNPS Status	Other Status	Habitat	Identification/ Survey Period	Potential to Occur 001	Potential to Occur 01 3	Potential to Occur 015
		Merced monardella <i>Monardella leucocephala</i>	-/-	1A	-	Valley and foothill grassland.	May-August	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities.	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities.	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities.
		subtle orache <i>Atriplex subtilis</i>	-/-	1B.2	-	Species is found in valley and foothill grassland.	June-September (April) (October)	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities.	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities.	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities.
		succulent owl's-clover <i>Castilleja campestris</i> var. <i>succulenta</i>	FT/CE	1B.2	-	Species is found in vernal pools.	April-May (March)	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities.	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities.	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities.
	Monocots	Colusa grass <i>Neostapfia colusana</i>	FT/CE	1B.1	-	Vernal pools.	May-August	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities.	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities.	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities.

**TABLE G-1
SPECIAL-STATUS SPECIES CONSIDERED IN THE PROJECT AREA**

Organism	Taxonomy	Common Name Scientific Name	Status Federal/ State	CNPS Status	Other Status	Habitat	Identification/ Survey Period	Potential to Occur 001	Potential to Occur 01 3	Potential to Occur 015
		Greene's tuctoria <i>Tuctoria greenei</i>	FE/CR	1B.1	-	Vernal pools.	May- July(Septembe r)	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities.	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities.	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities.
		hairy Orcutt grass <i>Orcuttia pilosa</i>	FE/CE	1B.1	SB_CalBG/RSABG -California/Rancho Santa Ana Botanic Garden	Vernal pools.	May- September	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities.	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities.	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities.
		San Joaquin Valley Orcutt grass <i>Orcuttia inaequalis</i>	FT/CE	1B.1	-	Vernal pools.	April- September	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities.	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities.	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities.
		stinkbells <i>Fritillaria agrestis</i>	-/-	4.2	-	Cismontane woodland, chaparral, valley and foothill grassland, pinyon and juniper woodland.	March-June	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities.	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities.	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities.

**TABLE G-1
SPECIAL-STATUS SPECIES CONSIDERED IN THE PROJECT AREA**

Organism	Taxonomy	Common Name Scientific Name	Status Federal/ State	CNPS Status	Other Status	Habitat	Identification/ Survey Period	Potential to Occur 001	Potential to Occur 01 3	Potential to Occur 015
Wildlife	Amphibians	California tiger salamander - central California DPS <i>Ambystoma californiense</i> <i>pop. 1</i>	FT/CT	-	CDFW_WL-Watch List IUCN_VU-Vulnerable	Species lives in vacant or mammal-occupied burrows throughout most of the year in grassland, savanna, or open woodland habitats.	-	Low. The project site and surrounding areas have had multiple decades of disturbance due to orchard and other agricultural practices. No vernal pool or seasonal wetland habitat that would be suitable for breeding is present on the project site or within dispersal distance. Closest record that is presumed extant is more than 8 miles away. Site surrounded by impassable irrigation canals.	Low. Nearby active vernal pools, and existing basin onsite, and records presumed extant. However, The project site and surrounding areas have had multiple decades of disturbance due to orchard and other agricultural practices. No vernal pool or seasonal wetland habitat that would be suitable for breeding is present on the project site or within dispersal distance. Closest record that is presumed extant is more than 8 miles away. Site surrounded by impassable irrigation canals.	Low. The project site and surrounding areas have had multiple decades of disturbance due to orchard and other agricultural practices. No vernal pool or seasonal wetland habitat that would be suitable for breeding is present on the project site or within dispersal distance. Closest record that is presumed extant is more than 8 miles away. Site surrounded by impassable irrigation canals.

