

State Water Resources Control Board

Sierra Linda Mutual Water Company Consolidation, Metering, and Water Treatment Project

Addendum to the Mitigated Negative Declaration

SCH # 2017031075

August 2025

Prepared For: **State Water Resources Control Board**
Division of Financial Assistance
Environmental Review
1001 I Street, 16th Floor
Sacramento, CA 95814

Prepared By: **NV5, Inc.**
15092 Avenue of Science, Suite 200
San Diego, CA 92128
SWRCB TA Work Plan No. 7193



NV5 Job Number: 2228124-0001831-02

This page is left intentionally blank.

TABLE OF CONTENTS

1.0	Introduction	1
1.1	Project Background	1
1.2	California Environmental Quality Act Compliance.....	1
2.0	Description of Project ModificationS.....	2
2.1	Proposed Water Treatment Facility Relocation	2
2.2	Storage Tank Improvements AT PROPosed treatment facility	4
2.3	Proposed Pipelines and conduit.....	4
2.3.1	Proposed Raw Water Transmission Pipeline and Conduit from Wells to Proposed Treatment Facility	4
2.3.2	Proposed Treated Water Transmission Pipeline and Conduit from Proposed Treatment Facility to SLMWC Storage Tank Site.....	5
2.3.3	Distribution Pipeline Improvements	5
2.4	Well Site Improvements	5
3.0	Summary of Project Impacts.....	6
3.1	Impacts to Biological Resources from Proposed Changes	6
3.2	Impacts to Tribal Cultural and Cultural Resources from Proposed Change	7
3.3	Mitigation Measures.....	7
4.0	Conclusion.....	10
5.0	References	10

LIST OF EXHIBITS

Exhibit 1 – Location Map

Exhibit 2 – Project Overview

LIST OF APPENDICES

Appendix A – Revised Mitigation Monitoring and Reporting Program

Appendix B – General Biological Resources Assessment, 2025

Appendix C – Supplemental Archaeological Survey Report, 2025

1.0 INTRODUCTION

The original IS/MND for the Sierra Linda Mutual Water Company Consolidation, Metering, and Water Treatment Project was filed in March of 2017. This document is intended to serve as an addendum to the IS/MND to address the proposed project modifications caused by the relocation of the proposed water treatment facility.

1.1 PROJECT BACKGROUND

Established in 1950 (California Corporation Entity No. 245705), Sierra Linda Mutual Water Company (SLMWC) is a community water system (Public Water System No. CA2000506) that serves 89 residential service connections with an approximate population of 200. SLMWC is located in an unincorporated area of Madera County, approximately 1.7 miles south of Bass Lake along County Road 222. Bass Lake Annex #3 Mutual Water Company (BLA#3) is a community water system (PWS No. CA2000501), located directly west of SLMWC. BLA#3 was established in 1960 (California Corporation Entity No. 396408) and serves 28 residential service connections with an approximate population of 42.

SLMWC has several challenges, including the following: 1) SLMWC's deteriorating water system infrastructure and periodic violations of the maximum contaminant level (MCL) for uranium, arsenic, manganese, and iron, and 2) SLMWC has limited technical, managerial, and financial capacity to sustainably operate and manage its water system for the long-term due to a small shareholder/customer base. BLA#3, a neighboring water system facing similar challenges with deteriorating infrastructure and MCL exceedances for uranium, executed a consolidation and water service agreement with SLMWC on April 18, 2015, to promote and protect the health and safety of its shareholders and customers. Infrastructure improvements, including a water treatment plant, well improvements, storage tanks, and pipelines are required for this proposed consolidation and to address the water supply and water quality challenges facing the two systems.

The proposed Sierra Linda Mutual Water Company Consolidation, Metering, and Water Treatment Project's (project) Initial Study and Mitigated Negative Declaration (IS/MND) notes a portion of the proposed project will include "approximately 3 acres on three parcels to contain the new tanks, well, and treatment plant". In advance of construction, the project proponent, Sierra Linda Mutual Water Company (SLMWC), planned on purchasing parcel APN 061-400-018 in anticipation of constructing a water treatment plant. However, SLMWC was not successful in the land acquisition of APN 061-400-018 for the proposed water treatment facility. After evaluating three other parcels (APNs 061-400-012, 061-400-013, and 061-400-15) for potential locations for the proposed water treatment facility, SLMWC now plans to construct the proposed water treatment facility on APNs 061-400-012 and -013, both owned by Bass Lake Annex #3 (BLA#3). The two parcels, APNs 061-400-012 and -013, are adjacent to each other. Exhibit 1 shows the location of the parcels evaluated for the location of the proposed water treatment plant (APNs 061-400-012, 061-400-013, and 061-400-15). Exhibit 2 shows the revised project overview.

This addendum addresses the modified location of the proposed treatment facility; adds detail to the proposed construction of the treatment plant; clarifies proposed construction of storage tanks, pipelines, and conduits; describes proposed well equipping and destruction; and outlines anticipated permitting and approvals.

1.2 CALIFORNIA ENVIRONMENTAL QUALITY ACT COMPLIANCE

CEQA Guidelines §15162 describes the conditions that would require a subsequent Environmental Impact Report (EIR) or negative declaration:

- a) When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for the project unless the lead agency determines, on the basis of substantial evidence in light of the whole record that:
 - 1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
 - 2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant impacts; or
 - 3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous...negative declaration was adopted, shows any of the following:
 - a. The project will have one or more significant effects not discussed in the previous or EIR negative declaration;
 - b. Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would be substantially reduce one of more significant effects on the environment, but the project proponents declined to adopt the mitigation measure or alternative.

The proposed project modifications are minor and do not pose a substantial change to the project. No new significant environmental impacts or any substantial increases in the severity of previously identified impacts are caused by the proposed project modifications. The lead agency determined that an addendum to the IS/MND is the appropriate level of CEQA review to address the proposed modification to the project and a subsequent EIR or negative declaration is not required.

2.0 DESCRIPTION OF MODIFICATIONS TO PROPOSED PROJECT

The following section describes the proposed project modifications caused by the relocation of the proposed water treatment plant and provides greater clarity to proposed improvements described in the original IS/MND. Exhibit 2 depicts the location of the revised project improvements and replaces Figure 2-2 Project Overview in the IS/MND.

2.1 PROPOSED WATER TREATMENT FACILITY RELOCATION

The proposed water treatment facility will be located on two BLA#3-owned parcels (APNs 061-400-012 and -013). The treatment facility was originally proposed to be built within three SLMWC-owned parcels (APN 061-400-016, 061-400-017, and 061-400-020). This location was removed from

consideration due to the limited footprint available on-site compared to the facility's proposed footprint, and also due to an adjacent creek and potential flood risks. Utilization of the adjacent privately-owned parcel 061-400-018 was also shown in some technical documents to contain some treatment facility components. SLMWC was not able to obtain this parcel.

For the proposed treatment location at parcels (APNs 061-400-012 and -013), electrical service to the water treatment facility will be provided by Pacific Gas and Electric, the regional electric utility (PG&E). PG&E provides electrical service to the existing BLA#3 equipment located at 061-400-013 (well and booster station). This service from PG&E will extend to the proposed treatment facility. Depending on additional electrical loading, the existing PG&E service is anticipated to be improved. The local power supply is anticipated to be improved from single phase power to three phase power. The BLA#3 utilizes a propane generator to power an existing well and booster station at 061-400-013. Instead of installing a new diesel generator, the existing BLA#3 propane generator will either continue to serve the proposed treatment facility and booster pump station., or it will be replaced with a larger propane generator to accommodate additional loads from the treatment facility and, booster pump station. A pumping system specific to fire suppression only will not be installed. The propane generator will be utilized during periodic system testing and extended grid outages. The proposed treatment facility will be designed to treat raw water sourced from wells within the existing BLA#3 and SLMWC service areas. The transmission pipeline proposed in the original IS/MND will be modified to convey water from SLMWC's Well Nos. 2 and 5 (Test Well No. 2) to the proposed treatment facility at APNS 061-400-012 and -013. See below for description of this proposed pipeline.

The proposed treatment facility will treat raw water in two phases. Phase one will remove uranium. Phase two will remove iron, manganese, and arsenic. The proposed water treatment plant will be contained within a concrete masonry building with an approximate footprint of 24 feet by 30 feet by 17 feet (length x width x height) . The building footprint has been slightly increased to allow operators to have easier access to the equipment. Most proposed equipment does not generate noise, i.e. treatment vessels in which chemical reactions will occur. The treatment process involves intermittent pumping for backwashing and rinsing the treatment vessels and processes. The pumping will operate at a constant speed; variable frequency drives will not be part of the treatment processes. The general operation of BLA#3's well, booster station, and backup generator at the adjacent parcel (061-400-013) will not change. The proposed water treatment site slopes downward to the east and will require grading and retaining walls prior to the construction and operation of the proposed water treatment facility. The proposed ground disturbance for the proposed treatment facility site will be approximately 92 feet by 80 feet by 5 feet (length x width x depth). Depths in some areas may be greater.

