

# Appendix A

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Notice of Preparation and  
Scoping Comments





**NOTICE OF PREPARATION OF  
AN ENVIRONMENTAL IMPACT REPORT  
Water Reclamation Facility Project  
California Polytechnic State University, San Luis Obispo**

**Date:** September 14, 2022

**To:** State Clearinghouse, Responsible Agencies, Trustee Agencies, and Individuals

**Lead Agency:** California Polytechnic State University, San Luis Obispo

**Purpose of the Notice:** The intent of this Notice of Preparation (NOP) is to inform agencies and interested parties that California Polytechnic State University, San Luis Obispo (Cal Poly) is preparing a project-level Draft Environmental Impact Report (EIR) for the proposed Water Reclamation Facility (WRF) Project. The California State University (CSU) Board of Trustees is the lead agency pursuant to CEQA and as such is responsible for complying with the provisions of CEQA.

This NOP has been prepared pursuant to Sections 15082 and 15083 of the CEQA Guidelines and starts a public scoping period that will assist Cal Poly in the preparation of the Draft EIR. The purpose of the NOP is to provide responsible and trustee agencies, and other interested parties with a description of the project and its potential environmental impacts and allow the opportunity to provide input regarding the scope and content of the EIR, including possible environmental impacts, mitigation measures, and alternatives.

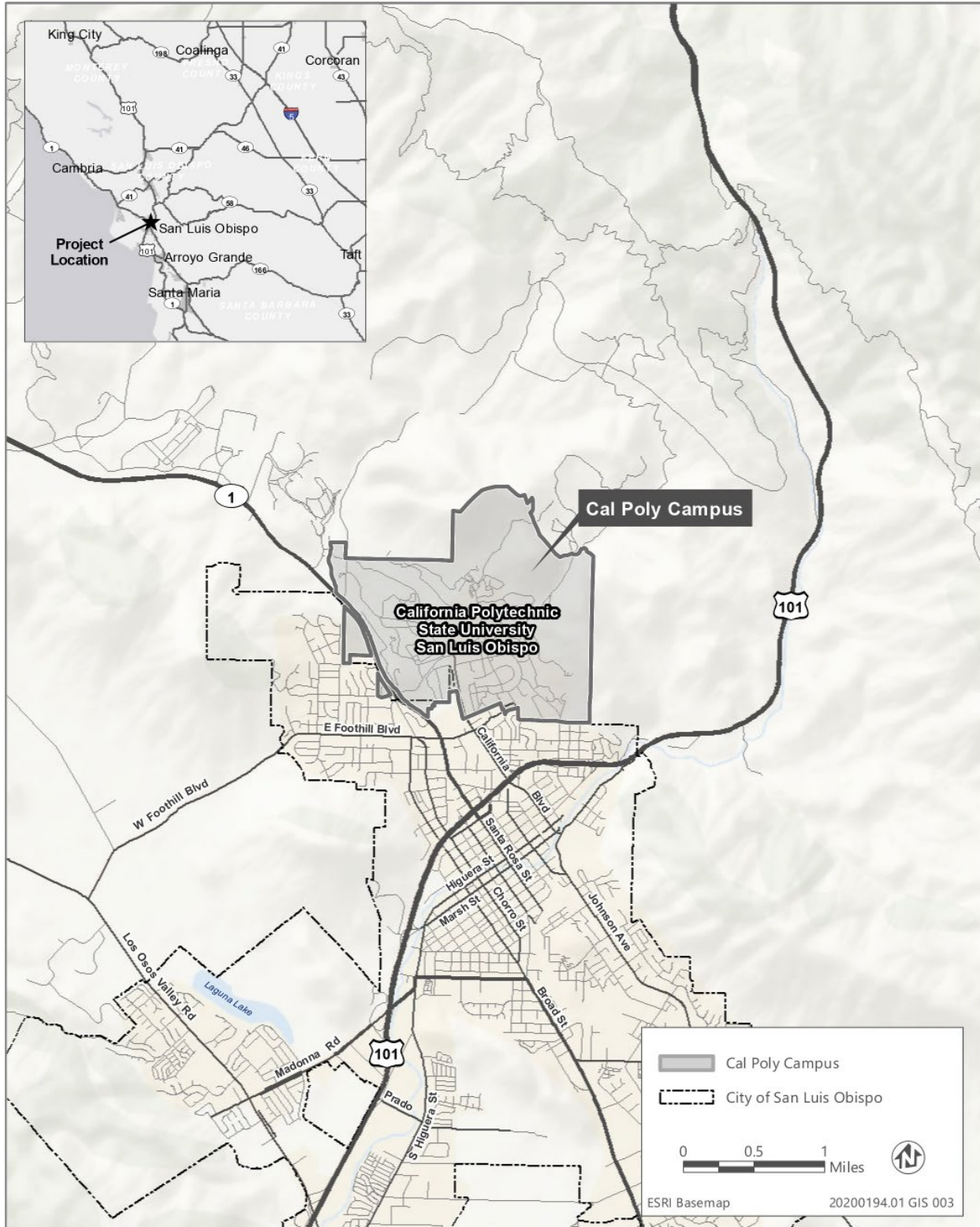
This NOP initiates the **30-day CEQA scoping process** which will run from **September 15, 2022, through October 14, 2022**. A hard copy of the NOP is available for public review at:

Cal Poly Facilities Management and Development Help Center  
1 Grand Ave., Building 70, Room 107  
San Luis Obispo, CA 93407

The NOP is also available for public review online at: <https://afd.calpoly.edu/facilities/planning-capital-projects/ceqa/>.

**Project Location:** Located in San Luis Obispo County, the Cal Poly campus covers 1,339 acres and abuts the City of San Luis Obispo to the south and west, and open space, ranchland, and public land, to the north and east (Figure 1). Cal Poly's main campus consists of 855 acres. An additional 484 acres consisting of rangeland and steep terrain lies to the north, northeast, and northwest of the main campus, and makes up the remainder of the Cal Poly campus property.

Vehicle access to campus is limited to three primary entrances: Grand Avenue with a direct connection to U.S. Highway 101 (US 101) at the southeast corner of campus, Highland Drive directly off State Route (SR) 1 (Santa Rosa Street) on the west side of campus, and California Boulevard off Campus Way in the southwest corner of campus. The campus also has secondary entrances at Stenner Creek Road off SR 1 from the northwest and near the Albert B. Smith Alumni and Conference Center from the south. The Union Pacific Railroad right-of-way bifurcates the campus from Foothill Boulevard to Highland Drive and beyond to the north, limiting other access from the west.



Source: Adapted by Ascent Environmental in 2022

**Figure 1: Project Site**

**Project Description:** The project would involve construction and operation of an on-campus water reclamation facility (WRF) and recycled water storage and distribution system to produce and deliver disinfected tertiary recycled water meeting the requirements of Title 22 of the California Code of Regulations (CCR Title 22, Social Security, Division 4, Environmental Health, Chapter 3, Water Recycling Criteria) for unrestricted reuse, including safe application to agricultural crops, pastures, and recreation fields on campus.

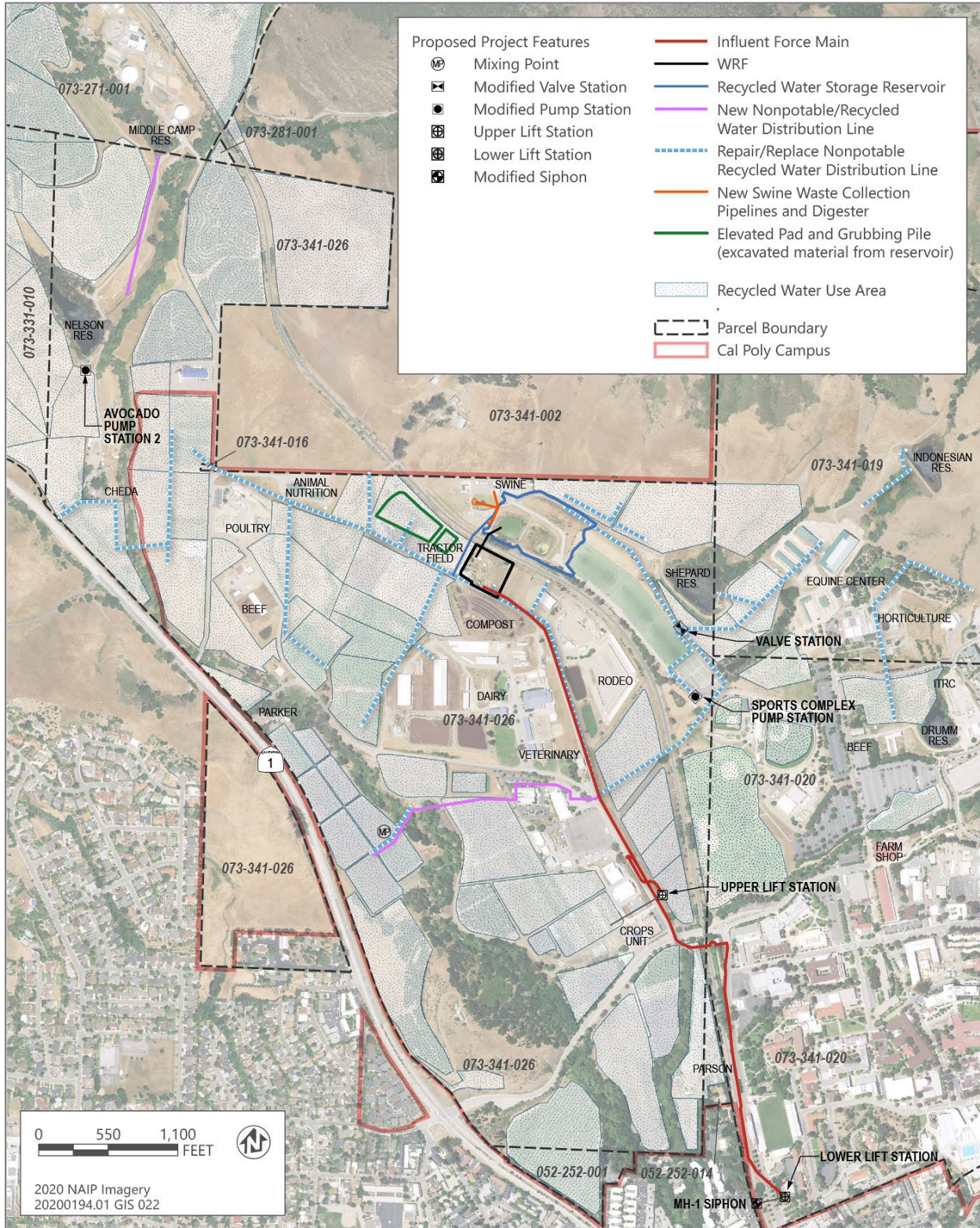
Elements of the proposed project are depicted in Figure 2 and include the following:

- WRF collection system,
- WRF,
- recycled water storage and distribution system, and
- utility improvements to support operation of proposed facilities.

The nonpotable water demands of the campus that are currently met via untreated water from Whale Rock Reservoir (approximately 15 miles to the northwest) would be transitioned over time to nonpotable recycled water supplied by the on-campus WRF. The campus would then use the Whale Rock Reservoir water freed up by operation of the WRF to meet future potable water demand associated with campus growth proposed under the Campus Master Plan. Cal Poly would continue to pump groundwater for agricultural purposes. Because Cal Poly would not increase agricultural operations as part of the Campus Master Plan, nonpotable water demands associated with agriculture are not anticipated to increase.

**Potential Permits and Approvals Required:** Elements of the project could be subject to permitting and/or approval by agencies other than the CSU Board of Trustees. As the lead agency pursuant to CEQA, the CSU Board of Trustees is responsible for considering the adequacy of the EIR and determining whether to approve the project. Permits that may be required from other agencies include:

- California Department of Fish and Wildlife: Lake and Streambed Alteration Agreement pursuant to California Fish and Game Code Section 1602; California Endangered Species Act incidental take permit authorizations
- California Division of State Architect: Review for accessibility compliance
- California State Fire Marshal: Future facility fire safety review and approval
- Central Coast Regional Water Quality Control Board: General Waste Discharge Requirements for Discharges from Domestic Water Systems with Flows Greater than 100,000 Gallons per Day (Order No. R3-2020-0020); Clean Water Act Section 402 National Pollutant Discharge Elimination System construction stormwater permit (Notice of Intent to proceed under General Construction Permit); Section 401 Water Quality Certification for impacts to waters of the United States
- City of San Luis Obispo: Modifications to existing water supply treatment and wastewater agreements; utility connection permits; utility easements
- National Oceanic and Atmospheric Administration Fisheries: Endangered Species Act (ESA) Section 7 consultation for authorization of incidental take of a listed species; consultation in compliance with the Magnuson-Stevens Fisheries Conservation Management Act Section 305(b) for effects on essential fish habitat



Source: Adapted by Ascent Environmental in 2022

**Figure 2: Proposed Project**

- San Luis Obispo County Air Pollution Control District: Authority to construct; Title V permit to operate; air quality management plan consistency determination
- State Office of Historic Preservation: National Historic Preservation Act Section 106 compliance; concurrence with effect determination
- State Water Resources Control Board Division of Drinking Water: Approval under General Waste Discharge Requirements Order No. R3-2020-0020 for recycled water use consistent with the Uniform Statewide Recycling Criteria (CCR Title 22, Division 4, Chapter 3); CCR Title 22 Engineering Report approval
- Union Pacific Railroad: Crossing permit
- US Army Corps of Engineers: Clean Water Act Section 404 Permit for impacts to waters of the United States
- US Fish and Wildlife Service: ESA Section 7 consultation for authorization of incidental take of a listed species

**Potential Environmental Effects:** The EIR will describe the significant direct and indirect environmental impacts of the project. The EIR also will evaluate the cumulative impacts of the project, defined as impacts that could be exacerbated when considered in conjunction with other related past, present, and reasonably foreseeable future projects. The project could result in potentially significant environmental impacts in the following resource areas:

- **Aesthetics:** Temporary and long-term changes in visual character or views of the site from key vantage points.
- **Air Quality:** Temporary increases in air pollutant emissions associated with construction and long-term project operations and associated vehicular trips.
- **Archaeological, Historical, and Tribal Cultural Resources:** Disturbance of known or unknown archaeological or tribal cultural resources.
- **Biological Resources:** Although the project site is disturbed and located within a semi-urban setting, the potential for impacts to biological resources, including tree removal, nesting birds, and special-status species, will be evaluated.
- **Greenhouse Gas Emissions:** Temporary increases in greenhouse gas (GHG) emissions associated with mobile-source exhaust from construction worker commute trips, truck haul trips, and equipment (e.g., excavators, graders); and long-term increases associated with project operations, including stationary and mobile sources.
- **Hydrology and Water Quality:** Potential to degrade surface water and groundwater quality during construction and operation of the WRF project, including a discussion of permit requirements.
- **Noise:** Temporary increases in noise (including off-site, vehicle traffic noise) and vibration levels during construction; and long-term increases in noise from project operation, including stationary and mobile sources.

- **Utilities and Service Systems:** Increased demand for water, wastewater service, electricity, or natural gas at the project site and the potential need to increase the capacity of existing infrastructure.

The WRF was contemplated as a near-term project in the Cal Poly 2035 Master Plan and was evaluated at the level of detail known at the time in the Master Plan EIR, certified in 2020. Because air quality, greenhouse gas emissions, and noise impacts of the WRF were sufficiently evaluated in the 2035 Master Plan EIR, the project-specific Draft EIR for the WRF will not include further evaluation of these resources, but will summarize the impact assessments and applicable mitigation measures in the 2035 Master Plan EIR and provide rationale as to why additional analysis is unnecessary. No significant environmental impacts are anticipated for agriculture and forestry resources, energy, hazards and hazardous materials, geology and soils, land use and planning, mineral resources, population and housing, public services, recreation, and wildfire. Therefore, Cal Poly does not propose to evaluate these resources in depth in the Draft EIR. Rather, brief discussions of these resources will be provided in the Draft EIR with explanations as to why significant impacts are not anticipated.