**TABLE G-1
SPECIAL-STATUS SPECIES CONSIDERED IN THE PROJECT AREA**

Organism	Taxonomy	Common Name Scientific Name	Status Federal/ State	CNPS Status	Other Status	Habitat	Identification/ Survey Period	Potential to Occur 001	Potential to Occur 01 3	Potential to Occur 015
		western spadefoot <i>Spea hammondi</i>	FPT/-	-	BLM_S-Sensitive CDFW_SSC- Species of Special Concern IUCN_NT-Near Threatened	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands.	-	Low. The project site and surrounding areas have had multiple decades of disturbance due to orchard and other agricultural practices. No vernal pool or seasonal wetland habitat that would be suitable for breeding is present on the project site or within dispersal distance. Closest record that is presumed extant is more than 7 miles away.	Medium. Nearby active vernal pools and records presumed extant. However, the project site and surrounding areas have had multiple decades of disturbance due to orchard and other agricultural practices, and minimal habitat exists on-site.	Low. The project site and surrounding areas have had multiple decades of disturbance due to orchard and other agricultural practices. No vernal pool or seasonal wetland habitat that would be suitable for breeding is present on the project site or within dispersal distance. Closest record that is presumed extant is more than 7 miles away.
	Birds	bald eagle <i>Haliaeetus leucocephalus</i>	FD/CE	-	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected IUCN_LC-Least Concern USFS_S-Sensitive	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water.	-	None. No habitat. Closest record more than 13 miles away at Turlock lake. All nearby records concentrated near waterways and foothills.	Low. More than one mile from Lake Turlock, where the record is presumed extant but was from 1992.	None. No habitat. Closest record more than 13 miles away at Turlock lake. All nearby records concentrated near waterways and foothills.
		burrowing owl <i>Athene cunicularia</i>	-/CCE	-	BLM_S-Sensitive CDFW_SSC- Species of Special Concern IUCN_LC-Least Concern USFWS_BCC- Birds of Conservation Concern	Species is found in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation.	-	Medium. Minimal habitat. Could be present as they pass by.	Medium. Minimal habitat present at nearby canal. Could be present as they pass by.	Low. Minimal habitat present.

**TABLE G-1
SPECIAL-STATUS SPECIES CONSIDERED IN THE PROJECT AREA**

Organism	Taxonomy	Common Name Scientific Name	Status Federal/ State	CNPS Status	Other Status	Habitat	Identification/ Survey Period	Potential to Occur 001	Potential to Occur 01 3	Potential to Occur 015
		golden eagle <i>Aquila chrysaetos</i>	-/-	-	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected CDFW_WL-Watch List IUCN_LC- Least Concern	Species is found in rolling foothills, mountain areas, sage-juniper flats, and desert.	-	None. No habitat.	None. No habitat.	None. No habitat.
		least Bell's vireo <i>Vireo bellii pusillus</i>	FE/CE	-	NABCI_YWL- Yellow Watch List	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft.	-	Low. No habitat but can pass through. Record less than 3 miles from site is possible extirpated.	Low. No habitat but can pass through. Record less than 3 minutes from site is possible extirpated.	Low. No habitat but can pass through. Record less than 3 miles from site is possible extirpated.
		Swainson's hawk <i>Buteo swainsoni</i>	-/CT	-	BLM_S-Sensitive IUCN_LC-Least Concern	Species breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees.	-	Medium. Habitat present and multiple records in vicinity that are presumed extant.	Medium. Habitat present and multiple records in vicinity that are presumed extant. Orchard trees nearby.	Medium. Habitat present and multiple records in vicinity that are presumed extant.
		tricolored blackbird <i>Agelaius tricolor</i>	-/CT	-	BLM_S-Sensitive CDFW_SSC- Species of Special Concern IUCN_EN- Endangered NABCI_RWL-Red Watch List USFWS_BCC- Birds of Conservation Concern	Species is mostly colonial and most numerous in Central Valley and vicinity. Species is largely endemic to California.	-	Low. No habitat but multiple presumed extant records nearby. Can use site as a pass through.	Low. Minimal habitat but multiple presumed extant records nearby. Can use site as a pass through in small patch of cattail along canal	None. No habitat present.

**TABLE G-1
SPECIAL-STATUS SPECIES CONSIDERED IN THE PROJECT AREA**

Organism	Taxonomy	Common Name Scientific Name	Status Federal/ State	CNPS Status	Other Status	Habitat	Identification/ Survey Period	Potential to Occur 001	Potential to Occur 01 3	Potential to Occur 015
	Crustaceans	California linderiella <i>Linderiella occidentalis</i>	-/-	-	IUCN_NT-Near Threatened	Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions.	-	Low. No habitat. Closest record is more than 9 miles away and possibly extirpated.	Low. No habitat. Closest record is more than 2 miles away and possibly extirpated.	None. No habitat, no vernal pools.
		Conservancy fairy shrimp <i>Branchinecta conservatio</i>	FE/-	-	IUCN_EN- Endangered	Species is endemic to the grasslands of the northern two-thirds of the Central Valley and found in large, turbid pools.	-	None. No habitat. Closest record is more than 20 miles away and possibly extirpated. Populations concentrated in the undeveloped grasslands to the east of the site.	None. No habitat. Closest record is more than 24 miles away. Populations concentrated in the undeveloped grasslands to the south of the site.	None. No habitat, no vernal pools.
		midvalley fairy shrimp <i>Branchinecta mesovallensis</i>	-/-	-	-	Species is found in vernal pools in the Central Valley.	-	None. No habitat. Closest records are more than 20 miles away and possibly extirpated. Populations concentrated in the undeveloped grasslands to the east of the site.	None. No habitat. Closest records are more than 15 miles away. Populations concentrated in the undeveloped grasslands to the east of the site.	None. No habitat, no vernal pools.
		vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT/-	-	IUCN_VU- Vulnerable	Species is endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain- filled pools.	-	None. No habitat. Closest records are more than 20 miles away and possibly extirpated. Populations concentrated in the undeveloped grasslands to the east of the site.	Low. No habitat. Closest records are more than 2 miles away and possibly extirpated. Populations concentrated in the undeveloped grasslands to the east of the site.	None. No habitat, no vernal pools.