During normal operation, the site will be visited by SLMWC personnel approximately daily to conduct inspections of equipment, obtain water samples, inspect inventories of chemicals and media, and other functions. Contractors for the water treatment plant maintenance, inspection, and equipment replacement will be present at the site approximately annually. Deliveries of chemicals for the treatment process (coagulants) will normally occur approximately every two weeks. During higher demand seasons (summer months), deliveries may be more frequent (i.e. weekly). Liquid waste from arsenic, iron, and manganese removal will be hauled from the water treatment facility approximately every two weeks, but may also be more frequent during seasons with higher demand. Given the frequency of liquid waste removal, the liquid waste is not anticipated to become concentrated and thus be classified as hazardous. Radionuclides removed in the treatment process will be retained on site, affixed to the treatment media in the treatment vessels. The media and affixed radionuclides will be removed offsite to an appropriate disposal site approximately every three to five years.

The proposed water treatment equipment and chemicals will be within a concrete masonry building. Therefore, the intermittent noise production from proposed permanent on-site equipment will be attenuated. The emergency generator will operate during periodic testing and during extended power outages, with similar frequency and duration as current operation. Recurring noise that would likely be noticeable to adjacent residences would be a daily visit during normal working hours by the water system operator to inspect the system (vehicle on paved and unpaved surfaces, vehicle doors, light conversation).

The project proposes merging the two adjacent BLA#3 parcels (APNs 061-400-012 and -013) to allow for more flexible and efficient land use. SLMWC and BLA#3 will work with the Madera County Surveyor, Zoning Administrator, and Recorder to merge these two parcels. APNs 061-400-012 and -013 may require a land use permit from Madera County as the proposed use of the parcels would be a public utility. Madera County may require a conditional use permit, minor use permit, or another land use permitting instrument prior to issuance of a building permit. BLA#3's current use of APNs 061-400-012 and -013 is for public utility purposes. If land use permitting is required, BLA#3's existing uses of these parcels should also be included in the land use permitting efforts.

2.2 STORAGE TANK IMPROVEMENTS AT PROPOSED TREATMENT FACILITY

In addition to the proposed relocation of the proposed water treatment facility, the proposed layout of the proposed treatment facility has been modified. The two proposed 10,000 gallon blending tanks will no longer be included in the Project. The proposed 68,000-gallon treated water storage tank, and the proposed backwash tank described in the IS/MND will remain. However, the proposed 68,000 gallon treated water storage tank and proposed backwash tank will be located on two BLA#3-owned parcels (APNs 061-400-012 and -013), and not within the SLMWC-owned parcels (APN 061-400-016, 061-400-017, and 061-400-020) or parcel 061-400-018. In addition, the proposed 15,000-gallon storage tank to replace SLMWC's existing 5,000-gallon storage will also remain. SLMWC's existing storage tanks are located on United States Forest Service (USFS) on land through a special-use permit. An amendment to the USFS special-use permit may be required for the installation of the proposed 15,000 gallon storage tank. The heights of the proposed storage tanks will provide freeboard for facility protection during seismic events. Additionally, new piping, valves, sample taps, conduits, and level sensors will be installed on the existing storage tanks.

2.3 PROPOSED PIPELINES AND CONDUIT

Approximately 19,900 linear feet of pipelines and 5,500 linear feet communication conduits will be installed. The proposed pipelines and conduits will be 6-inches in diameter or smaller. Isolation valves, combination air release valves, and blow-off valves would be installed approximately every 1,000 feet along the proposed pipelines. Where applicable, the water supply (raw water) pipelines, distribution pipelines, and communication conduits will be installed in a joint trench with an approximate width of 60 inches and depth of 36 inches. See Exhibit 2 for the revised pipeline and conduit alignments.

2.3.1 Proposed Raw Water Transmission Pipeline and Conduit from Wells to Proposed Treatment Facility

A proposed raw water transmission pipeline and parallel communication conduits will connect the existing SLMWC and BLA#3 wells to the proposed treatment facility. The proposed raw water transmission pipeline and communication conduits alignments have been modified along Highland Drive to accommodate the new location of the proposed water treatment plant. The drainage

crossing will still be required near the intersection of Highland Drive and County Road 222. Additionally, a portion of the pipeline alignment along County Road 222 has moved from private property into the County right-of-way to mitigate environmental impacts and right of way (easement) acquisition requirements.

2.3.2 Proposed Treated Water Transmission Pipeline and Conduit from Proposed Treatment Facility to SLMWC Storage Tank Site

The proposed water treatment facility will connect to the treated water storage tanks that will be adjacent to the proposed treatment facility. From there, the water will be pumped through a treated water transmission pipeline to SLMWC's existing storage tank site. Parallel communication conduits will also be installed alongside the treated water transmission pipeline. The pipeline and conduits will be installed within County right-of-way along Highland Drive and County Road 222 and on United States Forest Service (USFS) land through an existing special-use permit. SLMWC's existing USFS special-use permit may need to be amended to allow for the construction of the proposed pipelines and communication conduits.

2.3.3 Distribution Pipeline Improvements

Two distribution pipelines will be installed to replace the existing distributions systems for the BLA#3 and SLMWC. The proposed BLA#3 distribution pipeline will be located in County right-of-way along Highland Drive and will deliver treated water from the storage tanks adjacent to proposed treatment facility to the BLA#3's service area. The northern portion of this proposed pipeline has been relocated from private property into the County right-of-way to mitigate environmental impacts and right of way (easement) acquisition requirements.

The proposed SLMWC distribution pipeline will be located in County right-of-way along County Road 222, Cedar Lane, and Sierra Linda Drive and on USFS land through an existing special-use permit. The portion of the proposed SLMWC distribution pipeline located on USFS land will be installed alongside the proposed treated water transmission pipeline and may require an amendment to SLMWC's USFS special-use permit. The west portion of the proposed SLMWC distribution pipeline has been moved from private property into the County right-of-way to mitigate environmental impacts and right of way (easement) acquisition requirements.

New water meters and services will be installed along both the BLA#3 and SLMWC distribution pipelines. In addition, fire hydrants will be installed along the proposed distribution pipelines.

2.4 WELL SITE IMPROVEMENTS

SLMWC's existing Test Well No. 2 (proposed SLMWC Well No. 5) will be equipped. The equipping will include modifications to SLMWC Well No. 2's electrical supply from PG&E, a flow meter, valves, piping, pump and motor, air vent, level sensor, flow switch, sample tap, chlorine injection, pressure transmitter, and pressure gauge located on a new concrete pad.

At SLMWC's Well Nos. 1 and 2 and BLA#3's Well No. 4, a new flow meter, level sensor, sample tap, and flow switch will be installed.

BLA#3's Well Nos. 2 and 3 and SLMWC's Well Nos. 3 and 4 and Test Well No. 3 will be destroyed in accordance with California Department of Water Resources Well Standards (Bulletins 74-81 and 74-90), Madera County Code of Ordinances, Madera County Standard Detail W-15, and AWWA A100-06.

The existing pumps, chlorination system, sheds/enclosures, and other well site facilities shall be removed, and existing yard piping will be abandoned.

3.0 SUMMARY OF PROJECT IMPACTS

The potential impacts to biological, tribal cultural, and cultural resources caused by the proposed project modifications are described in the section below. The proposed project modifications will not alter the circumstances and do not add new information of substantial importance to the following environmental factors, whose impacts have not changed: aesthetics; agricultural and forestry resources; air quality; geology, soils, and seismicity; greenhouse gas emissions; hazards and hazardous materials; hydrology and water quality, land use and planning; mineral resources; noise; population and housing; public services; recreation; transportation/traffic; utilities and service systems; and mandatory findings of significance.

3.1 IMPACTS TO BIOLOGICAL RESOURCES FROM PROPOSED CHANGES

The revised location of the proposed water treatment plant was not within the original study area of the General Biological Resources Assessment (GBRA, 2017) by Horizon Water and Environmental. An additional General Biological Resources Assessment (GBRA, 2025) was completed by Live Oak Associates (LOA) in May 2024 to include the parcels being assessed for the relocation of the proposed treatment plant. From the 2025 GBRA:

Migratory Birds and Raptors

The proposed treatment plant site contains possible nesting habitat for avian species, including the killdeer, brewer's blackbird, and mourning dove, among others. Project-related construction activities could result in the destruction or abandonment of active bird nests located on or immediately adjacent to the proposed treatment plant site. These construction activities that adversely affect the nesting success of birds and raptors or result in the mortality of individual birds may violate state and federal laws and would be considered a significant impact (GBRA, 2024).