The environmental factors that will be evaluated in depth in the Draft EIR will therefore include aesthetics, archaeological, historical and tribal cultural resources, biological resources, hydrology and water quality, noise, and utilities and service systems. As necessary, feasible mitigation measures will be recommended to reduce any identified significant or potentially significant impacts.

**Scoping Period:** Written comments on the scope and content of the Draft EIR may be submitted during the 30-day scoping period, which runs from **September 15, 2022, through October 14, 2022**. Cal Poly will accept mailed or electronic comments submitted by 5:00 p.m. on October 14, 2022, to the following addresses:

Marcus Jackson  
Facilities Planning and Capital Projects  
California Polytechnic State University, San Luis Obispo  
1 Grand Avenue  
San Luis Obispo, CA 93407  
Email: [mjackson@calpoly.edu](mailto:mjackson@calpoly.edu)

Comments provided via email should include “Water Reclamation Facility Project NOP Scoping Comment” in the subject line and the full name of the commenter in the body of the email.

**Public Scoping Meeting:** Cal Poly will host a public scoping meeting on **Tuesday, September 27, 2022, 4:30 p.m. to 5:30 p.m.** to inform interested parties about the project, and to provide agencies and the public with an opportunity to provide comments on the scope and content of the EIR.

The scoping meeting will be held virtually via Zoom webinar. **Participants must register in advance at the following link:** [https://us06web.zoom.us/webinar/register/WN\\_RoMcj7LdS\\_uDLozpYyZD\\_g](https://us06web.zoom.us/webinar/register/WN_RoMcj7LdS_uDLozpYyZD_g). After registering, participants will receive the meeting link via email to log into the webinar on September 27, 2022.





## NATIVE AMERICAN HERITAGE COMMISSION

September 15, 2022

Marcus Jackson  
California State University Board of Trustees  
401 Golden Shore  
Long Beach, CA 90802-4210

**Re: 2022090231, Cal Poly Water Reclamation Facility Project, Los Angeles County**

CHAIRPERSON  
**Laura Miranda**  
Luiseño

VICE CHAIRPERSON  
**Reginald Pagaling**  
Chumash

PARLIAMENTARIAN  
**Russell Atebery**  
Karuk

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Miwok

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Apache

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**Isaac Bojorquez**  
Ohlone-Costanoan

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Nomlaki

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Kumeyaay

EXECUTIVE SECRETARY  
**Raymond C.  
Hilchcock**  
Miwok/Nisenan

NAHC HEADQUARTERS  
1550 Harbor Boulevard  
Suite 100  
West Sacramento,  
California 95691  
(916) 373-3710  
[nahc@nahc.ca.gov](mailto:nahc@nahc.ca.gov)  
NAHC.ca.gov

Dear Mr. Jackson:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, § 15064.5 (b) (CEQA Guidelines § 15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines § 15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

**Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.**

## AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

- 1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project:** Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

  - a. A brief description of the project.
  - b. The lead agency contact information.
  - c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
  - d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).
  
- 2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report:** A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1 (b)).

  - a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).
  
- 3. Mandatory Topics of Consultation If Requested by a Tribe:** The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

  - a. Alternatives to the project.
  - b. Recommended mitigation measures.
  - c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).
  
- 4. Discretionary Topics of Consultation:** The following topics are discretionary topics of consultation:

  - a. Type of environmental review necessary.
  - b. Significance of the tribal cultural resources.
  - c. Significance of the project's impacts on tribal cultural resources.
  - d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).
  
- 5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process:** With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).
  
- 6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document:** If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

  - a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
  - b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

- 7. Conclusion of Consultation:** Consultation with a tribe shall be considered concluded when either of the following occurs:
- a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
  - b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).
- 8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document:** Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).
- 9. Required Consideration of Feasible Mitigation:** If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).
- 10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:**
- a. Avoidance and preservation of the resources in place, including, but not limited to:
    - i. Planning and construction to avoid the resources and protect the cultural and natural context.
    - ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
  - b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
    - i. Protecting the cultural character and integrity of the resource.
    - ii. Protecting the traditional use of the resource.
    - iii. Protecting the confidentiality of the resource.
  - c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
  - d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).
  - e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
  - f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).
- 11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource:** An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
- a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
  - b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
  - c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: [http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation\\_CalEPAPDF.pdf](http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf)

## SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: [https://www.opr.ca.gov/docs/09\\_14\\_05\\_Updated\\_Guidelines\\_922.pdf](https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf).

Some of SB 18's provisions include:

1. **Tribal Consultation:** If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. **No Statutory Time Limit on SB 18 Tribal Consultation.** There is no statutory time limit on SB 18 tribal consultation.
3. **Confidentiality:** Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. **Conclusion of SB 18 Tribal Consultation:** Consultation should be concluded at the point in which:
  - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
  - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>.

### NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center ([https://ohp.parks.ca.gov/?page\\_id=30331](https://ohp.parks.ca.gov/?page_id=30331)) for an archaeological records search. The records search will determine:
  - a. If part or all of the APE has been previously surveyed for cultural resources.
  - b. If any known cultural resources have already been recorded on or adjacent to the APE.
  - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
  - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
  - b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
  - a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
  - b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
  
4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
  - a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
  - b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
  - c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address:  
[Andrew.Green@nahc.ca.gov](mailto:Andrew.Green@nahc.ca.gov).

Sincerely,

*Andrew Green*

Andrew Green  
Cultural Resources Analyst

cc: State Clearinghouse

**From:** [Marcus E. Jackson](#)  
**To:** [Andrea Shephard](#)  
**Cc:** [Sydney Coatsworth](#); [Collins-Doehne, Anne](#); [Michelle Chariton \(MC\)](#); [Marianne Lowenthal](#)  
**Subject:** FW: Water Reclamation Facility Project NOP Scoping - Jerry Hidalgo USACE  
**Date:** Wednesday, September 21, 2022 9:25:58 AM  
**Attachments:** [image001.png](#)

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Andrea,

Please see below and advise accordingly.

Wondering if we should schedule a pre-application meeting to vet, given Mr. Hidalgo states the activity 'may' require a DA permit.

Let me know your thoughts.

Thank you,

## Marcus Jackson

Pronouns he/him/his

Project Manager

Facilities Planning and Capital Projects

California Polytechnic State University

San Luis Obispo, California

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office 805-756-6797

cell 805-234-4093

[afd.calpoly.edu/facilities/](http://afd.calpoly.edu/facilities/)



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**From:** Hidalgo, Gerardo L CIV USARMY CESPL (USA) <Gerardo.L.Hidalgo@usace.army.mil>

**Sent:** Wednesday, September 21, 2022 9:20 AM

**To:** Marcus E. Jackson <mjackson@calpoly.edu>

**Subject:** Water Reclamation Facility Project NOP Scoping - Jerry Hidalgo USACE

Dear Mr. Jackson:

It has come to my attention that California Polytechnic State University, San Luis Obispo plans to construct and operate an on-campus water reclamation facility and recycled water storage and distribution system to produce and deliver disinfected tertiary recycled water within the city and county of San Luis Obispo, California.

This activity may require a Department of Army (DA) permit from the U.S. Army Corps of Engineers. A DA permit is required for the discharge of dredged or fill material into, including any redeposit of dredged material other than incidental fallback within, "waters of the U.S.", including wetlands and adjacent wetlands pursuant to Section 404 of the Clean Water Act of 1972. Examples include, but

are not limited to the following activities:

- a. creating fills for residential or commercial development, placing bank protection, temporary or permanent stockpiling of excavated material, building road crossings, backfilling for utility line crossings and constructing outfall structures, dams, levees, groins, weirs, or other structures;
- b. mechanized land clearing and grading which involve filling low areas or land leveling, ditching, channelizing and other excavation activities that would have the effect of destroying or degrading waters of the U.S.;
- c. allowing runoff or overflow from a contained land or water disposal area to re-enter a water of the U.S.; and
- d. placing pilings when such placement has or would have the effect of a discharge of fill material .

An application for a DA permit is available on our website:

<http://www.spl.usace.army.mil/Missions/Regulatory/PermitProcess.aspx>. If you have any questions or would like to setup a pre-application meeting, please contact me at (805) 585-2145 or via email at [Gerardo.L.Hidalgo@usace.army.mil](mailto:Gerardo.L.Hidalgo@usace.army.mil).

Sincerely,

Jerry Hidalgo, Project Manager  
Regulatory Division, North Coast Branch  
Ventura, CA Field Office  
Los Angeles District, U.S. Army Corps of Engineers  
[Gerardo.L.Hidalgo@usace.army.mil](mailto:Gerardo.L.Hidalgo@usace.army.mil)

Office: 805-585-2145  
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\* During the Coronavirus Health Emergency, Regulatory Program staff are teleworking. Please do not mail hard copy documents to any Regulatory staff or office. For further details on corresponding with us, please view our COVID-19 special public notice at:

[https://www.spl.usace.army.mil/Portals/17/docs/publicnotices/COVID19%20Regulatory\\_SPN.pdf?ver=2020-03-19-134532-833](https://www.spl.usace.army.mil/Portals/17/docs/publicnotices/COVID19%20Regulatory_SPN.pdf?ver=2020-03-19-134532-833)

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## Public Utilities

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879 Morro Street, San Luis Obispo, CA 93401-2710  
805.781.7215  
[slocity.org](http://slocity.org)

October 13, 2022

Marcus Jackson  
Facilities Planning and Capital Projects  
California Polytechnic State University, San Luis Obispo  
1 Grand Avenue  
San Luis Obispo, CA 93407  
Email: [mjackson@calpoly.edu](mailto:mjackson@calpoly.edu)

**SUBJECT: City of San Luis Obispo Comments for the  
Water Reclamation Facility Project  
EIR Notice of Preparation**

The City of San Luis Obispo staff and City Council have been engaged in the Cal Poly Master Plan Update and implementation since the public process started in 2014. We have appreciated the presentations made by Cal Poly to keep our City Council and community informed on Master Plan implementation, the many staff meetings covering specific issue areas analyzed in the Master Plan Environmental Impact Report, the annual Partnership Meetings held among Cal Poly and City Utilities Department staff, and the ongoing discussions regarding Master Plan implementation and the City/California State University water and sewer agreement.

The City of San Luis Obispo appreciates receipt of the Notice of Preparation (NOP) of a Project-Specific Environmental Impact Report (EIR) for the Water Reclamation Facility (WRF). Based on the information provided in the September 14, 2022 NOP and NOP Scoping Meeting, the City has the following comments on the content of the EIR and issues that should be identified and evaluated in the EIR. While the comments below are focused on the EIR, the City also looks forward to collaborating with Cal Poly on future amendments to the current water and sewer agreement, utility connection permits, and utility easements, which are approval requirements identified in the NOP.



## **Project Description**

The EIR Project Description should be comprehensive, and include, but not be limited to, descriptive components and associated figures, tables, and graphics for all Project elements (WRF, recycled water storage, associated infrastructure, and utility easements). The Project Description should include the following details regarding the proposed Project:

1. Include a quantified description of wastewater, including volume, flow rates, strength (organic loading) and quality. Describe and show how wastewater will be collected and conveyed, and where wastewater will flow (treatment, storage, and treatment cycles; any untreated or treated wastewater proposed to be discharged to the City system under certain circumstances).
2. Identify estimated Cal Poly-generated effluent flows to the proposed Cal Poly WRF and City Water Resource Recovery Facility (WRRF) through build-out of the Cal Poly Master Plan. Please quantify and show how flows are anticipated to fluctuate for both the Cal Poly WRF and City WRRF throughout the school year, and clearly identify if calculations are based on a quarter or semester system. Provide details regarding proposed Campus and Utility Master Plan implementation, including proposed schedules for off-line, rehabilitated, and new housing units. A defensible analysis will be critical to inform future water and sewer agreement amendments.
3. A membrane bioreactor (MBR) is a biological and mechanical process that relies on (near) steady-state flows to remain operational and within regulatory compliance. Identify how Cal Poly and the Project will address these seasonal fluctuations in student/staff populations and associated wastewater flow.
4. Clarify recycled water storage capacity, including existing and proposed new storage, and total acre-feet (AF) of storage.
5. Identify the proposed construction and operational schedule, including proposed phasing and estimated date(s) when the proposed system will be online.
6. Identify phased and Master Plan build-out non-potable water demand.
7. Describe facility operational and management staff, including but not limited to WRF operations and maintenance, wastewater collections, recycled water distribution, and laboratory analysis.

8. Describe management of “overflow” in the event non-potable demand is met and the proposed recycled water storage pond(s) are full. Identify if “overflow” is proposed to be discharged in the City system (to the City WRRF) or if an alternative method is proposed (and please describe).
9. Identify how and where solids will be addressed. Initial plans potentially indicate that solids would be sent to a new digester; however, the digester is not included in the NOP Project Description. Clearly identify where the solids will be discharged.
10. Identify how odor at the proposed WRF, recycled water storage ponds, and any proposed wastewater going into the City sewer system will be addressed.
11. Identify where water will go in the event an upset (i.e., any condition that does not meet regulated treatment requirements). In the event of a WRF upset, does Cal Poly propose that wastewater would be diverted to the City sewer and WWRf, or does the WRF Project include elements capable of addressing and mitigating the upset? Please describe.
12. Show how minimum clearance from City infrastructure will be provided.

### **EIR Issue Areas**

The Campus Master Plan EIR evaluated the proposed WRF and other projects at a programmatic level and all necessary Project-specific studies anticipated in the Master Plan EIR should be conducted to fully evaluate construction-related, operational, and cumulative impacts of the Project in all issue areas, as previously unknown details regarding the proposed WRF are now known. In addition to the environmental issue areas identified in the NOP, the EIR should include a project-specific analysis of potential air quality, greenhouse gas emissions, and noise impacts resulting from the Project. The EIR analysis should incorporate all applicable mitigation measures identified in the Master Plan EIR and identify any new or modified mitigation measures necessary to avoid or reduce potential impacts to be identified in the WRF Project-Specific EIR.

The EIR should also include analysis of the following Utilities related issues and potential conditions:

1. The currently proposed capacity of the Cal Poly WRF is 0.5 million gallons per day (mgd) peak wet; evaluate how this proposed capacity compares to the demand for wastewater treatment over time, as the Master Plan is implemented and reaches final build-out. Evaluate how flows are anticipated to fluctuate for both the Cal Poly WRF and City WRRF throughout the year.

2. Address proposed infiltration/inflow (I/I) projects identified in Utility Master Plan that are required to address sewer pipe capacity constraints experienced during rain events within the Campus. Identify and evaluate how implementation of these projects affect the analysis and flow and capacity estimations.
3. Identify potential catastrophic event(s) and failure(s), such as flooding, fires, seismic events, or electrical outages. Identify the potential environmental impacts that could occur as a result of such event(s) and failure(s), and how these impacts would be avoided or minimized.
4. Quantify the minimum flow necessary to maintain WRF operations. Identify any potential impacts resulting from low flow conditions, and describe how operation (or non-operation) of the WRF during low-flow months will occur.
5. Evaluate and identify any potential impacts to the City sewer system (wastewater collection, WRRF, recycled water) in the event the Cal Poly WRF is shut off as a result of insufficient flow, event, or failure. Identify how these impacts would be avoided or minimized.
6. Identify and evaluate any potential impacts to the environment and the City's sewer system and WRRF as a result of discharged wastewater, including but not limited to volume, strength (organic loading), and potential upsets. Identify how these impacts would be avoided or minimized.
7. Evaluate existing water supply cross-control infrastructure. Identify if existing backflow devices comply with specifications or if any upgrades needed. Include an analysis of potential environmental impacts resulting from the replacement and/or upgrading of existing infrastructure. Identify how these impacts would be avoided or minimized.
8. Evaluate and identify potential water quality impacts to San Luis Obispo Groundwater Basin as a result of construction and operation of the Project. Identify how these impacts would be avoided or minimized.
9. The City currently relies on Cal Poly's contribution of wastewater flow to meet discharge requirements supporting habitat for Federally Endangered South-Central California Coast steelhead. The EIR should evaluate potential impacts to steelhead habitat in San Luis Obispo Creek as a result of any changes to Cal Poly's contributed wastewater discharge. Identify how these impacts would be avoided or minimized.