**TABLE G-1
SPECIAL-STATUS SPECIES CONSIDERED IN THE PROJECT AREA**

Organism	Taxonomy	Common Name Scientific Name	Status Federal/ State	CNPS Status	Other Status	Habitat	Identification/ Survey Period	Potential to Occur 001	Potential to Occur 01 3	Potential to Occur 015
		vernal pool tadpole shrimp <i>Lepidurus packardii</i>	FE/-	-	IUCN_EN- Endangered	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water.	-	None. No habitat. Closest records are more than 9 miles away and possibly extirpated. Populations concentrated in the undeveloped grasslands to the east of the site.	Low. No habitat. Closest records are directly across Lake Road.	None. No habitat, no vernal pools.
	Fish	hardhead <i>Mylopharodon conocephalus</i>	-/-	-	CDFW_SSC- Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive	Low to mid- elevation streams in the Sacramento- San Joaquin drainage. Also present in the Russian River.	-	None. No habitat. Not near a water source where fish inhabit.	None. No habitat. Not near a water source where fish inhabit.	None. No habitat. Not near a water source where fish inhabit.
		Sacramento hitch <i>Lavinia exilicauda exilicauda</i>	-/-	-	CDFW_SSC- Species of Special Concern	-	-	None. No habitat. Not near a water source where fish inhabit.	None. No habitat. Not near a water source where fish inhabit.	None. No habitat. Not near a water source where fish inhabit.
		steelhead - Central Valley DPS <i>Oncorhynchus mykiss irideus pop. 11</i>	FT/-	-	AFS_TH- Threatened	Populations in the Sacramento and San Joaquin rivers and their tributaries.	-	None. No habitat. Not near a water source where fish inhabit.	None. No habitat. Not near a water source where fish inhabit.	None. No habitat. Not near a water source where fish inhabit.

**TABLE G-1
SPECIAL-STATUS SPECIES CONSIDERED IN THE PROJECT AREA**

Organism	Taxonomy	Common Name Scientific Name	Status Federal/ State	CNPS Status	Other Status	Habitat	Identification/ Survey Period	Potential to Occur 001	Potential to Occur 01 3	Potential to Occur 015
		Crotch bumble bee <i>Bombus crotchii</i>	-/CCE	-	IUCN_EN- Endangered	Species is found from Coastal California east to the Sierra- Cascade crest and south into Mexico.	-	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities. No pollinator species.	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities. No pollinator species.	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities. No pollinator species.
		monarch - California overwintering population <i>Danaus plexippus plexippus pop. 1</i>	FC/-	-	IUCN_EN- Endangered USFS_S-Sensitive	Species' winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico.	-	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities. No pollinator species.	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities. No pollinator species.	None. No habitat site has undergone significant conversion to agricultural land and undergoes regular weed management and orchard activities. No pollinator species.
		valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT/-	-	-	Occurs only in the Central Valley of California, in association with blue elderberry (<i>Sambucus mexicana</i>).	-	None. No elderberry present.	Low. Minimal habitat present. Closest record is within 12 miles near Oakdale. Records concentrated near rivers.	None. No elderberry present.

**TABLE G-1
SPECIAL-STATUS SPECIES CONSIDERED IN THE PROJECT AREA**

Organism	Taxonomy	Common Name Scientific Name	Status Federal/ State	CNPS Status	Other Status	Habitat	Identification/ Survey Period	Potential to Occur 001	Potential to Occur 013	Potential to Occur 015
	Mammals	hoary bat <i>Lasiurus cinereus</i>	-/-	-	IUCN_LC-Least Concern	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding.	-	Low. Minimal habitat present. Closest record is within 5 miles near Turlock and presumed extant but has not been observed since 1925.	Low. Minimal habitat present. Closest record is within 12 miles near Oakdale. Records concentrated near rivers.	Low. Minimal habitat present. Closest record is within 5 miles near Turlock and presumed extant but has not been observed since 1925.
		Merced kangaroo rat <i>Dipodomys heermanni dixonii</i>	-/-	-	-	Grassland and savanna communities in eastern Merced and Stanislaus counties.	-	None. No habitat present. Most records occurred in eastern Merced.	None. No habitat present. Most records occurred in eastern Merced.	None. No habitat present. Most records occurred in eastern Merced.
		pallid bat <i>Antrozous pallidus</i>	-/-	-	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive	Species is found in deserts, grasslands, shrublands, woodlands and forests. Species is most common in open, dry habitats with rocky areas for roosting.	-	Low. Minimal habitat present. Most records occurred closer to the eastern Merced River.	Low. Minimal habitat present. Most records occurred closer to the eastern Merced River.	Low. Minimal habitat present. Most records occurred closer to the eastern Merced River.
		San Joaquin kit fox <i>Vulpes macrotis mutica</i>	FE/CT	-	-	Annual grasslands or grassy open stages with scattered shrubby vegetation.	-	Low. Minimal habitat present. Nearest record is in Atwater.	Low. Minimal habitat present. Nearest record is in La Grange.	Low. Minimal habitat present. Nearest record is in Atwater.