Crotch Bumble Bee, Monarch Butterfly, Willow Flycatcher, California Spotted Owl, Western Mastiff Bat, and Fisher

No mitigation is warranted. The proposed water treatment site does not contain suitable reproductive habitat for the Crotch Bumble Bee, Monarch Butterfly, Willow Flycatcher, California Spotted Owl, Western Mastiff Bat, and Fisher. It is possible that the proposed water treatment site may occasionally be utilized for foraging by these species, however the project development would not result in a significant loss of habitat as there are many square miles of similar to higher quality habitat in the region. As a result, project impacts to these species from the loss of habitat are considered less than significant.

Furthermore, these species are highly mobile and avoid human contact, individuals of these species that may be present in the area at the time of construction would be expected to avoid construction areas and are not expected to be harmed by construction related activity. Therefore, direct project impacts to individuals or regional populations of these species are considered less than significant.

The 2025 GBRA notes the proposed water treatment plant site is anticipated to have an adverse effect to candidate, sensitive, or special status species that is "Less Than Significant With Mitigation

Incorporated". SLMWC proposes to implement the biological mitigation measures noted in the original IS/MND and recommended in the 2025 GBRA. These mitigation measures are also noted below.

The 2025 GBRA notes the proposed water treatment facility site will have No Impact to riparian habitat, wetlands, migratory fish or wildlife species, and it will not conflict with local policies or ordinances or an adopted Habitat Conservation Plan.

3.2 IMPACTS TO TRIBAL CULTURAL AND CULTURAL RESOURCES FROM PROPOSED CHANGE

The revised location of the proposed water treatment plant was not within the original study area of the Archeological Resources Investigation (ARI, 2017). A Supplemental Archaeological Survey Report (SASR, 2025) was completed by Culturescape in July of 2024 to include the parcels being assessed for the location of the proposed treatment plant. From the SASR, 2025:

The Phase I survey failed to locate any surface artifacts, however, monitoring at this location is advised based on the recommendations of the previous study. Further investigations may be needed if buried cultural materials are encountered during construction. Work should stop in that area until a qualified archaeologist can evaluate the nature and significance of the find (SASR, 2025).

No substantial adverse impacts to cultural resources or tribal cultural resources are anticipated for the revised location of the proposed water treatment plant. SLMWC shall continue to implement the cultural resource and tribal cultural resource mitigation measures from the original IS/MND.

3.3 MITIGATION MEASURES

The original CEQA document notes one aesthetics, three biological, three cultural resources, one hazards and hazardous materials, one noise, one tribal cultural resource, and one utilities and service systems mitigation measures. The amended CEQA document includes revisions to select mitigation measures contained in the project's original IS/MND document. See Appendix A for the Revised Mitigation Monitoring and Reporting Program. SLMWC intends to continue compliance with the revised mitigation measures, including at the revised location of the proposed water treatment facility. The revised mitigation measures consist of the following:

Mitigation Measure AES-1: Use non-reflective coating on new water storage tanks

No revision required.

Mitigation Measure BIO-1a: Perform focused surveys for special-status plant species

No revision required.

Mitigation Measure BIO-1b: Avoid Impacts on Special-Status Plant

No revision required.

Mitigation Measure BIO-1c: Minimize Impacts on Special-Status Plant Species

No revision required.

Mitigation Measure BIO-2: Conduct pre-construction surveys for nesting birds and implement no-work buffer areas if necessary.

The original IS/MND:

If construction activities commence during the typical bird breeding season (February 15–August 31), a pre-construction survey shall be conducted by a qualified biologist within suitable nesting habitat within 100 feet of construction activity. Surveys shall be conducted within 14 days before the start of construction activity. If the survey indicates that no active nests are found, no further mitigation shall be required. If active nests are identified, appropriate no-work buffers will be established per the recommendation of a qualified biologist. Factors to be considered for determining buffer size will include: the presence of natural buffers provided by vegetation or topography; nest height; locations of foraging territory; and baseline levels of noise and human activity. No project activity shall commence within the buffer area until a qualified biologist confirms that the nest is no longer active.

The revised IS/MND:

In order to avoid impacts to nesting birds and raptors, construction will occur, where possible, outside the nesting season, which is considered February 1 –August 31. If construction must occur during the nesting season, a qualified biologist will conduct preconstruction surveys for active raptor and migratory bird nests within 10 days of the onset of these activities. Nest surveys will include all areas on and within 200 feet of the project site, where accessible. Should any active nests be discovered in or near proposed construction zones, the biologist will identify a suitable construction-free buffer around the nest. This buffer will be identified on the ground by flagging or fencing and will be maintained until a qualified biologist has determined that the young have fledged.

Mitigation Measure BIO-3: Install temporary trench plates over open trenches

No revision required.

Mitigation Measure CR-1: Conduct archaeological sensitivity training and construction monitoring

No revision required.

Mitigation Measure CR-2: Immediately halt construction if cultural resources are discovered, evaluate all identified cultural resources for eligibility for inclusion in NRHP / CRHR, and implement appropriate mitigation measures for eligible resources.

No revision required.

Mitigation Measure CR-3: Immediately halt construction if human remains are discovered and implement applicable provisions of the California Health and Safety Code.

No revision required.

Mitigation Measure HAZ-1: Prepare and implement traffic control plan.

No revision required.

Mitigation Measure NOI-1: Measure water treatment operation noise levels and implement noise-reducing methods as needed.

The original IS/MND:

The SLMWC shall measure noise levels from water treatment and pump operations to determine if noise levels exceed 60 CNEL at the nearest residence. If the noise level exceeds 60 CNEL, the SLMWC shall implement noise-reducing methods so that noise from treatment and pumping operations at the Project's treatment plant site, located at the corner of Highland Drive and Road 222, does not exceed a 60 CNEL noise-level standard at nearby residences. Measures to be implemented may include any of the following in order to achieve the 60 CNEL noise level:

- *Design a sound wall for pumps*
- *Design an enclosure for pumps*
- *Provide additional sound reducing material in water treatment building.*
- *Any other mechanisms deemed acceptable to reduce noise levels below 60 CNEL at the nearest residence.*

The revised IS/MND:

The SLMWC shall measure noise levels from water treatment and pump operations to determine if noise levels exceed 60 CNEL at the nearest residence. If the noise level exceeds 60 CNEL, the SLMWC shall implement noise-reducing methods so that noise from treatment and pumping operations at the Project's treatment plant site, located at APNs 061-400-012 and -013 near Highland Drive, does not exceed a 60 CNEL noise-level standard at nearby residences. Measures to be implemented may include any of the following in order to achieve the 60 CNEL noise level:

- Design a sound wall for pumps
- Design an enclosure for pumps
- Provide additional sound reducing material in water treatment building.
- Any other mechanisms deemed acceptable to reduce noise levels below 60 CNEL at the nearest residence.

Mitigation Measure TCR-1: Consult with tribes with a traditional and cultural affiliation with the Project area should Native American archaeological materials be discovered during Project construction.

No revision required.

Mitigation Measure UTL-1: Prepare and Implement a Waste Management Plan

No revision required.

4.0 CONCLUSION

Through a Supplemental Archaeological Survey Report and General Biological Resources Assessment Report, it has been determined that the proposed project modifications do not satisfy the conditions that would require a subsequent EIR or negative declaration as described in Section 15162 of the CEQA Guidelines. Therefore, this Addendum to the project's IS/MND satisfies Section 15164 of the CEQA Guidelines and is deemed the appropriate document to assess the environmental impacts resulting from the proposed project modifications.