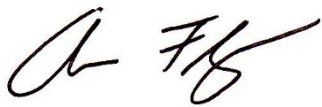
10. Identify the energy demand for the proposed WRF and associated infrastructure, and include a Project-specific energy impact analysis. The analysis should include an assessment of Pacific Gas & Electric (PG&E) Public Safety Power Shutoffs (PSPS) and how the proposed WRF and associated infrastructure would operate under PSPS conditions (e.g., temporary or permanent generators). If proposed, generator operation should be evaluated in applicable sections of the EIR, including air quality, greenhouse gas emissions, noise.

### **Project Alternatives**

1. Consider incorporation of an equalization basin to address dry and wet weather flow peaks.
2. Instead of construction of an on-campus WRF, consider evaluating opportunities through amendment of the existing sewer agreement with the City. This could include the City's treatment of Cal Poly-generated wastewater (increased capacity) and purchase of an equal amount of recycled water to offset non-potable demand.

Thank you for your consideration of the City's recommendations and comments provided in response to the NOP. We look forward to further collaboration and discussion as the Cal Poly moves forward with preparation of the EIR. If you have any questions regarding the City's comments in response to the NOP, please don't hesitate to be in touch with me directly. I can be contacted by phone at 805-781-7205, or by e-mail: [afloyd@slcity.org](mailto:afloyd@slcity.org).

Sincerely,



Aaron Floyd  
Public Utilities Director  
City of San Luis Obispo, Public Utilities

CC: Derek Johnson, City Manager  
Christine Dietrick, City Attorney  
Markie Kersten, Assistant City Attorney  
Shelly Stanwyck, Assistant City Manager Community Services  
Michael Codron, Community Development Director  
Matt Horn, Public Works Director  
Brian Leveille, Senior Planner  
Bob Hill, Office of Sustainability and Natural Resources Manager  
Luke Schwartz, Transportation Manager



# Northern Chumash Tribal Council

northernchumash.org chumashsanctuary.org



October 14, 2022

Marcus Jackson  
Facilities Planning and Capital Projects  
California Polytechnic State University, San Luis Obispo  
1 Grand Avenue San Luis Obispo, CA 93407  
Email: [mjackson@calpoly.edu](mailto:mjackson@calpoly.edu)

RE: Cal Poly Reclamation Notice of Preparation response

Dear Mr. Jackson:

The Northern Chumash Tribal Council, which is traditionally and culturally affiliated with the geographic area which includes the Cal Poly Campus and the Water Reclamation Facility Project, formally requests to consult for the purpose of avoiding and/or mitigating impacts to cultural places that may arise from this project and the applicant's request to modify allowable land uses. We request to review the Environmental Impact Reports and archeological records within a half mile of the water reclamation project area. We will review any ground disturbing activities, and changes to affect the cultural landscape. We also request that an NCTC tribal monitor and representative be onsite for all ground disturbances.

Chairwoman Violet Sage Walker  
P.O. Box 6533 Los Osos, CA 93412  
805-356-6149  
[violet@northernchumash.org](mailto:violet@northernchumash.org)

We request that all notices be sent via email and certified U.S. Mail. Following receipt and review of the information provided, the tribe may request additional consultation to mitigate any impacts the project may cause to tribal cultural resources. If you have any questions or need additional information, please contact our lead contact person listed above and CC [info@northernchumash.org](mailto:info@northernchumash.org).

Sincerely,

**Violet Sage Walker**  
Chairwoman  
Northern Chumash Tribal Council



Air Pollution Control District  
San Luis Obispo County

**VIA EMAIL ONLY**

October 14, 2022

Marcus Jackson  
Facilities Planning & Capital Projects  
Cal Poly State University  
1 Grand Avenue  
San Luis Obispo, CA 93407  
mjackson@calpoly.edu

SUBJECT: APCD Comments Regarding the NOP for a Water Reclamation Facility at Cal Poly, San Luis Obispo

Dear Marcus Jackson:

Thank you for including the San Luis Obispo County Air Pollution Control District (APCD) in the environmental review process. We have completed our review of the Notice of Preparation (NOP) of an Environmental Impact Report (EIR) for the proposed Water Reclamation Facility (WRF) project located at California Polytechnic State University in San Luis Obispo (Cal Poly).

The proposed project involves the construction and operation of an on-campus water reclamation facility and recycled water storage and distribution system to produce and deliver disinfected tertiary recycled water for unrestricted reuse and would include a WRF collection system and utility improvements to support operation of proposed facilities.

The WRF was contemplated as a near-term project in the Cal Poly 2035 Master Plan and was evaluated at the level of detail known at the time in the Master Plan EIR, certified in 2020. Because air quality, greenhouse gas emissions, and noise impacts of the WRF were evaluated in the 2035 Master Plan EIR, the project-specific Draft EIR for the WRF is not proposed to include further evaluation of these resources; rather, it is proposed to summarize the impact assessments and applicable mitigation measures in the 2035 Master Plan EIR and provide rationale as to why additional analysis is unnecessary.

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The following comments are formatted into 2 sections - **(1) General Comments**, and **(2) Air Quality**. Comments pertain to information stated in the project documentation.

The **applicant** or **agent** should contact the APCD Engineering & Compliance Division about permitting requirements stated in the (1) General Comments section. The **lead**.

**agency** may contact the APCD Planning Division for questions related to comments stated in the (2) Air Quality section. Both Divisions can be reached at 805-781-5912

*Please Note: The APCD recently updated the [Land Use and CEQA Webpage](#) on the [slocleanair.org](#) website. The information on the webpage displays the most up-to-date guidance from the SLO County APCD, including the [2021 Interim CEQA Greenhouse Gas Guidance](#), [Quick Guide for Construction Mitigation Measures](#) and [Quick Guide for Operational Mitigation Measures](#).*

## (1) General Comments

### Contact Person for DEIR

The NOP indicates an Environmental Impact Report (EIR) is being prepared for the project. The Draft EIR (DEIR) should be sent to the following APCD staff person for APCD review and comment:

Vince Kirkhuff  
Air Pollution Control District  
3433 Roberto Court  
San Luis Obispo, CA 93401  
(805) 781-5912  
vkirkhuff@co.slo.ca.us

### Construction Permit Requirements

Based on the information provided, we are unsure of the types of equipment that may be present during the project's construction phase. Portable equipment, 50 horsepower (hp) or greater, used during construction activities may require a California statewide portable equipment registration (issued by the California Air Resources Board) or an APCD permit. For a detailed listing of equipment requiring a permit, refer to the Technical Appendices, page 4-4, in the APCD's [CEQA Air Quality Handbook](#) (April 2012).

### Operational Permit Requirements

Based on the information provided, we are unsure of the types of equipment that may be present at the site. The NOP acknowledges the potential requirement for an APCD Authority to Construct, Title V Permit to Operate, and air quality management plan consistency. Other APCD plans and permits may be required, including an odor control plan. The applicant should contact APCD Engineering & Compliance Division prior to ordering equipment or making substantial investments in processes that may require APCD permits. The following list is provided as a guide to equipment and operations that may have permitting requirements but should not be viewed as exclusive:

- Portable generators and equipment with engines that are 50 hp or greater;
- Electrical generation plants or the use of standby generators;
- Public utility facilities, including wastewater treatment facilities; or
- Boilers.

For a more detailed listing, refer to the Technical Appendix, page 4-4, in the APCD's [CEQA Air Quality Handbook](#) (April 2012). Most facilities applying for an Authority to Construct or Permit to Operate with stationary diesel engines greater than 50 hp, should be prioritized or screened for facility wide health risk impacts.

#### Proper Abatement of Asbestos-Containing Material (ACM)

Demolition activities can have potential negative air quality impacts, including issues surrounding proper handling, abatement, and disposal of ACM. ACM could be encountered during the demolition or remodeling of existing structures. If this project will include these activities, then it may be subject to various regulatory jurisdictions, including the requirements stipulated in the National Emission Standard for Hazardous Air Pollutants (40CFR61, Subpart M - Asbestos NESHAP).

NESHAP requirements include but are not limited to:

- 1) Written notification to the APCD, within at least 10 business days of activities commencing.
- 2) Asbestos survey report conducted by a Certified Asbestos Consultant.
- 3) Written work plan addressing asbestos handling procedures in order to prevent visible emissions.

Go to [slocleanair.org/rules-regulations/asbestos.php](http://slocleanair.org/rules-regulations/asbestos.php) for more information.

#### Proper Abatement of Lead-Based Coated Structures

Demolition, remodeling, sandblasting, or removal with a heat gun can result in the release of lead-containing particles from the site. Proper abatement of lead-based paint must be performed to prevent the release of lead particles from the site. An APCD permit is required for sandblasting operations. For additional information regarding lead abatement, contact the San Luis Obispo County Environmental Health Department at 805-781-5544 or Cal-OSHA at 818-901-5403. Additional information can also be found online at [epa.gov/lead](http://epa.gov/lead).

#### Naturally Occurring Asbestos on Site

Naturally occurring asbestos (NOA) has been identified by the California Air Resources Board as a toxic air contaminant. Serpentine and ultramafic rocks are very common throughout California and may contain NOA. The APCD has identified areas throughout the county where NOA may be present ([NOA Map](#)). The following requirements apply because the project site is in a candidate area for NOA:

- a. The applicant shall ensure that a geologic evaluation is conducted to determine if the area disturbed is or is not exempt from the CARB Asbestos Air Toxics Control Measure (Asbestos ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations (Title 17 CCR Section 93105) regulation;
- b. If the site is not exempt from the requirements of the regulation, the applicant must comply with all requirements outlined in the Asbestos ATCM. This may include development of an Asbestos Dust Mitigation Plan and an Asbestos Health and Safety Program for approval by the APCD; or
- c. If the site is exempt, an [exemption request](#) must be filed with the APCD.

More information on NOA can be found at [slocleanair.org/rules-regulations/noa.php](http://slocleanair.org/rules-regulations/noa.php).

## **(2) Air Quality**

#### Air Quality Impacts – Insufficient Information

Sufficient information to quantify the air quality impacts from the construction phase and operational phase emissions for this project was not provided in the NOP. As noted in the NOP, air



quality and greenhouse gas emission impacts were evaluated at the level of detail known at the time in the Cal Poly 2035 Master Plan EIR, certified in 2020. The NOP states that the WRF EIR will not evaluate those impacts further, "but will summarize the impact assessments and applicable mitigation measures in the 2035 Master Plan EIR and provide rationale as to why additional analysis is unnecessary." Any such summary of impact assessments and mitigation measures, and rationale as to why additional analysis is unnecessary should include a screening of the WRF project using APCD screening criteria from the APCD [CEQA Air Quality Handbook](#) (April 2012) to determine if the project would exceed APCD adopted numeric thresholds of significance, as called for in the Master Plan EIR (Sections 3.3-2 and 3.3-3 – Mitigation Measures). Measure 3.3-2 also requires standard construction emission reduction measures for all projects, and if screening determines the project would exceed APCD thresholds, project-specific modeling would be required. If modeling shows exceedance of APCD thresholds, implementation of further emission reduction measures would be required per Mitigation Measures 3.3-2, 3.3-3a and 3.3-3b and the APCD [CEQA Air Quality Handbook](#) (April 2012).

Again, thank you for the opportunity to comment on this proposal. If you have any questions or comments, feel free to contact me at 805-781-5912.

Sincerely,



VINCE KIRKHUFF  
Air Quality Specialist

VJK/jjr

cc: Dora Drexler, APCD, ddrexler@co.slo.ca.us



State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
Central Region  
1234 East Shaw Avenue  
Fresno, California 93710  
(559) 243-4005  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

**GAVIN NEWSOM, Governor**  
**CHARLTON H. BONHAM, Director**



October 17, 2022

Marcus Jackson  
Facilities Planning and Capitol Projects  
California Polytechnic State University  
1 Grand Avenue  
San Luis Obispo, California 93407  
[mjackson@calpoly.edu](mailto:mjackson@calpoly.edu)  
(805) 756-6797

**Subject: California Polytechnic State University, San Luis Obispo Water  
Reclamation Facility Project (Project)  
Notice of Preparation (NOP)  
State Clearinghouse No: 2022090231**

Dear Marcus Jackson:

The California Department of Fish and Wildlife (CDFW) received a NOP for a draft Environmental Impact Report (EIR) from the California State University Board of Trustees at California Polytechnic State University, San Luis Obispo (Cal Poly) for the above-referenced Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.<sup>1</sup>

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under Fish and Game Code. While the comment period may have ended, CDFW would appreciate if you will still consider our comments.

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<sup>1</sup> CEQA is codified in the California Public Resources Code in section 21000 et seq. The “CEQA Guidelines” are found in Title 14 of the California Code of Regulations, commencing with section 15000.

Marcus Jackson  
Cal Poly, San Luis Obispo  
October 17, 2022  
Page 2

## **CDFW ROLE**

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required.

**Water Rights:** The capture of unallocated stream flows is subject to appropriation and approval by the State Water Resources Control Board (SWRCB) pursuant to Water Code § 1200 et seq. CDFW, as Trustee Agency, is consulted by the SWRCB during the water rights and petition processes to provide terms and conditions designed to protect fish and wildlife prior to appropriation of the State's water resources. Certain fish and wildlife are reliant upon aquatic and riparian ecosystems, which in turn are reliant upon adequate flows of water. CDFW therefore has a material interest in assuring that adequate water flows within streams for the protection, maintenance, and proper stewardship of those resources. CDFW provides, as available, biological expertise to review and comment on environmental documents and impacts arising from project activities.

**Nesting Birds:** CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs and nests include sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

In this role, CDFW is responsible for providing, as available, biological expertise during public agency environmental review efforts (e.g., CEQA), focusing specifically on Project activities that have the potential to adversely affect fish and wildlife resources.

Marcus Jackson  
Cal Poly, San Luis Obispo  
October 17, 2022  
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CDFW provides recommendations to identify potential impacts and possible measures to avoid or reduce those impacts.

## **PROJECT DESCRIPTION SUMMARY**

**Proponent:** California State University Board of Trustees

**Objective:** California Polytechnic State University, San Luis Obispo (Cal Poly) is proposing to construct and operate an on-campus water reclamation facility (WRF) and recycled water storage and distribution system to produce and deliver disinfected tertiary recycled water meeting the requirements of Title 22 of the California Code of Regulations for unrestricted reuse, including safe application to agricultural crops, pastures, and recreation fields on campus.

The non-potable water demands of the campus that are currently met via untreated water from Whale Rock Reservoir (approximately 15 miles to the northwest) would be transitioned over time to non-potable recycled water supplied by the on-campus WRF. The campus would then use the Whale Rock Reservoir water freed up by operation of the WRF to meet future potable water demand associated with campus growth proposed under the Campus Master Plan. Cal Poly would continue to pump groundwater for agricultural purposes. Because Cal Poly would not increase agricultural operations as part of the Campus Master Plan, non-potable water demands associated with agriculture are not anticipated to increase.