**TABLE G-1
SPECIAL-STATUS SPECIES CONSIDERED IN THE PROJECT AREA**

Organism	Taxonomy	Common Name Scientific Name	Status Federal/ State	CNPS Status	Other Status	Habitat	Identification/ Survey Period	Potential to Occur 001	Potential to Occur 01 3	Potential to Occur 015
		western mastiff bat <i>Eumops perotis californicus</i>	-/-	-	BLM_S-Sensitive CDFW_SSC-Species of Special Concern	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc.	-	Low. Minimal habitat present. Most records occurred near the Merced river.	Low. Minimal habitat present. Most records occurred near the Merced river.	Low. Minimal habitat present. Most records occurred near the Merced river.
		western red bat <i>Lasiurus blossevillii</i>	-/-	-	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Roosts primarily in trees, 2-40 ft above ground, from sea level up through mixed conifer forests.	-	Low. Minimal habitat present. Most records occurred closer to the Merced River.	Low. Minimal habitat present. Most records occurred closer to the Stanislaus and Merced Rivers.	Low. Minimal habitat present. Most records occurred closer to the Merced River.
		Yuma myotis <i>Myotis yumanensis</i>	-/-	-	BLM_S-Sensitive IUCN_LC-Least Concern	Optimal habitats are open forests and woodlands with sources of water over which to feed.	-	Low. Minimal habitat present. Most records occurred closer to the eastern Merced River.	Low. Minimal habitat present. Most records occurred closer to the eastern Merced River.	Low. Minimal habitat present. Most records occurred closer to the eastern Merced River.
	Reptiles	Northern California legless lizard <i>Anniella pulchra</i>	-/-	-	CDFW_SSC-Species of Special Concern USFS_S-Sensitive	Species is found in sandy or loose loamy soils under sparse vegetation.	-	Low. Minimal habitat present. Record from 1926 in Turlock but area has been largely developed and converted to agriculture.	Low. Minimal habitat present. Record from 1926 in Turlock but area has been largely developed and converted to agriculture.	Low. Minimal habitat present. Record from 1926 in Turlock but area has been largely developed and converted to agriculture.

**TABLE G-1
SPECIAL-STATUS SPECIES CONSIDERED IN THE PROJECT AREA**

Organism	Taxonomy	Common Name Scientific Name	Status Federal/ State	CNPS Status	Other Status	Habitat	Identification/ Survey Period	Potential to Occur 001	Potential to Occur 01 3	Potential to Occur 015
		western pond turtle <i>Emys marmorata</i>	FPT/-	-	BLM_S-Sensitive CDFW_SSC- Species of Special Concern IUCN_VU- Vulnerable USFS_S-Sensitive	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation.	-	Low. Irrigation canal north of project area could provide habitat but records of presence are far.	Low. The pond on the project area could provide habitat but records of presence are far.	None. No habitat present.

KEY TO STATUS CODES:

Federal

Candidate = FC
Delisted = FD
Endangered = FE
None = -
Proposed Endangered = FPE
Proposed Threatened = FPT
Threatened = FT

State

Candidate Endangered = CCE
Candidate Threatened = CCT
Delisted = CD
Endangered = CE
None = -
Rare = CR
Threatened = CT

Other

CNPS Rank Categories:

1A = Plants presumed extirpated in California and either rare or extinct elsewhere
1B = Plants Rare, Threatened, or Endangered in California and elsewhere
2A = Plants presumed extirpated in California, but more common elsewhere
2B = Plants Rare, Threatened, or Endangered in California, but more common elsewhere
3 = Plants about which more information is needed - A Review List
4 = Plants of limited distribution - A Watch List

CNPS Code Extensions:

.1 = Seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)
.2 = Fairly endangered in California (20U+002d80% occurrences threatened)
.3 = Not very endangered in California (less than 20% of occurrences threatened or no current threats known)

Sources: CNPS 2026; USFWS 2026; CDFW 2026

Appendix C

Mitigation Monitoring and Reporting Program