5.0 REFERENCES

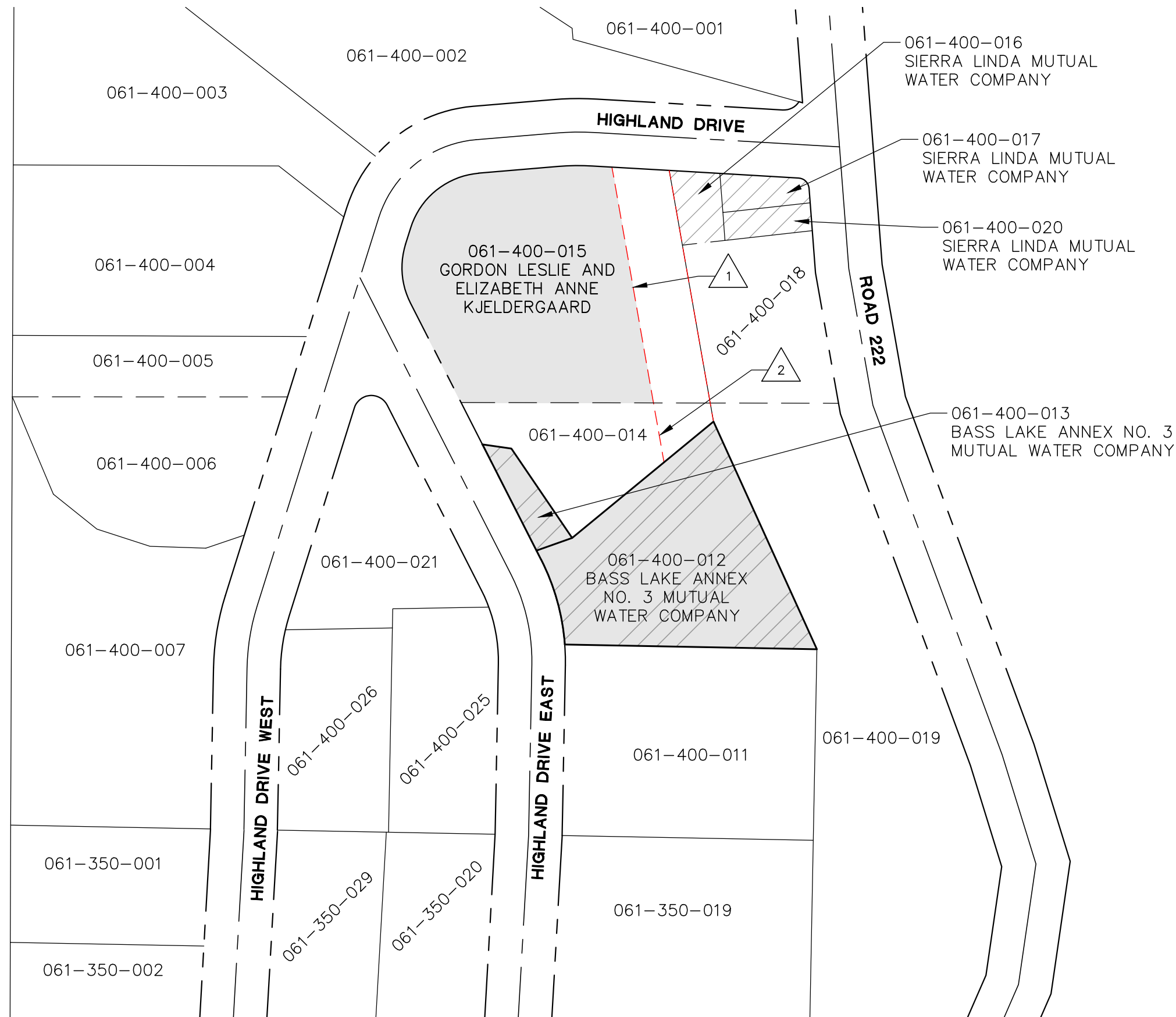
Culturescape. March 2025. Supplemental Archaeological Survey Report for the Sierra Linda Mutual Water Company Consolidation, Metering and Water Treatment Project, Bass Lake, Madera County California

Horizon Water and Environment, LLC. March 2017. Sierra Linda Mutual Water Company Consolidation, Metering, and Water Treatment Project Initial Study/ Mitigated Negative Declaration

Live Oak Associates, Inc. (LOA). March 2025. Biological Evaluation Letter for the Sierra Linda Mutual Water Company Water Treatment Facility, Madera County, CA

* * * * *

EXHIBITS



EASEMENTS

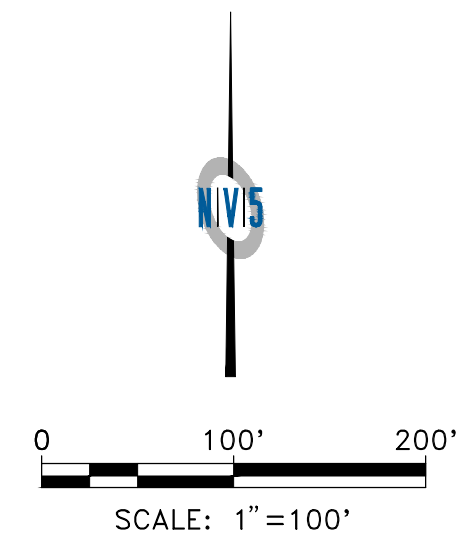


50 FT ROAD EASEMENT PER B927 P278
50 FT ROAD EASEMENT PER B927 P278

LEGEND

	MADERA COUNTY ROW
	PREVIOUS LOCATION FOR THE PROPOSED WATER TREATMENT FACILITY, SEE NOTE 1
	WATER TREATMENT PLANT AREA OF POTENTIAL EFFECTS
	PROJECT STUDY AREA FOR WATER TREATMENT PLANT COMPONENT
	EX. EASEMENT

NOTE 1: LOCATIONS FOR THE PROPOSED WATER TREATMENT FACILITY EVALUATED IN PREVIOUS CEQA DOCUMENT (SCH 2017031075).



PRELIMINARY
NOT FOR CONSTRUCTION

DATE: 8/18/25 TIME: 9:56:39 AM
SERVER: LAYOUT: Layout1
PATH: P:\2281-24\228124-0001831-02\EXHIBIT\CEQA AMENDMENT\
DRAWING NAME: EXHIBIT-1.DWG
PAGE SETUP: ----
DESIGNER: ZS PROJ. MGR: JFO

N|V|5

15092 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P: 858.385.0500 WWW.NV5.COM

SIERRA LINDA MUTUAL WATER COMPANY - CONSOLIDATION PROJECT PROPOSED WATER TREATMENT FACILITY RELOCATION OVERVIEW

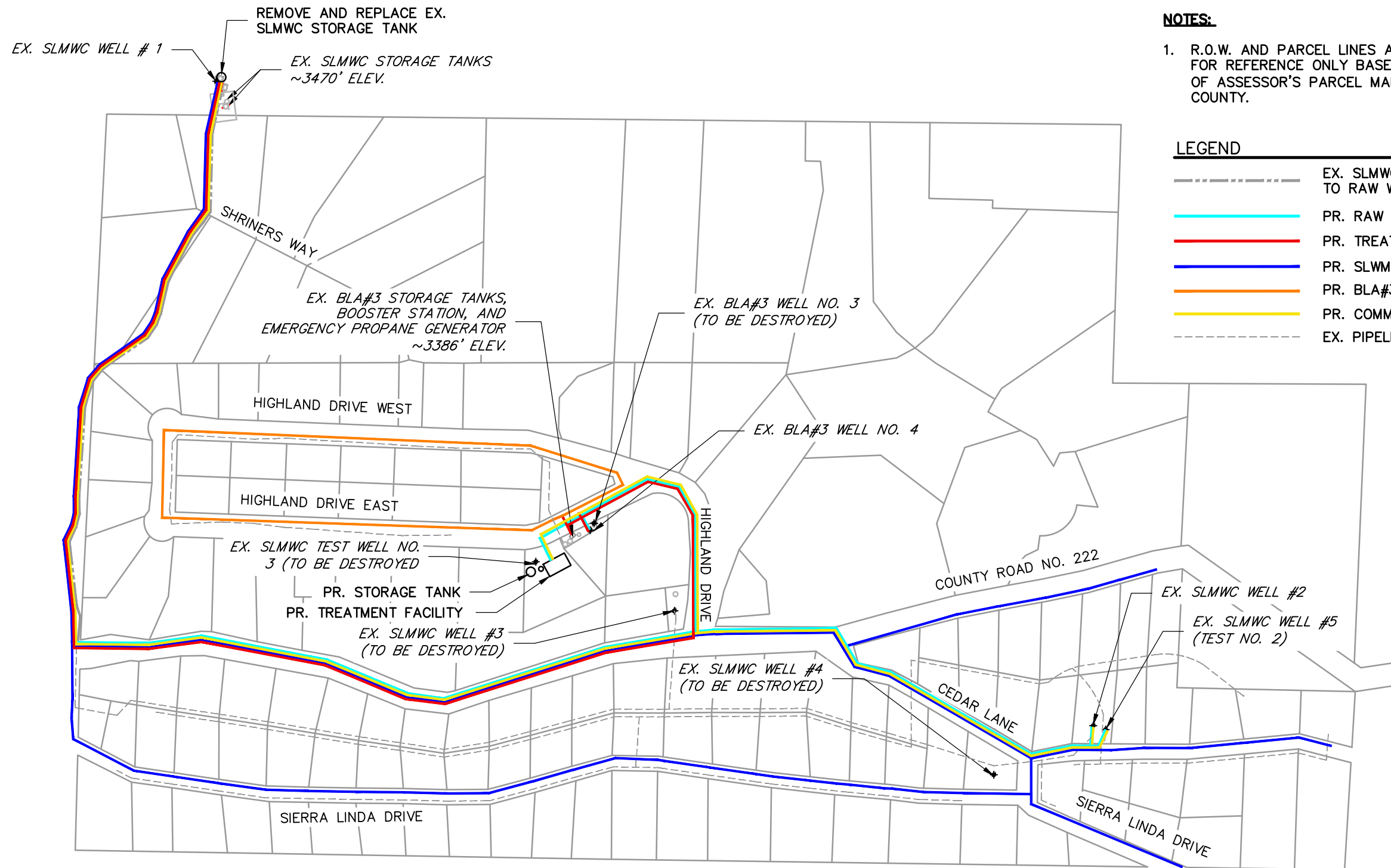
PREPARED FOR: SLMWC

DATE SUBMITTED: AUG 2025

EXHIBIT NUMBER

1

JOB NUMBER
228124-0001831.02

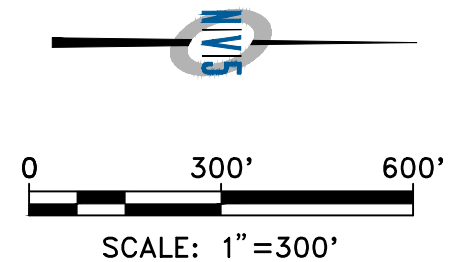


NOTES:

1. R.O.W. AND PARCEL LINES ARE PROVIDED FOR REFERENCE ONLY BASED ON A REVIEW OF ASSESSOR'S PARCEL MAPS FOR MADERA COUNTY.