**Location:** Located in San Luis Obispo County, the Cal Poly campus covers 1,339 acres and abuts the City of San Luis Obispo to the south and west, and open space, rangeland, and public land to the north and east. Cal Poly's main campus consists of 855 acres. An additional 484 acres consisting of rangeland and steep terrain lies to the north, northeast, and northwest of the main campus, and makes up the remainder of the Cal Poly campus property. Cross streets are California Boulevard, Highland Drive, and Mt. Bishop Road. Brizzolara Creek is located to the southeast on campus and Stenner Creek is located to the northwest, west, and south on the campus as well.

**Timeframe:** None given.

## **COMMENTS AND RECOMMENDATIONS**

CDFW offers the following comments and recommendations to assist the California State University Board of Trustees/Cal Poly University in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document for this Project.

Marcus Jackson  
Cal Poly, San Luis Obispo  
October 17, 2022  
Page 4

The NOP indicates that the EIR for the Project will consider potential environmental effects of the proposed Project to determine the level of significance of the environmental effect and will analyze these potential effects to the detail necessary to make a determination on the level of significance. The EIR will also identify and evaluate alternatives to the proposed Project. When an EIR is prepared, the specifics of mitigation measures may be deferred, provided the lead agency commits to mitigation and establishes performance standards for implementation.

**Special-Status Species:** Based on aerial imagery, and species occurrence records from the California Natural Diversity Database (CNDDDB, 2022), the proposed Project site and/or surrounding area is known to and/or has the potential to support special-status species, and these resources may need to be evaluated and addressed prior to any approvals that would allow ground-disturbing activities. CDFW is concerned regarding potential impacts to special-status species including, but not limited to, the Federally threatened (FT) and State species of concern (SSC) California red-legged frog (*Rana draytonii*), the Federal species of concern (FSC) and State endangered (SE) foothill yellow-legged frog (*Rana boylei*), the FT steelhead South Central California DPS (*Oncorhynchus mykiss irideus* pop. 9), the Federal Candidate (FC) and SSC Monarch butterfly (*Danaus plexippus*), the SSC Western pond turtle (*Emys marmorata*), the 1B.1 (rare, threatened, or endangered in California and elsewhere) and Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*), the 1B.2 (rare, threatened, or endangered in California and elsewhere) San Luis mariposa lily (*Calochortis obispoensis*), and 1B.3 (rare, threatened, or endangered in California and elsewhere) San Luis Obispo dudleya (*Dudleya abramsii* ssp. *murina*).

### **California Red-Legged Frog (CRLF)**

CRLF have been observed in Brizzolara Creek per CNDDDB records. If suitable habitat is present within the Project site and adjoining area, CDFW recommends that a qualified biologist conduct a habitat assessment and protocol surveys for CRLF as part of the biological technical studies conducted in support of the CEQA document and, regardless of the results of the initial surveys, repeated within 48 hours prior to commencing work (two night surveys immediately prior to construction or as otherwise required by the USFWS) in accordance with the USFWS *Revised Guidance on Site Assessment and Field Surveys for the California Red-legged Frog* (USFWS 2005) to determine if CRLF are within or adjacent to individual project sites.

If any CRLF are found during the initial protocol surveys conducted as part of the biological technical studies, the preconstruction surveys, or at any time during construction CDFW recommends that CDFW be contacted to discuss a relocation plan for CRLF. If CRLF are found at any time during construction, CDFW recommends that construction cease immediately and that CDFW be contacted to discuss a relocation plan for CRLF.

Marcus Jackson  
Cal Poly, San Luis Obispo  
October 17, 2022  
Page 5

CDFW recommends that initial ground-disturbing activities be timed to avoid the period when CRLF are most likely to be moving through upland areas (November 1 through March 31). If ground-disturbing activities must take place between November 1 and March 31, CDFW recommends that a qualified biologist monitor construction activity daily.

### **Foothill Yellow-Legged Frog (FYLF)**

CNDDDB records show that FYLF have been observed in Brizzolara Creek. CDFW recommends that a qualified biologist conduct a habitat assessment as part of the biological technical studies conducted in support of the CEQA document to determine if the Project area or its vicinity contains suitable habitat for FYLF.

If it is determined through the habitat assessment that habitat suitable to support FYLF is present within or near the project sites, CDFW recommends that focused visual encounter surveys be conducted by a qualified biologist during appropriate survey period(s) (April – October) in areas where potential habitat exists. CDFW advises that these surveys generally follow the methodology described in pages 5–7 of *Considerations for Conserving the Foothill Yellow-Legged Frog* (CDFW 2018a). In addition, CDFW advises surveyors adhere to *The Declining Amphibian Task Force Fieldwork Code of Practice* (DAPTF 1998). If any life stage of the FYLF (adult, metamorph, larvae, egg mass) is found, CDFW recommends consulting with CDFW to develop avoidance measures and evaluate permitting needs.

Submission of survey results to CDFW is recommended. In the event of negative findings, CDFW recommends that consultation with CDFW include documentation demonstrating FYLF are unlikely to be present in the vicinity of the project site. Information submitted may include, but is not limited to, a full habitat assessment and survey results. If any life stage of FYLF is detected, consultation with CDFW is advised to determine if an Incidental Take Permit (ITP) is necessary to comply with CESA.

If surveys find that FYLF are occupying the project area and cannot be avoided, CDFW may issue an ITP authorizing take of FYLF, pursuant to Fish and Game Code section 2081 subdivision (b). Take authorization is issued only when take is incidental to an otherwise lawful activity, the impacts of the take are minimized and fully mitigated, the applicant ensures there is adequate funding to implement any required measures, and take is not likely to jeopardize the continued existence of the species.

### **Steelhead South-Central California Coast (Steelhead)**

An estimated 94,000 steelhead spawned in streams of the central California coast in the early 1960s. Steelhead numbers have been in decline since the 1960's and most coastal streams have remnant runs of 500 fish or fewer (Center for Biological Diversity,

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2021). Per CNDDDB records, Steelhead have been observed in Stenner Creek approximately 0.6-mile upstream of the Project area.

CDFW recommends Project activities avoid work in water and floodplains whenever possible and conducting Project activities during less critical times of the year (June-February) and avoid spawning riffles or holding pools.

### **Monarch Butterfly (MOBU): Overwintering Population**

MOBUs have been observed per CNDDDB just south of Highland Drive near Stenner Creek within the Project limits. CDFW recommends that a qualified biologist conduct a habitat assessment, well in advance of Project implementation. The qualified biologist shall determine if the Project area or its immediate vicinity continues to contain habitat suitable to support the MOBU. The qualified biologist should assess habitat following the Xerces Management Guidelines for Monarch Butterfly Overwintering Habitat (The Xerces Society, 2017) or other protocols with prior approval by CDFW.

If suitable habitat for MOBU is present, CDFW recommends consultation with a qualified biologist and site monitors with knowledge of the history of the grove/area to determine primary roosting trees and other structural components of flora integral to maintaining microclimate conditions. These plants/trees shall be marked and avoided during Project activities. CDFW recommends avoiding or minimizing the cutting or trimming of trees within core overwintering habitat except for specific grove management purposes, and/or human health and safety purposes. Management activities in groves should be conducted between March 16<sup>th</sup> and September 14<sup>th</sup>, in coordination with the aforementioned biologist (Marcum and Darst, 2021).

If suitable habitat is present, and it is the overwintering period of September 15<sup>th</sup> – March 15<sup>th</sup> (Marcum and Darst, 2021), a qualified biologist shall be retained to assess habitat for presence of MOBU. The habitat should be assessed by conducting surveys following CDFW recommended protocols or protocol-equivalent surveys that have been developed by experts, such as the Xerces Society Western Monarch Count Protocol.

If MOBU are detected within the Project area, MOBU overwintering habitat shall be avoided by delineating and observing a no-disturbance buffer of at least 0.5 mile from the outer edge of the habitat (Marcum and Darst, 2021). If buffers cannot be maintained, then consultation with CDFW is warranted and recommended to determine how to implement ground and tree-disturbing activities and avoid take.

### **Western Pond Turtle (WPT)**

WPT are known to nest in the spring or early summer within 100 meters (approximately 328-feet) of a water body, although nest sites as far away as 500 meters (approximately

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1,640-feet) have also been reported (Thompson et al. 2016). CNDDDB records show that WPT have been observed approximately 0.2-mile upstream from Project limits.

CDFW recommends that a qualified biologist conduct focused surveys for WPT as part of the biological technical studies conducted in support of the CEQA document and then repeat the focused surveys, regardless of the initial results, ten days prior to Project implementation. In addition, CDFW recommends that focused surveys for nests occur during the egg-laying season (March through August) and that any nests discovered remain undisturbed until the eggs have hatched.

CDFW recommends that if any WPT are discovered at the site immediately prior to or during Project activities, they be allowed to move out of the area on their own.

### **Special Status Plants (SSP)**

Per CNDDDB records, SSPs including Congdon's tarplant, San Luis mariposa lily, and San Luis Obispo dudleya have been observed within and adjacent to the proposed Project site. CDFW recommends the Project area be surveyed for SSPs by a qualified botanist following the "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (CDFW, 2022). This protocol, which is intended to maximize detectability, includes identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period. CDFW recommends that the protocol be repeated over two growing and blooming seasons for each species likely to be present, to minimize effects of varying moisture regimes influencing results and maximize detection of rare plants.

CDFW recommends SSP species be avoided whenever possible by delineation of and observing a no-disturbance buffer of at least 50-feet from the outer edge of the plant population(s) or specific habitat type(s) required by special status plant species. If buffers cannot be maintained, then consultation with CDFW is warranted to determine appropriate minimization and mitigation measures for impacts to special status plant species.

## **II. Editorial Comments and/or Suggestions**

CDFW requests that the DEIR fully identify potential impacts to biological resources, including the above-mentioned species. In order to adequately assess any potential impacts to biological resources, focused biological surveys should be conducted by a qualified wildlife biologist/botanist during the appropriate survey period(s) in order to determine whether any special-status species and/or suitable habitat features may be present within the Project area. Properly conducted biological surveys, and the information assembled from them, are essential to identify any mitigation, minimization, and avoidance measures and/or the need for additional or protocol-level surveys, and to identify any Project-related impacts under CESA and other species of concern.



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Therefore, CDFW recommends the DEIR address potential impacts to these species and provide measurable mitigation measures that, as needed, will reduce impacts to less than significant levels. Information on survey and monitoring protocols for sensitive species can be found at CDFW's website (<https://www.wildlife.ca.gov/Conservation/Survey-Protocols>).

**Federally Listed Species:** CDFW also recommends consulting with the USFWS on potential impacts to Federally listed species, specifically, but not limited to, the FT steelhead-south-central California coast DPS and the California red-legged frog, and the FC and State SSC monarch-California overwintering population. Take under the Federal Endangered Species Act (FESA) is more broadly defined than CESA; take under FESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting. Consultation with the USFWS to comply with FESA is advised well in advance of any ground disturbing activities.

**Waters of the State and U.S.:** Pursuant to Fish and Game Code section 5650, it is unlawful to deposit in, permit to pass into, or place where it can pass into "Waters of the State" any substance or material deleterious to fish, plant life, or bird life, including non-native species. It is possible that without mitigation measures this Project could result in pollution of Waters of the State from storm water runoff or construction-related erosion. Potential impacts to the wildlife resources that utilize watercourses in the Project area include the following: increased sediment input from road or structure runoff; construction-related activity runoff associated with Project-related activities and implementation; and/or impairment of wildlife movement through the area. The Regional Water Quality Control Board and United States Army Corps of Engineers (USACE) also have jurisdiction regarding discharge and pollution to Waters of the State.

**Lake and Streambed:** The Project is subject to CDFW's regulatory authority pursuant Fish and Game Code section 1600 et seq. Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may (a) substantially divert or obstruct the natural flow of any river, stream, or lake; (b) substantially change or use any material from the bed, bank, or channel of any river, stream, or lake; or (c) deposit debris, waste or other materials that could pass into any river, stream, or lake. "Any river, stream, or lake" includes those that are ephemeral or intermittent, as well as those that are perennial in nature.

For additional information on notification requirements, please contact our staff in the Lake and Streambed Alteration Program at (559) 243-4593. It is important to note, CDFW is required to comply with CEQA, as a Responsible Agency, when issuing a Lake or Streambed Alteration Agreement. If inadequate, or no environmental review, has occurred, for the Project activities that are subject to notification under Fish and Game Code 1602, CDFW will not be able to issue the Final LSAA Lake and Streambed

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Alteration Agreement until CEQA analysis for the project is complete. This may lead to considerable Project delays.

**Water Rights:** CDFW recommends the DEIR include a detailed analysis of the water rights and water entitlements that pertain to the Project, including whether any applications or change petitions will be filed. As stated previously, CDFW, as Trustee Agency, is consulted by the SWRCB during the water rights process to provide terms and conditions designed to protect fish and wildlife prior to appropriation of the State's water resources. Given the potential for impacts to sensitive species and their habitats, it is advised that required consultation with CDFW occur well in advance of the SWRCB water right application process.

**Nesting birds:** Per Google and CNDDDB aerials along with Google Street View, the Project site contains numerous trees within/adjacent to the two creeks within the proposed Project boundaries. While no tree removal was mentioned in the Project information, CDFW encourages that Project implementation occur during the bird non-nesting season; however, if ground-disturbing or vegetation-disturbing activities must occur during the breeding season (February through mid-September), the Project applicant is responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act or relevant Fish and Game Codes as referenced above.

To evaluate Project-related impacts on nesting birds, CDFW recommends that a qualified biologist conduct an assessment of nesting habitat during biological surveys in support of the project's CEQA document, and then repeated as pre-activity surveys for active nests no more than 10 days prior to the start of ground or vegetation disturbance to maximize the probability that nests that could potentially be impacted are detected. CDFW also recommends that surveys cover a sufficient area around the Project sites to identify nests and determine their status. A sufficient area means any area potentially affected by the Project. In addition to direct impacts (i.e., nest destruction), noise, vibration, and movement of workers or equipment could also affect nests. Prior to initiation of construction activities, CDFW recommends that a qualified biologist conduct a survey to establish a behavioral baseline of all identified nests. Once construction begins, CDFW recommends having a qualified biologist continuously monitor nests to detect behavioral changes resulting from the Project. If behavioral changes occur, CDFW recommends halting the work causing that change and consulting with CDFW for additional avoidance and minimization measures.

If continuous monitoring of identified nests by a qualified biologist is not feasible, CDFW recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors. These buffers are advised to remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and

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are no longer reliant upon the nest or on-site parental care for survival. Variance from these no-disturbance buffers is possible when there is compelling biological or ecological reason to do so, such as when the construction areas would be concealed from a nest site by topography. CDFW recommends that a qualified biologist advise and support any variance from these buffers and notify CDFW in advance of implementing a variance.

**Project Alternatives Analysis:** CDFW recommends that the information and results obtained from the biological technical surveys, studies, and analysis conducted in support of the project's CEQA document be used to develop and modify the project's alternatives to avoid and minimize impacts to biological resources to the maximum extent possible. When efforts to avoid and minimize have been exhausted, remaining impacts to sensitive biological resources should be mitigated to reduce impacts to a less than significant level, if feasible.

**Cumulative Impacts:** CDFW recommends that a cumulative impact analysis be conducted for all biological resources that will either be significantly or potentially significantly impacted by implementation of the project, including those whose impacts are determined to be less than significant with mitigation incorporated or for those resources that are rare or in poor or declining health and will be impacted by the project, even if those impacts are relatively small (i.e. less than significant). Cumulative impacts should be analyzed using an acceptable methodology to evaluate the impacts of past, present, and reasonably foreseeable future projects on resources and should be focused specifically on the resource, not the project. An appropriate resource study area should be identified and utilized for this analysis. CDFW staff is available for consultation in support of cumulative impacts analyses as a trustee and responsible agency under CEQA.

## **ENVIRONMENTAL DATA**

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The completed form can be mailed electronically to CNDDDB at the following email address: [CNDDDB@wildlife.ca.gov](mailto:CNDDDB@wildlife.ca.gov). The types of information reported to CNDDDB can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

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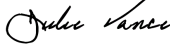
## FILING FEES

If it is determined that the Project has the potential to impact biological resources, an assessment of filing fees will be necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

CDFW appreciates the opportunity to comment on the Project to assist the California State University Board of Trustees/California Polytechnic State University in identifying and mitigating the Project's impacts on biological resources.

More information on survey and monitoring protocols for sensitive species can be found at CDFW's website (<https://www.wildlife.ca.gov/Conservation/Survey-Protocols>). If you have any questions, please contact Kelley Nelson, Environmental Scientist, at the address provided on this letterhead, or by electronic mail at [Kelley.Nelson@wildlife.ca.gov](mailto:Kelley.Nelson@wildlife.ca.gov).

Sincerely,

DocuSigned by:  
  
FA83F09FE08945A...  
Julie A. Vance  
Regional Manager

ec: Patricia Cole ([patricia\\_cole@fws.gov](mailto:patricia_cole@fws.gov))  
United States Fish and Wildlife Service

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## LITERATURE CITED

California Department of Fish and Wildlife (CDFW). 2022. Biogeographic Information and Observation System (BIOS). <https://www.wildlife.ca.gov/Data/BIOS>. Accessed September 27, 2022.

### *MOBU Literature Citation*

Marcum, S., and Darst, C. 2021. Western Monarch Butterfly Conservation Recommendations.

The Xerces Society. 2017. Protecting California's Butterfly Groves: Management Guidelines for Monarch Butterfly Overwintering Habitat.

### *CRLF Literature Citation*

USFWS. 2005. Revised Guidance on Site Assessment and Field Surveys for the California Red-legged Frog March 2005. 26 pp.

### *FYLF Literature Citation*

California Department of Fish and Wildlife (CDFW). 2018a. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. California Department of Fish and Wildlife, March 2018.

Declining Amphibian Task Force (DAPTF). 1998. The Declining Amphibian Task Force Fieldwork Code of Practice. <https://www.fws.gov/media/declining-amphibian-task-force-fieldwork-code-practice>

### *Steelhead Literature Citation*

Center for Biological Diversity. 2021. [https://www.biologicaldiversity.org/species/fish/central California coast steelhead trout/index.html](https://www.biologicaldiversity.org/species/fish/central_California_coast_steelhead_trout/index.html)

### *WPT Literature Citation*

Thomson, R. C., A. N. Wright, and H. B. Shaffer, 2016. California Amphibian and Reptile Species of Special Concern. California Department of Fish and Wildlife and University of California Press.

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*SSP Species*

CDFW. 2022. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. California Department of Fish and Wildlife.

# Appendix B

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## Construction Assumptions





# Cal Poly San Luis Obispo Water Reclamation Facility



**Table 1 | Construction Impacts Projection**

The following table identifies a breakdown in construction activities, duration of activity, level of effort and required construction equipment necessary to complete each task.

Construction Phase	Estimated Start	Estimated Finish	Duration (Weeks)	Duration (Calendar Days)	Duration (Working Days)	Number of Worker per day (8 hrs. / day)	Equipment List Total # of Equip. / hrs. per day T4
Mobilization – Trailer Set-up, Potholing, Survey, USA	10/17/24	11/11/24	3	18	26	4	2-pick-up 1-utility truck 1-vac truck 1-backhoe
Force Main Underground Piping	11/12/24	11/26/25	54	378	272	8	2-pick-up 1-utility truck 2-hydraulic track mounted excavator w/bucket (3cy) 1-backhoe and sheep foot 3-4-tri-axle dump trucks 1-water truck
Lift Pump Station LS-1	11/12/24	5/20/25	22	156	135	4	1-pick-up 1-utility truck 1-hydraulic track mounted excavator w/bucket (3cy) 1-backhoe and sheep foot 1-water truck 1-110 ton lattice crane 1-concrete truck 1-concrete pump truck
Lift Pump Station LS-2	2/6/25	9/7/25	22	156	135	4	1-pick-up 1-utility truck 1-hydraulic track mounted excavator w/bucket (3cy)

								1-backhoe and sheep foot 1-water truck 1-110 ton lattice crane 1-concrete truck 1-concrete pump truck
<b>Site Work – Phase 1 WRF Reservoir Prep</b>	5/20/25	8/9/25	12	84	74	10		1-pick-up 1-utility truck 2-hydraulic track mounted excavator w/bucket (3cy) 1-dozer 1-backhoe and sheep foot 2-dump trucks 1-water truck
<b>Site Work – Phase 2 WRF Prep</b>	6/10/25	7/11/25	5	35	24	8		2-pick-up 1-utility truck 1-hydraulic track mounted excavator w/bucket (3cy) 1-dozer 1-backhoe and sheep foot 1-Skid steer loader 1-water truck
<b>Site Work – Phase 3 Lagoon Digester Prep</b>	9/1/25	9/24/25	4	24	18	4		2-pick-up 1-utility truck 1-backhoe and sheep foot
<b>Site Work – Exterior Improvements</b>	12/26/25	1/27/26	5	33	23	6		2-pick-up 1-utility truck 1-backhoe and sheep foot 1 - water truck
<b>Pre-packaged WWTP Unit</b>	9/1/25	11/12/25	10	72	53	5		1-pick-up 1-utility truck 1-110 ton lattice crane 1-concrete truck 1-concrete pump truck
<b>Pre-Engineered Metal Building</b>	11/13/25	1/7/26	8	55	40	8		2-pick-up 2-utility truck 1- 50 ton RT crane 1-concrete truck

							1-concrete pump truck
<b>Yard Piping – Upgrade Existing Piping System</b>	3/4/25	11/10/25	36	251	180	6	1-pick-up 1-utility truck 1-hydraulic track mounted excavator w/bucket (3cy) 1-backhoe and sheep foot 1-dump trucks
<b>Yard Piping – Valve Box Structure</b>	3/11/25	8/18/25	23	160	114	3	1-pick-up 1-utility truck 1-backhoe
<b>Yard Piping – Wet Well Nelson Reservoir</b>	3/25/25	6/2/25	10	69	50	8	1-pick-up 1-utility truck 1-hydraulic track mounted excavator w/bucket (3cy) 1-backhoe and sheep foot

## Table 2 | Import and Export Calculations and Quantities

The following table identifies a breakdown in import and export quantities and pavement repair requirements for the proposed construction activities.

Surface Improvement Activity	Volume (cy)	Truck Size (cy)	Total Weight (Tons)	Estimated Truck Loads Delivered
Building – Stone Base	112	12	191	10
Valve Vault – Stone Base	34	12	58	3
Reservoir – Access Road	1097	12	1865	81
Treatment Unit – Stone Base	162	12	275	12
Lift Station #1 & #2 – Stone Base @ Wet Well	92	12	184	7
Lift Station #1 & #2 – Stone Base	178	12	302	14
Storage Tank – Stone Base	56	12	95	4
Asphalt Paving – Stone Base	210	12	357	16
Concrete for Treatment Unit	250	9	500	28
Concrete for Metal Building	107	9	214	12
Concrete for Lift Stations #1 & #2	1200	9	2400	134
Concrete Sidewalks	26	9	52	3
Force Main – Pipe Bedding	2889	12	4911	241
Replacement Piping – Pipe Bedding	2667	12	4534	222
Asphalt Paving – Road Replacement	210	12	368	18

### Table 3 | Earthwork Excavation Quantities

The following table identifies a breakdown of quantities anticipated for mass excavation efforts.

Earthwork Activity	Cut/Burrow Location	Fill Location	Percent Solids	Earthwork Cut Volume (cy)	High Side Semi Truck Size (cy)	Total Truckloads Transported	Transport Distance (miles)
Remove Organics	Reservoir	Stockpile	100%	4,350	12-14	335	1.5 mi
Remove Organics	WRF	Stockpile	100%	1,300	22-24	57	300-500 ft
Cut/Stockpile	Reservoir	TBD	100%	110,100	22-24	4788	.25
Cut/Haul	Reservoir	Stockpile	100%	16,300	12-14	1254	1.5 mi
Cut/Haul/Fill	Reservoir	WRF Building	100%	21,800	12-14	1677	1.25 mi
Fill	TBD	Reservoir	100%	78,900	22-24	3,430	.25
Cut/Haul	WRF Building	Stockpile	100%	5,300	22-24	231	700-1000 ft

### Table 4 | Worker Equipment Excavation and Site Earthwork Calculation

The following table identifies a breakdown of quantities anticipated, transportation expectations and associated level of effort.

Earthwork Activity	Equipment Used for Earthwork	Loads Esc. Per Scraper (per/hr)	Total Loads Excavated (per/hr)	Workday Duration (hr/day)	Load Excavated (per/day)	High Side Semi Truck Size (cy)	Daily Volume Excavated (cy/d)	Days of Mass Excavation
Remove Organics - Reservoir	Hydraulic Excavator 1-1/2 cy bucket	10	10	8	80	13	1000	6
Remove Organics - WRF	Hydraulic Excavator 1-1/2 cy bucket	7	7	8	56	23	1300	1
Cut/Stockpile - Reservoir	Hydraulic Excavator 3 cy bucket	19	19	8	152	23	3496	32
Cut/Haul - Reservoir	Hydraulic Excavator 3 cy bucket	20	20	8	157	13	2041	8
Cut/Haul/Fill - Reservoir	Hydraulic Excavator 3 cy bucket	20	20	8	157	13	2041	11
Fill - Reservoir	Hydraulic Excavator 3 cy bucket	19	19	8	152	23	3496	23
Cut-Haul - WRF	Hydraulic Excavator 3 cy bucket	14	14	8	115	23	2650	2

# Appendix C

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Construction Noise Modeling Results





# Construction Source Noise Prediction Model (Leq)

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L <sub>eq</sub> dBA)	Equipment	Reference Emission Noise Levels (L <sub>max</sub> ) at 50 feet <sup>1</sup>	Usage Factor <sup>1</sup>
Threshold	221	75.0	Excavator	85	0.4
	50	87.9	Dozer	85	0.4
	100	81.9	Dump Truck	84	0.4
			Front End Loader	80	0.4
			Grader	85	0.4
			Flat Bed Truck	84	0.4
			Ground Type	HARD	
			Source Height	8	
			Receiver Height	5	
			Ground Factor <sup>2</sup>	0.00	
			<b>Predicted Noise Level<sup>3</sup></b>	<b>L<sub>eq</sub> dBA at 50 feet<sup>3</sup></b>	
			Excavator	81.0	
			Dozer	81.0	
			Dump Truck	80.0	
			Front End Loader	76.0	
			Grader	81.0	
			Flat Bed Truck	80.0	
			<b>Combined Predicted Noise Level (L<sub>eq</sub> dBA at 50 feet)</b>	<b>87.9</b>	

Sources:

<sup>1</sup> Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

<sup>2</sup> Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 6-23).

<sup>3</sup> Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 12-3).

$$L_{eq}(\text{equip}) = E.L. + 10 \cdot \log(U.F.) - 20 \cdot \log(D/50) - 10 \cdot G \cdot \log(D/50)$$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2006: pg 6-23); and

D = Distance from source to receiver.



# Construction Source Noise Prediction Model (Lmax)

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L <sub>eq</sub> dBA)	Equipment	Reference Emission Noise Levels (L <sub>max</sub> ) at 50 feet <sup>1</sup>	Usage Factor <sup>1</sup>
Threshold	350	75.0	Excavator	85	1
	50	91.9	Dozer	85	1
	100	85.9	Dump Truck	84	1
			Front End Loader	80	1
			Grader	85	1
			Flat Bed Truck	84	1
			Ground Type	HARD	
			Source Height	8	
			Receiver Height	5	
			Ground Factor <sup>2</sup>	0.00	
			<b>Predicted Noise Level<sup>3</sup></b>	<b>L<sub>eq</sub> dBA at 50 feet<sup>3</sup></b>	
			Excavator	85.0	
			Dozer	85.0	
			Dump Truck	84.0	
			Front End Loader	80.0	
			Grader	85.0	
			Flat Bed Truck	84.0	
			<b>Combined Predicted Noise Level (L<sub>eq</sub> dBA at 50 feet)</b>		
				91.9	

Sources:

<sup>1</sup> Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

<sup>2</sup> Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 6-23).

<sup>3</sup> Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 12-3).

$$L_{eq}(\text{equip}) = E.L. + 10 \cdot \log(U.F.) - 20 \cdot \log(D/50) - 10 \cdot G \cdot \log(D/50)$$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2006: pg 6-23); and

D = Distance from source to receiver.



# Utility/Pipeline Construction Leq



Location	Distance To Where Threshold Would be Exceeded in feet	Combined Predicted Noise Level (L <sub>eq</sub> dBA)	Equipment	Reference Emission Noise Levels (L <sub>max</sub> ) at 50 feet <sup>1</sup>	Usage Factor <sup>1</sup>
Church of Jesus Christ of Latter-Day Saints	150	73.5	Excavator	85	0.2
			Dump Truck	84	0.4
			Backhoe	80	0.4

Ground Type	hard
Source Height	8
Receiver Height	5
Ground Factor <sup>2</sup>	0.00

Predicted Noise Level <sup>3</sup>	L <sub>eq</sub> dBA at 50 feet <sup>3</sup>
Excavator	78.0
Dump Truck	80.0
Backhoe	76.0

Sources:

<sup>1</sup> Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

<sup>2</sup> Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 6-23).

<sup>3</sup> Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 12-3).

$$L_{eq}(\text{equip}) = E.L. + 10 \cdot \log(\text{U.F.}) - 20 \cdot \log(D/50) - 10 \cdot G \cdot \log(D/50)$$

Where: E.L. = Emission Level;

U.F. = Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2006: pg 6-23); and

D = Distance from source to receiver.

**Combined Predicted Noise Level (L<sub>eq</sub> dBA at 50 feet)**

## Utility/Pipeline Construction Lmax

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level ( $L_{eq}$ dBA)	Equipment	Reference Emission Noise Levels ( $L_{max}$ ) at 50	Usage Factor <sup>1</sup>
Threshold	230	75.0	Excavator	85	1
Church of Jesus Christ of Latter-Day Saints	150	78.7	Dump Truck	84	1
			Backhoe	80	1

Ground Type	hard
Source Height	8
Receiver Height	5
Ground Factor <sup>2</sup>	0.00

Predicted Noise Level <sup>3</sup>	$L_{eq}$ dBA at 50 feet <sup>3</sup>
Excavator	85.0
Dump Truck	84.0
Backhoe	80.0

Sources:

<sup>1</sup> Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

<sup>2</sup> Based on Figure 6-5 from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 6-23).

<sup>3</sup> Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2006 (pg 12-3).

$$L_{eq}(\text{equip}) = E.L. + 10 \cdot \log(U.F.) - 20 \cdot \log(D/50) - 10 \cdot G \cdot \log(D/50)$$

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2006: pg 6-23); and

D = Distance from source to receiver.