LEGEND

- EX. SLMWC WATER TRANSMISSION PIPELINE TO BE CONVERTED TO RAW WATER PIPELINE
- PR. RAW WATER TRANSMISSION PIPELINE
- PR. TREATED WATER TRANSMISSION PIPELINE
- PR. SLMWC SERVICE AREA DISTRIBUTION SYSTEM
- PR. BLA#3 SERVICE AREA DISTRIBUTION SYSTEM
- PR. COMMUNICATION CONDUIT
- EX. PIPELINES TO BE ABANDONED



PRELIMINARY
NOT FOR CONSTRUCTION

DATE: 8/18/25 TIME: 9:59:57 AM
SERVER: LAYOUT: Layout1
PATH: P:\2281-24-000183-02\24001\EXHIBIT\24001\24001-2.DWG
DRAWING NAME: EXHIBIT-2.DWG
PAGE SETUP: ----
DESIGNER: ZS PROJ. MGR: JFO

NV5

15092 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P: 858.385.0500 WWW.NV5.COM

SIERRA LINDA MUTUAL WATER COMPANY - CONSOLIDATION PROJECT
PROPOSED PROJECT OVERVIEW

PREPARED FOR: SLMWC

DATE SUBMITTED: AUG 2025

EXHIBIT NUMBER

2

JOB NUMBER
228124-0001831.02

APPENDIX A – REVISED MITIGATION MONITORING AND REPORTING PROGRAM

REVISED MITIGATION MONITORING AND REPORTING PROGRAM

The following revised mitigation monitoring and reporting program (MMRP) summary table includes the mitigation measures identified in the State Water Resources Control Board, Sierra Linda Mutual Water Company Consolidation, Metering, and Water Treatment Project (Project Initial Study/Mitigated Negative Declaration (IS/MND)). For each mitigation measure, this table identifies monitoring and reporting actions that shall be carried out, the party responsible for implementing these actions, and the monitoring schedule. This table also includes a column where responsible parties can check off monitoring and reporting actions as they are completed.

ACRONYMS AND ABBREVIATIONS (FOR APPENDIX A)

CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
CRHR	California Register of Historical Resources
CWA	Clean Water Act
IS/MND	Initial study/mitigated negative declaration
MLD	Most Likely Descendant
MMRP	mitigation monitoring and reporting program
MUTCD	Manual on Uniform Traffic Control Devices
NAHC	Native American Heritage Commission
NRHP	National Register of Historic Places
Project	Sierra Linda Mutual Water Company Consolidation, Metering, and Water Treatment Project
TCR	tribal cultural resource
SLMWC	Sierra Linda Mutual Water Company
§	section

Mitigation Measure		Monitoring and Reporting Action	Monitoring Responsibility	Monitoring Schedule	Completion Date and Initials
Aesthetics					
AES-1	Use non-reflective coating on new water storage tanks. The Sierra Linda Mutual Water Company (SLMWC) and/or its contractor shall use non-reflective paint or coating on the exterior of the water storage tanks to be installed for the Proposed Project. This coating shall be of an appropriate, neutral color that is in keeping with the character of the surrounding environment and shall not produce excessive glare.	1. Confirm that measure is included in plans and specifications. 2. Confirm measure is followed.	1. Contractor or SLMWC 2. Contractor or SLMWC	1. During development of the plan. 2. During construction	
Biological Resources					
BIO-1a	Perform focused surveys for special-status plant species. Within one year prior to commencement of ground disturbing activities, a qualified botanist will perform surveys for special-status plant species with the potential to occur in the proposed project area. Surveys will occur along the pipeline alignment between the end of Shriners Lane and Road 222 (Station 3+75 to 16+50), which is the portion of the Proposed Project with the potential to support special-status plant species. If special status plants are detected within the construction zone or within a 50-foot radius of the construction zone, SLMWC will implement Mitigation Measure BIO-1b.	1. Retain a qualified botanist to conduct pre-activity surveys. 2. Conduct pre-activity surveys of specified construction work area within 1 year of construction activity. 3. If special-status plants are identified, implement Mitigation Measure BIO-1b.	1. SLMWC 2. SLMWC 3. SLMWC	1. Before construction 2. Before construction 3. Before construction	
BIO-1b	Avoid impacts on special-status plant species. If special-status plants are detected within the construction zone or within a 50-foot radius of the construction zone, SLMWC will adjust the construction footprint or establish an exclusion area to avoid impacts to the plants. Locations of special-status plant populations will be clearly identified in the field by staking, flagging, or fencing prior to the commencement of activities that may cause disturbance. A qualified botanist shall determine whether direct and/or indirect impacts would occur. If the botanist determines that impacts would not be completely avoided, Mitigation Measure BIO-1c would be implemented.	1. Establish adjustments to construction footprint or establishment of exclusion area. 2. Confirm special-status plant location have been clearly identified. 3. Retain a qualified botanist to determine if impacts will occur. 4. If impacts will not be completely avoided implement Measure BIO-1c.	1. SLMWC 2. SLMWC 3. SLMWC 4. SLMWC	1. Before construction 2. Before construction 3. Before construction 4. Before construction	

Mitigation Measure		Monitoring and Reporting Action	Monitoring Responsibility	Monitoring Schedule	Completion Date and Initials
BIO-1c	Minimize impacts on special-status plant species. If avoidance is not feasible, then SLMWC will implement measures to minimize the impact on the species. Minimization measures will be evaluated on a case by case basis for local rarity and extent of impacts. Minimization measures may include transplanting perennial species, seed collection and dispersal for annual species, and other conservation strategies that will protect the viability of the local population. If minimization measures are implemented, monitoring of plant populations will be conducted annually for 5 years by a qualified botanist to assess the mitigation's effectiveness and results shall be reported to CDFW and any other relevant agencies. The performance standard for the mitigation will be no net reduction in the size or viability of the local population	1. Confirm minimization measures have been evaluated 2. Confirm minimization measures have been implemented 3. Monitor plant populations annually for 5 years	1. SLMWC 2. SLMWC 3. SLMWC	1. Before construction 2. Before, during, and after construction 3. After construction	
BIO-2	Conduct pre-construction surveys for nesting birds and implement no-work buffer areas if necessary. In order to avoid impacts to nesting birds and raptors, construction will occur, where possible, outside the nesting season, which is considered February 1 –August 31. If construction must occur during the nesting season, a qualified biologist will conduct preconstruction surveys for active raptor and migratory bird nests within 10 days of the onset of these activities. Nest surveys will include all areas on and within 200 feet of the project site, where accessible. Should any active nests be discovered in or near proposed construction zones, the biologist will identify a suitable construction-free buffer around the nest. This buffer will be identified on the ground by flagging or fencing and will be maintained until a qualified biologist has determined that the young have fledged.	1. Retain a qualified biologist to conduct pre-activity surveys 2. Conduct pre-activity surveys of construction work area within 10 days before construction activity. 3. If active nests are identified, establish no-disturbance buffers. 4. If listed species are detected, contact CDFW regarding appropriate action.	1. SLMWC 2. SLMWC 3. SLMWC 4. SLMWC	1. Before construction 2. Before construction 3. Before construction 4. Before or during construction	
BIO-3	Install temporary trench plates over open trenches. During construction of the pipelines, temporary trench plates will be installed over open trenches at the end of each workday.	1. Confirm that measure is included in plans and specifications. 2. Confirm measure is followed.	1. Contractor or SLMWC 2. Contractor or SLMWC	1. Before construction 2. During construction	