**Combined Predicted Noise Level ( $L_{eq}$  dBA at 50 feet)**

# Appendix D

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## Botanical and Wildlife Species Evaluated for the Potential to Occur on the Project Site



**Table D-1 Special-Status Plant Species Documented to Occur within the Project Region**

Species Name	Habitat and Elevation	Flowering Period	Legal Status <sup>1</sup> Federal/ State/CNPS	Potential for Occurrence within the Project Site <sup>2</sup>
Hoover's bent grass <i>Agrostis hooveri</i>	Occurs in sandy sites in chaparral, cismontane woodland, and valley and foothill grassland. 60–600 meters.	April–July	—/—/1B.2	Not expected to occur: The project site does not support sandy soils.
Arroyo de la Cruz manzanita <i>Arctostaphylos cruzensis</i>	Occurs in broadleaf upland forest, coastal scrub, closed-cone coniferous forest, chaparral, and grassland. On sandy soils. 60–310 meters	December–March	—/—/1B.2	Not expected to occur: The project site does not support sandy soils.
Santa Lucia manzanita <i>Arctostaphylos luciana</i>	Occurs in chaparral with shale outcrops. 350–850 meters.	December–March	—/—/1B.2	Not expected to occur: The project site does not contain chaparral vegetation.
Morro manzanita <i>Arctostaphylos morroensis</i>	Occurs in chaparral, cismontane woodland, and coastal scrub and on stabilized coastal dunes. 5–205 meters.	December–March	FT/—/1B.1	Not expected to occur: The project site does not support sandy soils woodlands, chaparral, or coastal scrub habitat.
Oso manzanita <i>Arctostaphylos osoensis</i>	Occurs in chaparral and cismontane woodland associated with dacite porphyry (purple/red igneous volcanic rock) on buttes. 300–500 meters.	February–March	—/—/1B.2	Not expected to occur: The project site does not contain chaparral, woodland, or soils suitable for this species.
Pecho manzanita <i>Arctostaphylos pechoensis</i>	Occurs in closed-cone coniferous forest, chaparral, and coastal scrub on siliceous shale. 125–850 meters.	November to March	—/—/1B.2	Not expected to occur: The project site does not contain closed-cone coniferous forest, chaparral, or coastal scrub habitat, nor does the project site contain soils suitable for this species.
Santa Margarita manzanita <i>Arctostaphylos pilosula</i>	Occurs in closed coniferous forest, chaparral, and cismontane woodland on shale soils. 170–1,100 meters.	December–May	—/—/1B.2	Not expected to occur: The project site does not contain closed-cone coniferous forest, chaparral, or woodland habitat, nor does the project site contain soils suitable for this species.
Sand mesa manzanita <i>Arctostaphylos rudis</i>	Occurs in maritime chaparral and coastal scrub with sandy soils. 25–322 meters.	November–February	—/—/1B.2	Not expected to occur: The project site does not contain maritime chaparral and coastal scrub habitats suitable for this species.
Dacite manzanita <i>Arctostaphylos tomentosa</i> ssp. <i>daciticola</i>	Occurs in chaparral and cismontane woodland associated with dacite porphyry (purple/red igneous volcanic rock) on buttes. 100–300 meters.	March–May	—/—/1B.1	Not expected to occur: The project site does not contain chaparral, woodland, or soils suitable for this species.
Marsh sandwort <i>Arenaria paludicola</i>	Occurs in marshes and swamps; grows through dense mats of <i>Typha</i> , <i>Juncus</i> , <i>Scirpus</i> , etc. in freshwater marsh. 10–170 meters.	May–August	FE/SE/1B.1	May occur: The edges of reservoirs in the project site may provide habitat suitable for this species.
Mile's milk-vetch <i>Astragalus didymocarpus</i> var. <i>milesianus</i>	Occurs in coastal scrub on clay soils. 20–90 meters.	March–June	—/—/1B.2	Not expected to occur: The project site does not contain coastal scrub habitat suitable for this species.
Coulter's saltbush <i>Atriplex coulteri</i>	Occurs in coastal bluff scrub, coastal dunes, coastal scrub, and valley and foothill grassland/alkaline or clay. 3–460 meters.	March–October	—/—/1B.2	May occur: Grassland habitat in the project site may be suitable habitat for this species.

Species Name	Habitat and Elevation	Flowering Period	Legal Status <sup>1</sup> Federal/ State/CNPS	Potential for Occurrence within the Project Site <sup>2</sup>
Twisted horsehair lichen <i>Sulcaria spiralifera</i>	Typically associated with conifers. Largest known population is on Samoa Peninsula in Humboldt County. 0–30 meters.	Not applicable	—/—/1B.2	Not expected to occur: The project site does not contain conifer forest habitat suitable for this species.
San Luis mariposa lily <i>Calochortus obispoensis</i>	Occurs in chaparral, coastal scrub, and valley and foothill grassland. Often in serpentine grassland. 75–665 meters.	May–July	—/—/1B.2	May occur: Documented to occur in Poly Canyon, near the Poly “P,” and Pennington Creek preserve (CNDDDB 2022a). Serpentine soils may occur within the project site in the vicinity of Indonesian Reservoir. Therefore, the grassland in this area may be suitable for this species.
La Panza mariposa lily <i>Calochortus simulans</i>	Occurs in chaparral, cismontane woodlands, lower montane coniferous forest, and valley and foothill grassland; often in sandy, granitic, or serpentine soils. 395–1,100 meters.	April–June	—/—/1B.3	May occur: The project site contains grasslands near Indonesian Reservoir that may be located on serpentine soils suitable for this species.
Dwarf calycadenia <i>Calycadenia villosa</i>	Typically found in rocky, fine soils within chaparral, cismontane woodland, meadows and seeps, and valley and foothill grassland. 240–1,350 meters	May–October	—/—/1B.1	May occur: The grasslands in the project site provide habitat suitable for this species.
Hardham’s evening-primrose <i>Camissoniopsis hardhamiae</i>	Typically found in sandy, decomposed carbonate soils, especially in disturbed or burned areas among chaparral and cismontane woodland. 140–945 meters.	March–May	— /—/1B.2	Not expected to occur: The project site does not support suitable soils or habitats.
San Luis Obispo sedge <i>Carex obispoensis</i>	Occurs in closed-cone coniferous forests, chaparral, coastal prairie, coastal scrub, and valley and foothill grassland. Usually adjacent to seeps, springs, stream sides, or other water source with sand, clay, or serpentine. 5–790 meters.	April–June	—/—/1B.2	May occur: Documented to occur in upper reaches of Stenner Creek (CNDDDB 2022a). Grassland habitat adjacent to waterways in the project site may provide suitable habitat.
San Luis Obispo owl’s clover <i>Castilleja densiflora</i> ssp. <i>obispoensis</i>	Occurs in valley and foothill grassland. 10–215 meters.	March–May	—/—/1B.2	May occur: Documented to occur in Poly Canyon and Chorro Creek Ranch (CNDDDB 2022a). The grassland habitat within the project site may provide suitable habitat.
California jewelflower <i>Caulanthus californicus</i>	Occurs in nonnative grassland, upper Sonoran subshrub scrub, and cismontane juniper woodland and scrub communities in subalkaline and sandy loam soils. 61–1,000 meters.	February–May	FE/SE/1B.1	Not expected to occur: The project site does not contain soils suitable for this species. The campus is outside the current known range of the species (CNPS 2022b).
Nipomo Mesa ceanothus <i>Ceanothus impressus</i> var. <i>nipomensis</i>	Typically found in sandy soils within chaparral habitat. 30–245 meters.	February–April	—/—/1B.2	Not expected to occur: The project site does not contain soil or habitat suitable for this species.
San Luis Obispo ceanothus <i>Ceanothus thyrsiflorus</i> var. <i>obispoensis</i>	Typically found in dacite in chaparral and cismontane woodland. 140–225 meters.	June	—/—/1B.1	Not expected to occur: The project site does not contain soil or habitat suitable for this species.

Species Name	Habitat and Elevation	Flowering Period	Legal Status <sup>1</sup> Federal/ State/CNPS	Potential for Occurrence within the Project Site <sup>2</sup>
Congdon's tarplant <i>Centromadia parryi</i> ssp. <i>congdonii</i>	Occurs in alkaline soils within valley and foothill grassland. 0–230 meters.	June–October (sometimes blooms until November)	—/—/1B.1	May occur: Grassland habitat may provide habitat suitable for this species.
Coastal goosefoot <i>Chenopodium littoreum</i>	Occurs on coastal dunes. 10–30 meters.	April–August	—/—/1B.2	Not expected to occur: The project site does not contain coastal dunes.
Dwarf soaproot <i>Chlorogalum pomeridianum</i> var. <i>minus</i>	Occurs in chaparral habitats with serpentine soils. 305–1,000 meters.	May–August	—/—/1B.2	Not expected to occur: Species is not expected to occur within the project site because it lacks chaparral habitat on serpentine soils.
Salt marsh bird's-beak <i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	Occurs in coastal dunes and coastal salt marshes and swamps. 0–30 meters.	May–October (sometimes blooms until November)	FE/SE/1B.2	Not expected to occur: The project site does not contain coastal dune or salt marsh habitat.
Point Reyes salty bird's-beak <i>Chloropyron maritimum</i> ssp. <i>palustre</i>	Occurs in coastal salt marsh, usually <i>Salicornia</i> , <i>Distichlis</i> , <i>Jaumea</i> , <i>Spartina</i> , and other halophytes. 0–10 meters	June–October.	—/—/1B.2	Not expected to occur: The project site does not contain coastal salt marsh habitat.
Irish Hills spineflower <i>Chorizanthe aphanantha</i>	Occurs in chaparral and coastal scrub on gravelly, rocky, and serpentinite soils. 100–370 meters.	April–June	—/—/1B.3	Not expected to occur: The project site does not contain chaparral or coastal dune habitat.
Brewer's spineflower <i>Chorizanthe breweri</i>	Occurs in chaparral, cismontane woodland, coastal scrub, closed-cone coniferous forest; rocky or gravelly serpentine sites; usually in barren areas. 45–800 meters.	April–August	—/—/1B.3	Not expected to occur: The project site does not contain chaparral, cismontane woodland, coastal scrub, or closed-cone coniferous forest habitats suitable for this species.
Straight-awned spineflower <i>Chorizanthe rectispina</i>	Occurs in chaparral, cismontane woodland, and coastal scrub; often on granite in chaparral. 355–1,035 meters.	April–July	—/—/1B.3	Not expected to occur: The project site does not contain chaparral, woodland, coastal scrub, or soils suitable for this species.
San Luis Obispo fountain thistle [=Chorro Creek Bog Thistle] <i>Cirsium fontinale</i> var. <i>obispoense</i>	Occurs in chaparral and cismontane woodlands within serpentine seeps or bogs (strict serpentine endemic). 35–380 meters.	February–July (sometimes as late as August–September)	FE/SE/1B.2	Not expected to occur: Documented to occur in the vicinity of the project site; however, the project site does not contain seeps or bogs on serpentine substrates suitable for this species.
Cuesta Ridge thistle <i>Cirsium occidentale</i> var. <i>lucianum</i>	Occurs in openings among chaparral with rocky substrates and serpentinite; often found on steep rocky slopes and road cuts. 500–750 meters.	April–June	— /—/1B.2	Not expected to occur: The project site does not contain chaparral habitat on serpentine soils suitable for this species.
Surf thistle <i>Cirsium rhotophilum</i>	Occurs in coastal dunes, coastal bluff scrub, and open areas in central dune scrub; usually in coastal dunes. 3–60 meters	April–June	—/ST/1B.2	Not expected to occur: The project site does not contain coast dunes or coastal bluff scrub habitat suitable for this species.

Species Name	Habitat and Elevation	Flowering Period	Legal Status <sup>1</sup> Federal/ State/CNPS	Potential for Occurrence within the Project Site <sup>2</sup>
La Graciosa thistle <i>Cirsium scariosum</i> var. <i>loncholepsis</i>	Typically found in mesic, sandy soils within cismontane woodland, coastal dunes, coastal scrub, marshes and swamps (brackish), and valley and foothill grassland. 4-220 meters.	May–August	FE/ST/1B.1	Not expected to occur: While mesic grassland areas are present within the project site, the project site does not contain the sandy soils suitable for this species.
Popcorn lichen <i>Cladonia firma</i>	Occurs on soil, detritus, or moss on stabilized coastal dunes among coastal scrub. Known in California only from Morro Bay and Baywood-Los Osos areas. 30–75 meters.	Not applicable	—/—/2B.1	Not expected to occur: The project site does not contain coastal scrub or coastal dunes habitat suitable for this species.
Pismo clarkia <i>Clarkia speciosa</i> ssp. <i>immaculata</i>	Occurs in sandy soils, openings in chaparral, cismontane woodland, and valley and foothill grassland. On ancient sand dunes not far from the coast. 25–185 meters.	May–July	FE/SR/1B.1	Not expected to occur: While grasslands are present within the project site, the project site does not contain the sandy soils suitable for this species.
Dune larkspur <i>Delphinium parryi</i> ssp. <i>blochmaniae</i>	Occurs in maritime chaparral and coastal dunes with sandy or rocky soils. 0–200 meters.	April–June	—/—/1B.2	Not expected to occur: The project site does not contain coastal dunes or maritime chaparral habitat suitable for this species.
Eastwood’s larkspur <i>Delphinium parryi</i> ssp. <i>eastwoodiae</i>	Occurs in chaparral and valley and foothill grassland among serpentine soils. 60–640 meters.	March–May (sometimes may start blooming in February)	—/—/1B.2	May occur: Documented to occur in Poly Canyon outside of the project site (CNDDDB 2022a). Serpentine soils may occur within the project site in the vicinity of Indonesian Reservoir. Therefore, the grassland in this area may be suitable for this species.
Umbrella larkspur <i>Delphinium umbraculorum</i>	Occurs in cismontane woodland. 400–1,600 meters.	April–June	—/—/1B.3	Not expected to occur: The project site does not contain cismontane woodland habitat suitable for this species.
beach spectaclepod <i>Dithyrea maritima</i>	Occurs in coastal dunes, in coastal scrub, on seashores, on sand dunes, and in sandy places near the shore. 3–50 meters.	March–May	—/ST/1B.1	Not expected to occur: The project site does not contain coastal dune, coastal scrub, or sand dune habitat suitable for this species.
Betty’s dudleya <i>Dudleya abramsii</i> ssp. <i>bettinae</i>	Occurs in coastal scrub, valley and foothill grassland, chaparral, and rocky barren serpentine exposures. 20–180 meters.	May–July	—/—/1B.2	May occur: Serpentine soils may occur within the project site in the vicinity of Indonesian Reservoir. Therefore, the grassland in this area may be suitable for this species.
Mouse-gray dudleya <i>Dudleya abramsii</i> ssp. <i>murina</i>	Occurs in serpentine outcrops in chaparral and cismontane woodland. 90–300 meters.	May–June	—/—/1B.3	Not expected to occur: Cal Poly reports occurrences in Poly Canyon (Cal Poly 2020). Also documented to occur on Chorro Creek Ranch and in Poly Canyon but outside of the project site (CNDDDB 2022a). Species not expected to occur in the project site because the site lacks chaparral and cismontane woodland habitat suitable for the species.



Species Name	Habitat and Elevation	Flowering Period	Legal Status <sup>1</sup> Federal/ State/CNPS	Potential for Occurrence within the Project Site <sup>2</sup>
Blochman's dudleya <i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	Occurs in coastal scrub, chaparral, and valley and foothill grassland habitats on rocky outcrops in clay or serpentine soils. 5–450 meters.	April–June	—/—/1B.1	May occur: Documented occurrences in Poly Canyon and Pennington Creek outside of the project site (CNDDDB 2022a). Grassland habitat within the project site may be suitable for this species.
Yellow-flowered eriastrum <i>Eriastrum luteum</i>	Occurs in broadleaf upland forest, chaparral, and cismontane woodland on sandy or gravelly soils. 290–1,000 meters.	May–June	—/—/1B.2	Not expected to occur: The project site does not contain upland forest, cismontane woodland, chaparral, or sandy soils suitable for this species.
Blochman's leafy daisy <i>Erigeron blochmaniae</i>	Occurs in coastal dunes and coastal scrub on sandy soils. 3–45 meters.	July–August	—/—/1B.2	Not expected to occur: The project site does not contain coastal dune, coastal scrub, or sandy soils suitable for this species.
Indian knob mountainbalm <i>Eriodictyon altissimum</i>	Occurs in maritime chaparral, cismontane woodland, and coastal scrub with sandstone substrates. 80–270 meters.	March–June	FE/SE/1B.1	Not expected to occur: The project site does contain maritime chaparral, cismontane woodland, coastal scrub, or sandstone soils suitable for this species.
Hoover's button-celery <i>Eryngium aristulatum</i> var. <i>hooveri</i>	Occurs in vernal pools and seasonal wetlands (occasionally alkaline). 5–45 meters.	July (may bloom as early as June or as late as August)	—/—/1B.1	Not expected to occur: The project site does not contain suitable vernal pool habitat.
Irish Hills monkeyflower <i>Erythranthe serpentinicola</i>	Occurs in wet meadows and seeps within chaparral on rocky and serpentine soils. 60–360 meters.	February–May	—/—/1B.1	Not expected to occur: The project site does not contain chaparral habitat suitable for this species.
San Joaquin spearscale <i>Extriplex joaquiniana</i>	Occurs in chenopod scrub, meadows, seeps, playas, and valley and foothill grassland, often in alkaline soils. 1–835 meters.	April–October	—/—/1B.2	May occur: The project site contains grassland that may provide habitat suitable for this species.
Ojai fritillary <i>Fritillaria ojaiensis</i>	Occurs in broadleaf upland forest, chaparral, and lower montane coniferous forest on rocky soils. 300–998 meters.	February–May	—/—/1B.2	Not expected to occur: The project site does not contain chaparral or forested habitat suitable for this species.
San Benito fritillary <i>Fritillaria viridea</i>	Occurs in chaparral on serpentine slopes; 300–1,525 meters.	March–May	—/—/1B.2	Not expected to occur: The project site does not contain chaparral habitat suitable for this species.
Monterey cypress <i>Hesperocyparis macrocarpa</i>	Occurs along the coast in closed-cone coniferous forest on granitic soils. 10–30 meters.	Not applicable	—/—/1B.2	Not expected to occur: The project site does not contain closed-cone coniferous forest habitat suitable for this species.
Mesa horkelia <i>Horkelia cuneata</i> ssp. <i>puberula</i>	Occurs in chaparral, cismontane woodlands, and coastal scrub in sandy or gravelly sites. 70–810 meters.	February–July (may sometimes bloom in September)	—/—/1B.1	Not expected to occur: The project site does not contain chaparral, woodlands, or coastal scrub habitat suitable for this species.

Species Name	Habitat and Elevation	Flowering Period	Legal Status <sup>1</sup> Federal/ State/CNPS	Potential for Occurrence within the Project Site <sup>2</sup>
Kellogg's horkelia <i>Horkelia cuneata</i> ssp. <i>sericea</i>	Occurs in closed-cone coniferous forest, maritime chaparral, and coastal scrub with sandy or gravelly openings. 10–200 meters.	April– September	—/—/1B.1	Not expected to occur: The project site does not contain closed-cone coniferous forest, maritime chaparral, or coastal scrub habitat suitable for this species.
Perennial goldfields <i>Lasthenia californica</i> ssp. <i>macrantha</i>	Occurs in coastal bluff scrub, coastal dunes, and coastal scrub. 5–520 meters.	January– November	—/—/1B.2	Not expected to occur: The project site does not contain coastal bluff scrub, coastal dune, or coastal scrub habitat suitable for this species.
Coulter's goldfields <i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Occurs in freshwater wetlands coastal salt marshes, wetland/riparian habitat, alkali sink, playas, vernal pools, and swamps. 1–1,220 meters.	February– June	—/—/1B.1	May occur: The margins of the reservoirs and riparian corridors in the project site may provide habitat suitable for this species.
Jones's layia <i>Layia jonesii</i>	Occurs in chaparral and valley and foothill grassland on clay or serpentine outcrops. 5–400 meters.	March–May	—/—/1B.2	May occur: Documented to occur adjacent to the project site near Poly Canyon (CNDDDB 2022a). The grassland habitat in the project site may provide suitable habitat.
San Luis Obispo County lupine <i>Lupinus ludovicianus</i>	Occurs in chaparral, cismontane woodland, and in open areas in sandy soils or sandstone soils. 50–525 meters.	April–July	—/—/1B.2	Not expected to occur: The project site does not contain chaparral, woodland, or soils suitable for this species.
Slender bush-mallow <i>Malacothamnus gracilis</i>	Usually found in rocky soils within chaparral habitat. 190–575 meters.	May–October	—/—/1B.1	Not expected to occur: The project site does not contain chaparral habitat suitable for this species.
Carmel Valley bush-mallow <i>Malacothamnus palmeri</i> var. <i>involutus</i>	Typically found in chaparral, cismontane woodland, and coastal scrub. 30–1,100 meters.	April– October	—/—/1B.2	Not expected to occur: The project site does not contain chaparral, cismontane woodland, or coastal scrub habitat suitable for this species.
Santa Lucia bush-mallow <i>Malacothamnus palmeri</i> var. <i>palmeri</i>	Occurs in chaparral with rocky substrates. 60–360 meters.	May–July	—/—/1B.2	Not expected to occur: The project site does not contain chaparral habitat suitable for this species.
Palmer's monardella <i>Monardella palmeri</i>	Occurs in chaparral and cismontane woodland on serpentine slopes. 200–800 meters.	June–August	—/—/1B.2	Not expected to occur: The project site does not contain chaparral or cismontane woodland suitable for this species.
Southern curly-leaved monardella <i>Monardella sinuata</i> ssp. <i>sinuata</i>	Occurs in sandy soil among chaparral, cismontane woodland, coastal dunes, and coastal scrub with openings. 0–300 meters.	April– September	—/—/1B.2	Not expected to occur: The project site does not contain chaparral, cismontane woodland, coastal dunes, coastal scrub, or sandy soil suitable for this species.
San Luis Obispo monardella <i>Monardella undulata</i> spp. <i>undulata</i>	Typically found in coastal dunes and coastal scrubs with sandy soils. 10–200 meters	May– September	—/—/1B.2	Not expected to occur: The project site does not contain coastal dunes, coastal scrub, or sandy soil suitable for this species.

Species Name	Habitat and Elevation	Flowering Period	Legal Status <sup>1</sup> Federal/ State/CNPS	Potential for Occurrence within the Project Site <sup>2</sup>
Woodland woollythreads <i>Monolopia gracilens</i>	Typically found in serpentine soils within broadleaved upland forest (openings), chaparral (openings), cismontane woodland, North Coast coniferous forest (openings), and valley and foothill grasslands. 100–1,200 meters	March–July (occasionally may bloom as early as February)	—/—/1B.2	May occur: Serpentine soils may occur within the project site in the vicinity of Indonesian Reservoir. Therefore, the grassland in this area may be suitable for this species.
Aparejo grass <i>Muhlenbergia utilis</i>	Occurs in meadows and seeps, marshes and swamps, chaparral, coastal scrub, and cismontane woodland. Sometimes alkaline, sometimes serpentinite. 25–2,325 meters.	October–March	—/—/2B.2	May occur: The edges of the reservoirs and ponds may provide habitat suitable for this species.
Spreading navarretia <i>Navarretia fossalis</i>	Occurs in chenopod scrub, marshes and swamps (assorted shallow freshwater), playas, and vernal pools. 30–655 meters.	April–June	FT/—/1B.1	May occur: The edges of the reservoirs and ponds may provide habitat suitable for this species.
Shining navarretia <i>Navarretia nigelliformis</i> ssp. <i>radicans</i>	Sometimes occurs in clay soils within cismontane woodland, valley and foothill grassland, and vernal pools. 76–1,000 meters.	April–July (occasionally may bloom as early as March)	—/—/1B.2	May occur: Grassland habitat within the project site may be suitable for this species.
Coast woolly-heads <i>Nemacaulis denudate</i> var. <i>denudata</i>	Occurs on coastal dunes. 0–100 meters.	April–September	—/—/1B.2	Not expected to occur: The project site does not contain coastal dune habitat suitable for this species.
Hooked popcornflower <i>Plagiobothrys uncinatus</i>	Occurs in chaparral, cismontane woodland, and valley and foothill grassland with sandy soils. 300–760 meters.	April–May	—/—/1B.2	Not expected to occur: The project site does not contain sandy soils suitable for this species.
Diablo Canyon blue grass <i>Poa diaboli</i>	Occurs in closed-cone coniferous forest, chaparral, cismontane woodland, and coastal scrub with shale substrates. 120–400 meters.	March–April	—/—/1B.2	Not expected to occur: The project site does not contain closed-cone coniferous forest, chaparral, cismontane woodland, or coastal scrub habitat suitable for this species.
Adobe sanicle <i>Sanicula maritima</i>	Occurs in moist seeps within coastal prairie, chaparral, meadows, and valley and foothill grassland habitats in clay or serpentine soils. 30–240 meters.	February–May	—/SR/1B.1	May occur: Seasonal drainages within the grassland habitat in the project site area may be suitable for this species.
Black-flowered figwort <i>Scrophularia atrata</i>	Occurs in closed-cone coniferous forest, chaparral, coastal dunes, coastal scrub, and riparian scrub; around swales and in sand dunes; and in sand, diatomaceous shale, and soils derived from other parent material. 10–250 meters.	March–July	—/—/1B.2	Not expected to occur: The project site does not contain soils suitable for this species.
Rayless (chaparral) ragwort <i>Senecio aphanactis</i>	Sometimes occurs in alkaline soils within chaparral, cismontane woodlands, and coastal scrub. 15–800 meters.	January–April (may sometimes bloom till May)	—/—/2B.2	Not expected to occur: The project site does not contain closed-cone coniferous forest, chaparral, cismontane woodland, or coastal scrub habitat.
Cuesta pass checkerbloom <i>Sidalcea hickmanii</i> ssp. <i>anomala</i>	Occurs in closed-cone coniferous forest with rocky serpentine slopes. 600–800 meters.	May–June	—/SR/1B.2	Not expected to occur: The project site does not contain closed-cone coniferous forest habitat suitable for this species.

Species Name	Habitat and Elevation	Flowering Period	Legal Status <sup>1</sup> Federal/ State/CNPS	Potential for Occurrence within the Project Site <sup>2</sup>
Most beautiful jewelflower <i>Streptanthus albidus</i> ssp. <i>peramoenus</i>	Occurs in chaparral, cismontane woodlands, and valley and foothill grasslands on serpentine soil. 110–1,000 meters.	April–September (may bloom as early as March or as late as October)	—/—/1B.2	May occur: Serpentine soils may occur within the project site in the vicinity of Indonesian Reservoir, and there are documented occurrences of the species in this area (CNDDDB 2022a). Therefore, the grassland in this area may be suitable for this species.
California seablite <i>Suaeda californica</i>	Occurs in coastal salt marshes and swamps. 0–15 meters.	July–October	FE/—/1B.1	Not expected to occur: The project site does not contain coastal salt marsh and swamp habitat suitable for this species.
Splitting yarn lichen <i>Sulcaria isidiifera</i>	Occurs on branches of old growth oaks and shrubs in coastal scrub habitat.	Not applicable	—/—/1B.1	Not expected to occur: The project site does not contain old growth oak or coastal scrub habitat suitable for this species.
Saline clover <i>Trifolium hydrophilum</i>	Occurs in marshes and swamps, valley and foothill grassland (mesic, alkaline), and vernal pools. 0–300 meters.	April–June	—/—/1B.2	May occur: Mesic areas within grassland habitat may provide suitable habitat for this species.
Caper fruited tropidocarpum <i>Tropidocarpum capparideum</i>	Occurs in valley and foothill grassland habitats on alkaline hills 1–455 meters.	March–April	—/—/1B.1	Not expected to occur: The project site does not contain alkaline habitat suitable for this species.

Notes: CESA = California Endangered Species Act; CNPPA = California Native Plant Protection Act; ESA = federal Endangered Species Act.

<sup>1</sup> Legal Status Definitions

Federal:

FE Endangered (legally protected by ESA)  
 FT Threatened (legally protected by ESA)

State:

SE Endangered (legally protected by CESA)  
 ST Threatened (legally protected by CESA)  
 SR Rare (legally protected by CNPPA)

California Rare Plant Ranks:

1B Plant species considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under ESA or CESA)  
 2B Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under ESA or CESA)

Threat Ranks:

0.1 Seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)  
 0.2 Moderately threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat)  
 0.3 Not very threatened in California (less than 20% of occurrences threatened; low degree and immediacy of threat or no current threats known)

<sup>2</sup> Potential for Occurrence Definitions

Not expected to occur: Species is unlikely to be present in the project site because of poor habitat quality, lack of suitable habitat features, or restricted current distribution of the species.

May occur: Suitable habitat is available in the project site, and populations/occurrences are known to occur in the project vicinity.

Sources: CNDDDB 2022a; CNPS 2022a, CNPS 2022b; Baldwin et al. 2012.

**Table D-2 Special-Status Wildlife Species Evaluated for the 2019 Master Plan**

Species Name	Habitat and Distribution	Legal Status <sup>1</sup> Federal/State/ Other	Potential for Occurrence within the Project Site <sup>2</sup>
<b>Gastropods</b>			
Morro shoulderband snail <i>Helminthoglypta walkeriana</i>	Restricted to Baywood fine sand in coastal dune and coastal sage scrub communities near Morro Bay; often occurs under shrubs that exhibit dense, low growth and have ample contact with the ground. Use mock heather, seaside golden yarrow, deerweed, sand almond, and ice plant, among others.	E/—/—	Not expected to occur: The project site is outside of the current known range of this species.
<b>Insects</b>			
Crotch bumble bee <i>Bombus crotchii</i>	Found primarily in California: Mediterranean, Pacific coast, western desert, Great Valley, and adjacent foothills through most of southwestern California. Habitat includes open grassland and scrub. Nests underground.	—/CE/—	May occur: Crotch bumble bee has been documented to occur in the City of San Luis Obispo within the last 20 years (CNDDDB 2022a), and the grassland and riparian habitat within the project site likely provides adequate floral resources for the species.
Western bumble bee <i>Bombus occidentalis</i>	Once common throughout much of its range, in California, this species is currently largely restricted to high-elevation sites in the Sierra Nevada and the northern California coast. Habitat includes open grassy areas, chaparral, scrub, and meadows. Requires suitable nesting sites for the colonies, availability of nectar and pollen from floral resources throughout the duration of the colony period (spring, summer, and fall), and suitable overwintering sites for the queens.	—/CE/—	Not expected to occur: Although western bumble bee has been documented to occur historically in the vicinity of Pismo Beach (CNDDDB 2022a), the project site is outside of the current known range of this species (CDFW 2019).
Monarch butterfly <i>Danaus plexippus</i>	Occurs along the coast from northern Mendocino to Baja California, Mexico. Winter roosts in wind-protected tree groves (eucalyptus, Monterey pine, and cypress), with nectar and water sources nearby.	—/SSC/—	Known to occur: The riparian corridors of Smith Reservoir, Brizzolara Creek, and Stenner Creek support marginal conditions for this species. There is a documented occurrence of a winter roost within the project site along Stenner Creek (CNDDDB 2022a), downstream from Highland Drive.
<b>Branchiopods</b>			
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	Occurs in vernal pool habitats, including depressions in sandstone, to small swale, earth slump, or basalt-flow depressions with a grassy or, occasionally, muddy bottom in grassland.	T/— /—	Not expected to occur: The project site does not support vernal pools suitable for this species.
<b>Fish</b>			
Tidewater goby <i>Eucyclogobius newberryi</i>	Occurs in brackish shallow lagoons and lower stream reaches where water is fairly still, but not stagnant.	E/SSC/—	Not expected to occur: The project site does not support brackish water aquatic sites suitable for this species.
South-Central California Coast steelhead DPS <i>Oncorhynchus mykiss</i>	Occurs in clear, cool water with abundant instream cover, well-vegetated stream margins, relatively stable water flow, and a 1:1 pool-to-riffle ratio.	T/SSC/—	Known to occur: Species has been documented in Stenner Creek and Brizzolara Creek. Both these creeks are designated critical habitat and suitable for steelhead.