Mitigation Measure		Monitoring and Reporting Action	Monitoring Responsibility	Monitoring Schedule	Completion Date and Initials
Cultural Resources					
CR-1	Conduct archaeological sensitivity training and construction monitoring. Prior to initiation of ground disturbing activities, SLMWC shall arrange for construction crews to receive training about the kinds of archaeological materials that could be present within the project site and the protocols to be followed should any such materials be uncovered during construction. Training will be conducted by an archaeologist who meets the U.S. Secretary of Interior's professional standards. Training may be required during different phases of construction to educate new construction personnel. A qualified archaeological and Native American monitor will be retained to monitor all ground disturbing activities associated with the project. If any prehistoric or historic-era features, or human remains, are exposed during construction, the archaeological monitor will have the authority to stop work in the vicinity of the finds and implement Mitigation Measure CR-2.	1. Retain a qualified archaeologist training and monitor ground disturbing activities. 2. Conduct construction crew training regarding archaeological monitor monitors all ground disturbing activities. 3. Ensure a qualified archaeological monitor monitors all ground disturbing activities. 4. In the event that cultural resources are encountered, ensure Mitigation Measure CR-2 is implemented.	1. SLMWC 2. SLMWC 3. SLMWC 4. SLMWC	1. Before construction 2. Before and during construction 3. During construction 4. During construction	
CR-2	Immediately Halt Construction if Cultural Resources are Discovered, Evaluate All Identified Cultural Resources for Eligibility for Inclusion in the NRHP/CRHR, and Implement Appropriate Mitigation Measures for Eligible Resources. If any cultural resources, such as structural features, unusual amounts of bone or shell, flaked or ground stone artifacts, historic-era artifacts, human remains, or architectural remains, are encountered during any project construction activities, work shall be suspended immediately at the location of the find and within a radius of at least 50 feet and the lead agency will be contacted. All cultural resources accidentally uncovered during construction within the project site shall be evaluated for eligibility for inclusion in the NRHP/CRHR. Resource evaluations will be conducted by individuals who meet the U.S. Secretary of the Interior's professional standards in	1. In the event that any cultural resources are encountered, ensure that work stops immediately. 2. Confirm that any unanticipated discoveries are evaluated and addressed appropriately. 3. If any resources meet eligibility criteria, ensure adequate mitigation measures are developed and implemented before construction resumes.	1. SLMWC 2. SLMWC 3. SLMWC - SLMWC	1. During construction 2. During construction 3. During construction	

Mitigation Measure		Monitoring and Reporting Action	Monitoring Responsibility	Monitoring Schedule	Completion Date and Initials
	archaeology, history, or architectural history, as appropriate. If any of the resources meet the eligibility criteria identified in Pub. Res. Code § 5024.1 or CEQA § 21083.2(g), mitigation measures will be developed and implemented in accordance with CEQA Guidelines § 15126.4(b) before construction resumes. For resources eligible for listing in the NRHP/CRHR that would be rendered ineligible by the effects of project construction, additional mitigation measures will be implemented. Mitigation measures for archaeological resources may include (but are not limited to) avoidance; incorporation of sites within parks, greenspace, or other open space; capping the site; deeding the site into a permanent conservation easement; or data recovery excavation. Mitigation measures for archaeological resources shall be developed in consultation with responsible agencies and, as appropriate, interested parties such as Native American tribes. Implementation of the approved mitigation would be required before resuming any construction activities with potential to affect identified eligible resources at the site.				

Mitigation Measure		Monitoring and Reporting Action	Monitoring Responsibility	Monitoring Schedule	Completion Date and Initials
CR-3	Immediately halt construction if human remains are discovered and implement applicable provisions of the California Health and Safety Code. If human remains are accidentally discovered during the Proposed Project's construction activities, the requirements of California Health and Human Safety Code § 7050.5 shall be followed. Potentially damaging excavation shall halt in the project site of the remains, with a minimum radius of 100 feet, and the Madera County Coroner shall be notified. The Coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (California Health and Safety Code § 7050.5[b]). If the Coroner determines that the remains are those of a Native American, he or she must contact NAHC by phone within 24 hours of making that determination (California Health and Safety Code § 7050[c]). Pursuant to the provisions of Pub. Res. Code § 5097.98, the NAHC shall identify a Most Likely Descendent (MLD). The MLD designated by the NAHC shall have at least 48 hours to inspect the site and propose treatment and disposition of the remains and any associated grave goods. CHP shall work with the MLD to ensure that the remains are removed to a protected location and treated with dignity and respect.	1. Confirm that measure is included in project plans and specifications. 2. In the event that human remains are encountered, halt work and contact the Madera County Coroner. 3. Confirm that any discoveries of human remains are evaluated and addressed properly.	1. SLMWC 2. SLMWC 3. SLMWC	1. During preparation of plans and specifications 2. During construction 3. During construction	

Mitigation Measure		Monitoring and Reporting Action	Monitoring Responsibility	Monitoring Schedule	Completion Date and Initials
Hazards and Hazardous Materials					
HAZ-1	Prepare and implement traffic control plan. SLMWC and/or its contractor(s) shall develop a traffic control plan in accordance with professional traffic engineering standards to reduce the effects of project construction activities and traffic on surrounding local roads, bicycle and pedestrian facilities, and emergency access. SLMWC and/or its contractor(s) shall coordinate development and implementation of this plan with the County of Madera. Components of the traffic control plan are expected to include, but not be limited to the following: • Restriction of truck access to truck routes identified by the County. • Provision of advance construction warning signage for lane reduction during trenching work along Project roadways. • Traffic handling plans for Project roadways prepared in accordance with Caltrans and California Manual on Uniform Traffic Control Devices (MUTCD) standards. The traffic handling plans shall demonstrate how two-way traffic operations can be maintained during work hours (e.g., through the use of flaggers) and when construction activity ends each day. • Plans for notification and consultation with emergency service providers, such as police and fire stations, hospitals, and schools prior to the start of construction. SLMWC and/or its contractors must provide emergency access at all times, by whatever means necessary, to expedite and facilitate the passage of emergency vehicles.	1. Develop plan and confirm it is included in project plans and specifications. 2. Confirm that traffic management plan is implemented	1. SLMWC or contractor 2. SLMWC or contractor	1. During development of plans and specifications 2. Before and during construction	

Mitigation Measure		Monitoring and Reporting Action	Monitoring Responsibility	Monitoring Schedule	Completion Date and Initials
Noise					
NOI-1	Measure water treatment operation noise levels and implement noise-reducing methods as needed. The SLMWC shall measure noise levels from water treatment and pump operations to determine if noise levels exceed 60 CNEL at the nearest residence. If the noise level exceeds 60 CNEL, the SLMWC shall implement noise-reducing methods so that noise from treatment and pumping operations at the Project's treatment plant site, located at APNs 061-400-012 and -013 near Highland Drive, does not exceed a 60 CNEL noise-level standard at nearby residences. Measures to be implemented may include any of the following in order to achieve the 60 CNEL noise level: • Design a sound wall for pumps • Design an enclosure for pumps • Provide additional sound reducing material in water treatment building. • Any other mechanisms deemed acceptable to reduce noise levels below 60 CNEL at the nearest residence.	1. Confirm that measure is included in plans and specifications. 2. Measure operation noise levels and implement noise-reduction measures as needed. 3. Confirm that sound and vibration-attenuation devices are used in accordance with the measure.	1. SLMWC 2. SLMWC 3. SLMWC	1. During preparation of plans and specifications 2. During and after construction 3. After construction	

Mitigation Measure		Monitoring and Reporting Action	Monitoring Responsibility	Monitoring Schedule	Completion Date and Initials
<i>Tribal Cultural Resources</i>					
TCR-1	Consult with tribes with a traditional and cultural affiliation with the Project area should Native American archaeological materials be discovered during Project construction. If any prehistoric or historic-era Native American archaeological remains are discovered during the course of project construction, in addition to complying with Mitigation Measures CR-1, CR-2 and CR-3, the State Water Board will consult with Native American tribes with a traditional and cultural affiliation with the project area regarding the status of the discovered resources as a TCR. If the tribe(s) consider the resource to be a TCR and the State Water Board agree, appropriate mitigation measures will be discussed.	1. Notify State Water Board if any Native American archeological materials are discovered during construction 2. Consult with Native American tribes & determine resource status 3. Discuss and implement appropriate mitigation measures	1. SLMWC 2. State Water Board 3. SLMWC	1. During construction 2. During construction 3. During construction	
<i>Utilities and Service Systems</i>					
UTL-1	Prepare and Implement a Waste Management Plan SLMWC or its designees shall prepare and implement a Waste Management Plan for proper management and disposal of wastes generated by the Proposed Project. Solid and liquid residuals from water treatment processes shall be tested to determine their radioactive and hazardous characteristics, and to identify appropriate disposal methods. Workers performing tests shall wear personal protective equipment, as appropriate, to prevent unsafe exposure to radioactive or hazardous materials. Depending on the characteristics of the waste, the Waste Management Plan shall identify appropriate storage, transport, and disposal options for the waste that meet all applicable federal, State, and local regulations.	1. Prepare Waste Management Plan 2. Implement plan and test treatment process residuals 3. Identify appropriate waste storage, transport, and disposal options.	1. SLMWC or designee 2. SLMWC of designee 3. SLMWC	1. Before construction 2. After construction 3. After construction.	