Species Name	Habitat and Distribution	Legal Status <sup>1</sup> Federal/State/ Other	Potential for Occurrence within the Project Site <sup>2</sup>
Amphibians			
California tiger salamander <i>Ambystoma californiense</i>	Cismontane woodland, meadow and seep, riparian woodland, valley and foothill grassland, vernal pool, and wetlands. Central Valley DPS federally listed as threatened. Santa Barbara and Sonoma Counties DPS federally listed as endangered. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	T/T/—	Not expected to occur: The project site is located between the range of the Santa Barbara DPS and the nearest documented occurrences of the Central Valley DPS. The nearest documented occurrence of the Central Valley DPS to the project site is in extreme northwestern San Luis Obispo County (CNDDDB 2022a).
Lesser slender salamander <i>Batrachoseps minor</i>	Occurs in the South Santa Lucia Mountains in tanbark oak, coast live oak, blue oak, and sycamore and laurel groves that support shaded slopes with abundant leaf litter.	—/SSC/—	Not expected to occur: The project site does not provide habitat suitable for this species.
Foothill yellow-legged frog <i>Rana boylei</i>	Frequents rocky streams and rivers with rocky substrate and open, sunny banks, in forests, chaparral, and woodlands. Range in California includes the north and central coasts and the western Sierra.	—/E/—	Not expected to occur: The species occurred historically in Brizzolara Creek (1958); however, the species has been extirpated from the creek and has not been detected during multiple surveys from 1981 to 2014. The closest documented extant population is in northern San Luis Obispo County (CNDDDB 2022a).
California red-legged frog <i>Rana draytonii</i>	Occurs in aquatic habitats with little or no flow and surface water depths to at least 2.3 feet. Presence of shrubby or emergent vegetation such as cattails required. Requires 11–20 weeks of permanent water for larval development. Must have access to estivation habitat.	T/SSC/—	Known to occur: Shepard, Smith, and Drumm Reservoirs; the Swine Unit detention basins; and Brizzolara and Stenner Creeks support suitable aquatic habitat, although not all of these features are suitable for breeding. Cal Poly staff observed species in the Swine Unit detention basin in 2011 (Cal Poly 2020). Also documented in Brizzolara Creek (CNDDDB 2022a).
Western spadefoot <i>Spea hammondi</i>	Inhabits vernal pools in primarily grassland but also in valley and foothill hardwood woodlands with sandy or gravelly soils.	—/SSC/—	Not expected to occur: The clay and clay loam soils found in the undeveloped parts of the project site are not suitable for this burrowing species. No vernal pools have been documented in the project site. The nearest documented occurrence of the species is in the Atascadero area (CNDDDB 2022a).
Coast Range newt <i>Taricha torosa torosa</i>	Breeds in ponds, reservoirs, and slow-moving streams. Frequents terrestrial habitats, such as oak woodlands.	—/SSC/—	Known to occur The perennial reservoirs and stream reaches on the campus lands support appropriate aquatic habitat. Documented to occur historically in Brizzolara Creek (CNDDDB 2022a).

Species Name	Habitat and Distribution	Legal Status <sup>1</sup> Federal/State/ Other	Potential for Occurrence within the Project Site <sup>2</sup>
<b>Reptiles</b>			
California legless lizard <i>Anniella pulchra</i> (inclusive of <i>A. p. nigra</i> )	Occurs in sandy or loose loamy soils with high moisture content under sparse vegetation.	—/SSC/—	Not expected to occur: Clay and clay loam soils in the project site are not suitable for this species.
Western pond turtle <i>Actinemys marmorata</i>	Quiet waters of ponds, lakes, streams, and marshes. Typically, in the deepest parts with an abundance of basking sites.	—/SSC/—	May occur: Some of the reservoirs in the project site support aquatic habitat suitable for this species. The species has been documented to occur in Stenner Creek upstream from the project site (CNDDDB 2022a).
Coast horned lizard <i>Phrynosoma coronatum</i> ( <i>blainvillii</i> population)	Frequents a wide variety of habitats, commonly occurring in lowlands along sandy washes, riparian woodland, valley and foothill grassland, coastal sage scrub, and chaparral in arid and semiarid climate conditions. Species prefers friable, rocky, or shallow sandy soils.	—/SSC/—	May occur: The nonnative annual grasslands in the project site could support this species. Documented to occur west of the project site in El Chorro Regional Park (CNDDDB 2022a).
<b>Birds</b>			
Tricolored blackbird <i>Agelaius tricolor</i>	Species requires open water; protected nesting substrate, such as blackberry, cattails, tules, or tall rushes; and foraging area with insect prey.	—/E, SSC/—	Known to occur: Some of the reservoirs in the project site support suitable breeding habitat. A small flock of fewer than 25 individuals was observed foraging in the fields where two of the proposed Water Recycling Facility water storage ponds would be located (Cal Poly 2020).
Grasshopper sparrow <i>Ammodramus</i> <i>savannarum</i>	Dense grasslands on rolling hills, on lowland plains, in valleys, and on hillsides on lower mountain slopes. Favors native grasslands with a mix of grasses, forbs, and scattered shrubs. Loosely colonial when nesting.	—/SSC/—	May occur: The nonnative annual grasslands in the project site could support this species. Documented to occur west of Santa Margarita (CNDDDB 2022a).
Golden eagle <i>Aquila chrysaetos</i>	Usually occurs in mountainous areas with varying vegetative cover and removed from people; may forage in grasslands and other open habitats; nests on cliff edges and rarely in tall trees.	—/FP/—	Not expected to occur: The project site does not support cliffs suitable for nesting by this species project site.
Burrowing owl <i>Athene cucularia</i>	Occurs in open, dry grasslands, deserts, and scrublands; subterranean nester, dependent upon burrowing mammals.	—/SSC/—	May occur: The campus is outside the breeding range for burrowing owl. However, burrowing owls could occupy the campus grasslands during the winter months.
Western yellow-billed cuckoo <i>Coccyzus americanus</i> <i>occidentalis</i>	Occurs in forests to open riparian woodlands with thick understory.	T/E/—	Not expected to occur: The project site is outside of the current range of this species (CNDDDB 2022b). The one documented occurrence within San Luis Obispo County is from 1921 and is assumed to be extirpated (CNDDDB 2022a). The riparian habitat within the project site is narrow, lacks complexity, and would be marginally suitable for the species.
White-tailed kite <i>Elanus leucurus</i>	Occurs in open grasslands, meadows, or marshlands for foraging close to isolated trees used for nesting and perching.	—/FP/—	May occur: Brizzolara Creek and Stenner Creek riparian areas support suitable conditions for this species. The species has been documented to occur within the vicinity of the project site (CNDDDB 2022a).

Species Name	Habitat and Distribution	Legal Status <sup>1</sup> Federal/State/ Other	Potential for Occurrence within the Project Site <sup>2</sup>
Southwestern willow flycatcher <i>Empidonax trailii extimus</i>	Typically found in areas with willows or other shrubs near standing or running water in southern California. Most nests are in willow, but some have been found in box elder, dogwood, hawthorn, bracken fern, and tamarisk.	E/E/—	Not expected to occur: Although the project site is within the historical range of the species, the riparian habitat in the project site does not provide suitable complexity to function as habitat for this species. Nearest historical observation is within the Santa Ynes River near Buellton, Santa Barbara County (CNDDDB 2022a).
California condor <i>Gymnogyps californianus</i>	Requires vast expanses of open savanna, grasslands, and foothill chaparral in mountain ranges of moderate altitude. Forages up to 100 miles from roost/nest.	E/E, FP/—	Not expected to occur: The project site does not contain suitable roosting or nesting habitat for this species. In addition, the existing human disturbance within the project site makes use as foraging habitat for condors unlikely.
California black rail <i>Laterallus jamaicensis coturniculus</i>	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	—/T, FP/—	Not expected to occur: The project site does not provide marsh habitat that is suitable for this species.
Least Bell's vireo <i>Vireo bellii pusillus</i>	Riparian forest, riparian scrub, and riparian woodland. Summer resident of southern California in low riparian vegetation in vicinity of water or in dry river bottoms; below 2,000 feet. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	E/E/—	May occur: The project site is within the historic range of least Bell's vireo. While the species was extirpated throughout much of its historic range, subsequent to listing under the Endangered Species Act, the least Bell's vireo population is expanding (Kus 2002). The species has been recorded within western San Luis Obispo County (Preston et al. 2021). While the species is uncommon, it is possible that recolonization of the historic range could continue into the foreseeable future.
Loggerhead shrike <i>Lanius ludovicianua</i>	Frequents open areas with scattered shrubs; commonly observed foraging in grassland, and desert scrubs; builds nests in isolated trees or shrubs in the vicinity of foraging areas.	—/SSC/—	May occur: The grasslands associated with grazing areas and pastures could support this species.
Purple martin <i>Progne subis</i>	Occupies valley foothill and montane hardwood forests, conifer forests, and riparian habitats; may nest in old woodpecker cavities or in human-made structures, such as bridges and culverts; feeds on insects.	—/SSC/—	May occur: Brizzolara Creek and Stenner Creek riparian areas may provide habitat suitable for this species.
California Ridway's rail (= California clapper rail) <i>Rallus obsoletus obsoletus</i> (= <i>Rallus longirostris obsoletus</i> )	Occurs within salt and brackish marshes dominated by pickleweed and Pacific cordgrass; currently restricted to marsh areas within the vicinity of San Francisco Bay; last species to be sighted in Morro Bay was documented in 1939.	E/E, FP/—	Not expected to occur: The project site does not provide marsh habitat that is suitable for this species.
<b>Mammals</b>			
Pallid bat <i>Antrozous pallidus</i>	Prefers rocky outcrops, cliffs, and crevices with access to open habitats for foraging; day roosts in caves, crevices, mines, and occasionally in hollow trees and buildings; night roosts may be in more open sites, such as porches and buildings. Species highly sensitive to disturbance.	—/SSC/—	May occur: Tree cavities within riparian corridors, unused buildings, bridges, and other similar structures within the project site may provide roosting habitat suitable for this species.



Species Name	Habitat and Distribution	Legal Status <sup>1</sup> Federal/State/ Other	Potential for Occurrence within the Project Site <sup>2</sup>
Ringtail <i>Bassariscus astutus</i>	Riparian habitats, forest habitats, and shrub habitats in lower to middle elevations. Usually found within 0.6 mile of a permanent water source, but may range farther in some locations.	—/FP/—	May occur: Brizzolara Creek and Stenner Creek riparian areas support habitat suitable for this species.
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	Occurs in a wide variety of habitats; most common in mesic (wet) sites; may use trees for day and night roosts; however, requires caves, mines, rock faces, bridges, or buildings for maternity roosts. Maternity roosts are in relatively warm sites. Species highly sensitive to disturbance.	—/SSC/—	May occur: Tree cavities within riparian corridors, unused buildings, bridges, and other similar structures within the project site may provide roosting habitat suitable for this species. There are documented occurrences just west of the project site on Camp San Luis Obispo (CNDDDB 2022a).
Morro Bay kangaroo rat <i>Dipodomys heermanni morroensis</i>	Typically occurs in habitats associated with stabilized dunes and coastal dune scrub communities with dominant vegetation, including mock heather, buck brush, and deer weed.	E/E/—	Not expected to occur: The project site does not provide habitat suitable for this species and is outside of the current known range of the species.
Giant kangaroo rat <i>Dipodomys ingens</i>	Typically found in annual grasslands on the western side of the San Joaquin Valley and marginal habitat in alkali scrub. Needs level terrain and sandy loam soils for burrowing.	E/E/—	Not expected to occur: The project site is outside of the current known range of this species (CNDDDB 2022c).
Western mastiff bat <i>Eumops perotis</i>	Found in many open, semiarid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc.; roosts in crevices in cliff faces, high buildings, trees, and tunnels.	—/SSC/—	May occur: Within the project site, tree cavities, buildings, bridges, and other similar structures where there are unobstructed drops of several feet below the roost may provide roosting habitat suitable for this species.
Monterey dusky-footed woodrat <i>Neotoma macrotis luciana</i>	Occurs in coastal central California in habitats that exhibit a moderate vegetative canopy, with a brushy understory. Builds nests of sticks and leaves at the base of, or within, a tree or shrub, or at the base of a hill. Primarily feeds on woody plants, but also eats fungi, flowers, grasses, and acorns.	—/SSC/—	May occur: The project site is at the boundary of the range of the species (Koenig 2015). However, <i>Neotoma macrotis</i> , big-eared woodrat, which is not a special-status species, may also occur within the project site. The riparian habitat within the project site is potentially suitable for this species.
San Diego desert woodrat <i>Neotoma lepida intermedia</i>	Coastal scrub of southern California from San Diego County to San Luis Obispo County. Moderate to dense canopies preferred. They are particularly abundant in rock outcrops and rocky cliffs and slopes.	—/SSC/—	Not expected to occur: The coastal scrub habitat required for this species is not found within the project site.
Big free-tailed bat <i>Nyctinomops macrotis</i>	Rare vagrant in California, probable resident in Texas, New Mexico, and southern Arizona; probably does not breed in California; prefers rugged, rocky canyons but will roost on buildings or in caves and trees.	—/SSC/—	May occur: This species does not breed in California and is an uncommon visitor; however, the species has been documented to occur in San Luis Obispo County (CNDDDB 2022a), and suitable nonmaternity roosting habitat and foraging habitat is present in the project site.
Mountain lion—Southern California/Central Coast evolutionarily significant unit <i>Puma concolor</i>	Found in most habitats within central California. Uses caves, other natural cavities, and brush thickets for cover and denning often within riparian habitats.	—/CT/—	May occur: Mountain lion is not anticipated to den within the project site because of the level of human disturbance and the narrow riparian corridors. However, the species may forage in the project site.

Species Name	Habitat and Distribution	Legal Status <sup>1</sup> Federal/State/ Other	Potential for Occurrence within the Project Site <sup>2</sup>
American badger <i>Taxidea taxus</i>	Occurs in open stages of shrub, forest, and herbaceous habitats; needs uncultivated ground with friable soils.	—/SSC/—	Known to occur: Grassland habitat in the project site is potentially suitable for the species, and American badger burrows were observed within the project site during surveys by Ascent Environmental biologists.
San Joaquin kit fox <i>Vulpes macrotis mutica</i>	Typically found in annual grasslands or grassy open stages with scattered shrubby vegetation in chenopod scrub and valley and foothill grasslands. Needs loose-textured sandy soils for burrowing, and suitable prey base.	E/T/—	Not expected to occur: The project site is outside of the current known range of the species (CNDDDB 2022d).

General references: Unless otherwise noted, all habitat and distribution data provided by CNDDDB.

Notes: CNDDDB = California Natural Diversity Database; DPS = distinct population segment.

<sup>1</sup> Legal Status Definitions

Federal:

- C Candidate (no formal protection other than CEQA consideration)
- E Endangered (legally protected)
- T Threatened (legally protected)

State:

- FP Fully protected (legally protected)
- SSC Species of special concern (no formal protection other than CEQA consideration)
- E Endangered (legally protected)
- T Threatened (legally protected)
- CE Candidate Endangered (legally protected)
- CT Candidate Threatened (legally protected)

<sup>2</sup> Potential for Occurrence Definitions

Not expected to occur: Species is unlikely to be present in the project site due to poor habitat quality, lack of suitable habitat features, or restricted current distribution of the species.

May occur: Suitable habitat is available in the project site; however, there are little to no other indicators that the species might be present.

Known to occur: The species has been documented to occur within the project site, either during searches of relevant databases and other sources, or during survey.

Sources: CalPoly 2019; CDFW 2019; CNDDDB 2022a, 2022b, 2022c, 2022d; Kus 2002; Preston et al. 2021.

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