APPENDIX B – GENERAL BIOLOGICAL RESOURCES ASSESSMENT, 2025



February 21, 2025

Shen Huang
NV5
15092 Avenue of Science, Suite 200
San Diego, CA 92128

RE: Biological Evaluation Letter for the Sierra Linda Mutual Water Company Water Treatment Facility, Madera County, CA

Dear Ms. Huang,

This letter report presents the results of a biological evaluation conducted by Live Oak Associates, Inc. (LOA) for an approximately 1-acre site (“study area” or “site” or “Action Area”) for the proposed Sierra Linda Mutual Water Company (SLMWC) Water Treatment Facility Project. The study area consists of two parcels, APNs 061-400-012 and -013, located on the west side of Road 222, south of its intersection with Highland Drive, in Bass Lake Annex, Madera County, California (Figure 1). It can be found on the *Bass Lake* U.S. Geological Survey (USGS) 7.5-minute quadrangle within Section 35 of Township 7 South, Range 22 East and Section 02 of Township 8 South, Range 22 East (Figure 2).

On May 20, 2024, LOA biologist Jeff Gurule surveyed the site for its habitat values, flora and fauna, and potential to support special status species and other sensitive biological resources. As follows is a brief description of the proposed project and study area, a discussion of potential impacts to biological resources that may result from site development, and recommended mitigations for biological impacts that would be considered significant under the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA).

Project Description

The proposed water treatment plant will be located on two Bass Lake Annex #3 (BLA#3)-owned parcels (APNs 061-400-012 and -013), and not within the Sierra Linda Mutual Water Company (SLMWC)-owned parcels (APN 061-400-016, 061-400-017, and 061-400-020) or parcel 061-400-018. Project development is expected to occur within portions of the study area containing no trees or shrubs. A tentative site plan is presented in Attachment 1. Electrical service to the water treatment plant will be provided by Pacific Gas and Electric (PG&E). PG&E provides electrical service to the existing BLA#3 equipment located on APN 061-400-013 (well and booster station). This service from PG&E will extend to the proposed treatment facility. The BLA#3 utilizes a propane generator to power an existing well and booster station at 061-400-013. This generator

OAKHURST

P.O. Box 2697 | 39930 Sierra Way #B
Oakhurst, CA 93644

P: (559) 642-4880 | F: (559) 642-4883

SAN JOSE

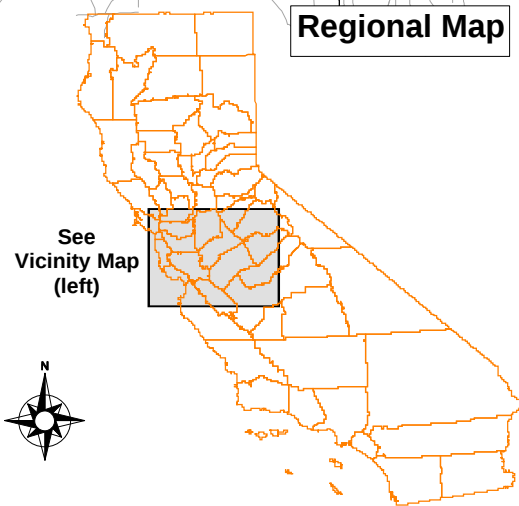
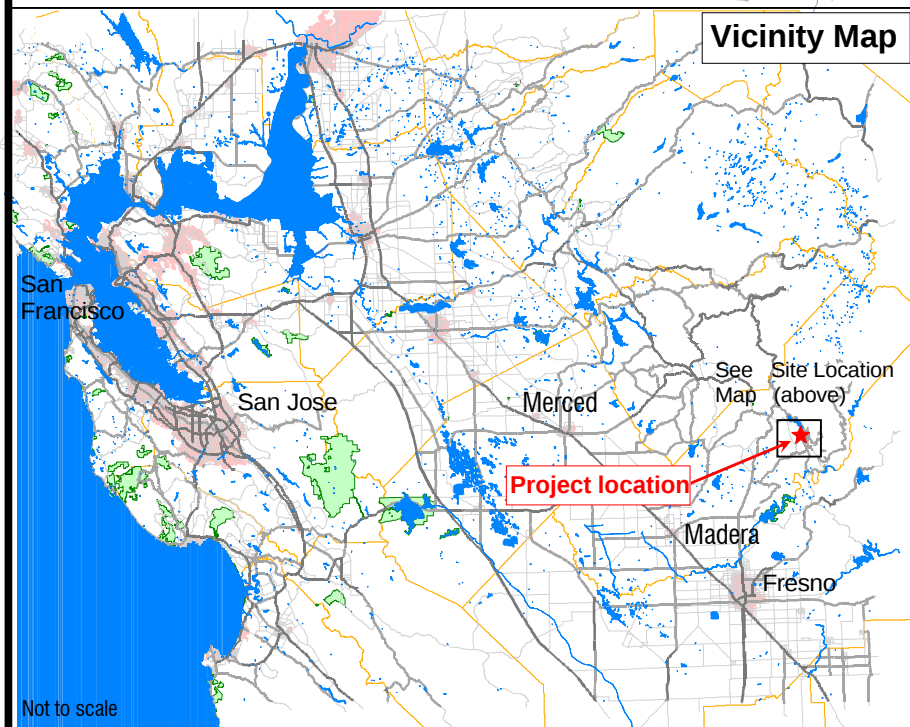
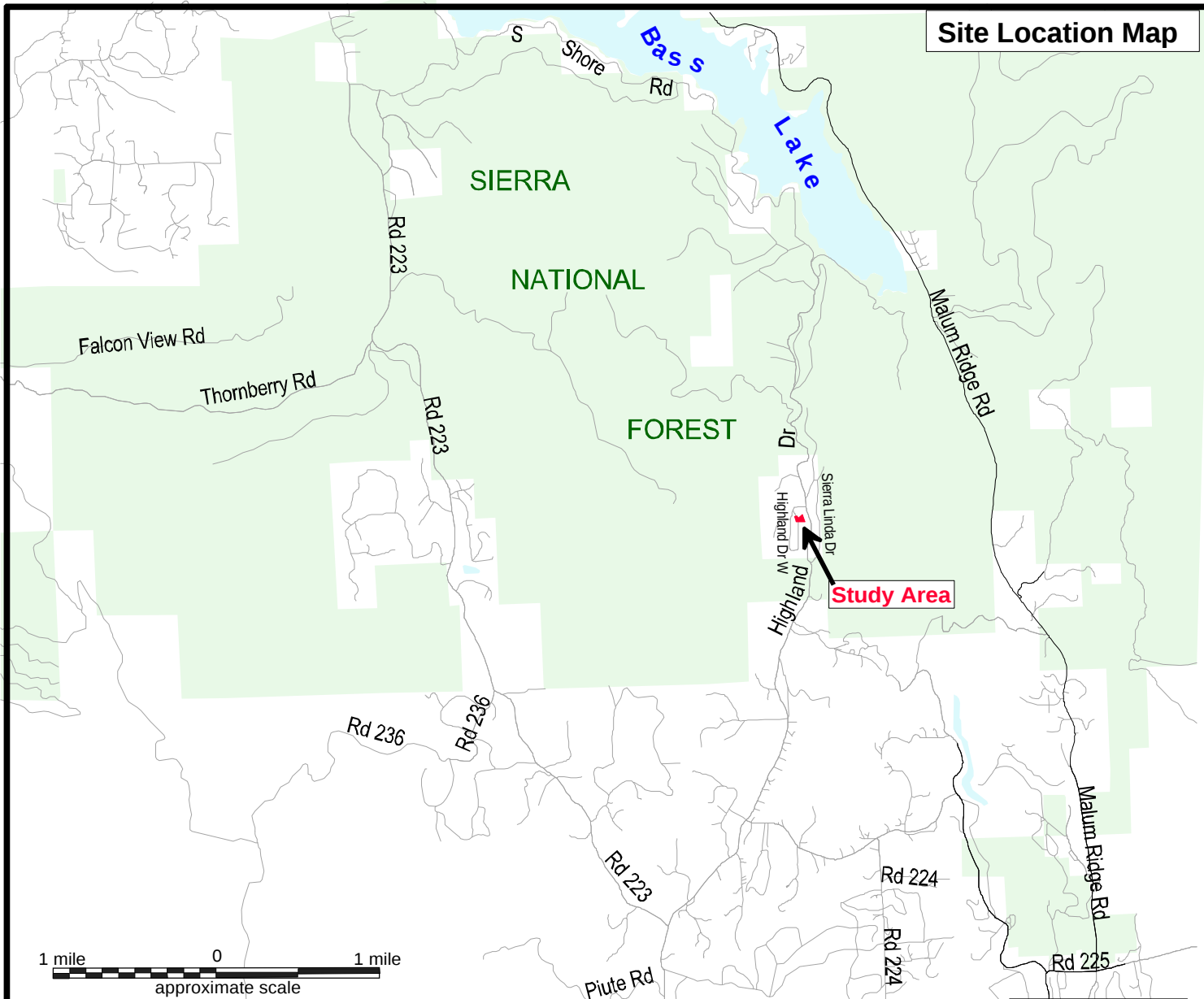
6840 Via Del Oro, Suite 220
San Jose, CA 95119

(408) 224-8300

SOUTH LAKE TAHOE

P.O. Box 7314
South Lake Tahoe, CA 96158

(408) 281-5885



LIVE OAK
ASSOCIATES, INC.

Sierra Linda Mutual Water Treatment Facility
Vicinity Map

Date 2/20/2025 Project # 2882-01 Figure # 1



1 mile

0

1/2 mile

1 mile

approximate scale

From USGS
Bass Lake 7.5' Quadrangle 1990



Sierra Linda Mutual Water Treatment Facility
U.S.G.S. Quadrangle

Date
2/20/2025

Project #
2882-01

Figure #
2



will either continue to also serve the proposed treatment plant, or it will be replaced with a larger generator to accommodate additional loads from the treatment facility. The electrical generator will be utilized for periodic system testing and during extended grid outages.

The proposed treatment plant will be designed to treat raw water in two phases: phase one will remove uranium and phase two will remove iron, manganese, and arsenic. The proposed water treatment plant will be contained within a pre-engineered concrete masonry building with an approximate building footprint of 24 feet by 30 feet. Most proposed equipment does not generate noise, i.e. treatment vessels in which chemical reactions will occur. The treatment process involves intermittent pumping for backwashing and rinsing the treatment processes. The proposed water treatment site slopes downward to the east and will require grading and retaining walls prior to the construction and operation of the proposed water treatment plant. The proposed water treatment plant will connect to the existing SLMWC and BLA#3 wells and storage tanks via existing and proposed above and below grade piping and conduits. The proposed project will also include the destruction of BLA#3's Well Nos. 2 and 3 and SLMWC's Well No. 3 and Test Well No. 3.

Site Description and Conditions

The study area contains previously disturbed lands from grading, road building, vegetation removal, establishment of electrical and water infrastructure, scraping, and mowing. The eastern end of the study area supports open woodland. The study area is surrounded by rural residential development.

The site is gently sloping to the east, ranging in elevation from approximately 3,400 to 3,375 feet above sea level. It contains one soil mapping unit: Holland family, 5 to 35 percent slopes. This soil mapping unit is not considered a hydric soil, meaning the soil would not be prone to wetland development. Some of the soil on the site has been historically disturbed as previously described.

One habitat/land use type categorized as disturbed oak-pine woodland was identified on the study area at the time of the field survey, as seen on the aerial photo in Figure 3. Representative photographs of the study area are presented in Attachment 1. Dominant trees observed on the site included California black oak (*Quercus kelloggii*), canyon live oak (*Quercus chrysolepis*), ponderosa pine (*Pinus ponderosa*), foothill pine (*Pinus sabiniana*), and incense cedar (*Calocedrus decurrens*). Common shrubs found in the site's oak-pine woodland habitat included Mariposa manzanita (*Arctostaphylos viscida* ssp. *mariposa*), wedgeleaf ceanothus (*Ceanothus cuneatus*), and poison oak (*Toxicodendron diversilobum*). Grasses and forbs found in the understory included ripgut (*Bromus diandrus*), silver European hairgrass (*Aira caryophyllea*), soft chess brome (*Bromus hordeaceus*), tincture plant (*Collinsia tinctoria*), and Hall's wyethia (*Wyethia elata*), among many others.

Typically, areas of oak-pine woodland favor a great diversity of both resident and migratory wildlife; however, past disturbance of the site and nearby development has somewhat reduced expected wildlife diversity. Oak-pine woodland on the site provides habitat for a few reptiles and amphibians. Rocks, decaying logs and rodent burrows provide habitat for amphibians such as the California toad (*Anaxyrus boreas halophilus*) and gregarious slender salamander (*Batrachoseps*

LEGEND

 Study Area Boundary

 Disturbed Oak-Pine Woodland



100' 0 50' 100 feet
approximate scale

Aerial Photo courtesy of Google Earth 10-2023



LIVE OAK
ASSOCIATES, INC.

Sierra Linda Mutual Water Treatment Facility
Biotic Habitats / Land Cover

Date
2/2/2025

Project #
2882-01

Figure #



gregarius). Western fence lizards (*Sclerophorus occidentalis*) were observed scampering on onsite logs. Brush and piles of downed trees and leaves provide habitat for more reclusive lizards such as the Gilbert's skink (*Eumeces gilberti*) and southern alligator lizard (*Gerrhonotus multicarinatus*). The mountain king snake (*Lampropeltis getulus*), ring-neck snake (*Diadophis punctatus*), gopher snake (*Pituophis melanoleuca*) and Northern Pacific rattlesnake (*Crotalus oregonus oregonus*) are common predators of frogs, lizards and small mammals that might occur on the site.

The site's oak-pine woodland also provides habitat for various bird species. Resident birds observed or heard in this habitat include acorn woodpeckers (*Melanerpes formicivorus*) (observed), spotted towhees (*Pipilo maculatus*) (observed), California quail (*Callipepla californica*) (observed), white-breasted nuthatches (*Sitta carolinensis*), and scrub jays (*Aphelocoma coerulescens*), among others. Winter migrants that would use this habitat include white-crowned sparrows (*Zonotrichia leucophrys*), yellow-rumped warblers (*Setophaga coronata*), and hermit thrushes (*Catharus guttatus*). House wrens (*Troglodytes aedon*), western wood pewees (*Contopus sordidulus*), Cassin's vireos (*Vireo solitarius cassinii*), black-headed grosbeak (*Pheucticus melanocephalus*) (observed), and ash-throated flycatchers (*Myiarchus cinerascens*) (observed) could all be expected to use the site during the summer. Raptors such as Cooper's hawks (*Accipiter cooperi*), great horned owls (*Bubo virginianus*), and western screech owls (*Strix occidentalis*) may all hunt and nest in oak-pine woodland on the site.

A number of mammals could also occur in this habitat, which include the California mouse (*Peromyscus californicus*), deer mouse (*Peromyscus maniculatus*), California vole (*Microtus californicus*), western gray squirrel (*Sciurus griseus*), California ground squirrel (*Otospermophilus beecheyi*), big-eared woodrat (*Neotoma macrotis*), Botta's pocket gopher (*Thomomys bottae*), mule deer (*Odocoileus hemionus*), coyote (*Canis latrans*), black bear (*Ursus americanus*), gray fox (*Urocyon cinereoargenteus*), cougar (*Puma concolor*), bobcat (*Lynx rufus*), striped skunk (*Mephitis mephitis*), and raccoon (*Procyon lotor*).

Special Status Species

Many species of plants and animals within the state of California have low populations, limited distributions, or both. Such species may be considered "rare" and are vulnerable to extirpation as the state's human population grows and the habitats these species occupy are converted to agricultural and residential uses. State and federal laws have provided the California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting the diversity of plant and animal species native to the state. A sizable number of native plants and animals have been formally designated as threatened or endangered under state and federal endangered species legislation. Others have been designated as "candidates" for such listing. Still others have been designated as "species of special concern" by the CDFW. The California Native Plant Society (CNPS) has developed its own set of lists (i.e., California Rare Plant Ranks, or CRPR) of native plants considered rare, threatened, or endangered (CNPS 2024). Collectively, these plants and animals are referred to as "special status species."

The California Natural Diversity Data Base (CNDDB; CDFW 2024) and USFWS Information for Planning and Consultation (IPaC) System were used to query special status species occurrences in the nine U.S. Geological Survey 7.5-minute quadrangles containing and surrounding the study



area that included *Bass Lake, Shuteye Peak, Cascadel Point, North Fork, O'Neals, Ahwahnee, Fish Camp, White Chief Mtn., Little Shuteye Peak* quads (see Attachment 2). Based on these queries and LOA's knowledge of the project vicinity, 7 special status plant species and 10 special status animal species have some potential to occur, or to have once occurred, in the area, or are species that came up in the IPaC query, which require a Section 7 impact determination; see Tables 1 and 2, respectively.

Table 1. Regionally-Occurring Special Status Plant Species

Species	Status	Habitat	*Occurrence on the Study Area
Mariposa Pussy-Paws (<i>Calytridium pulchellum</i>)	FT, CRPR 1B.1	Fewer than 10 populations in Mariposa, Madera and Fresno Counties between 1,320 and 4,000 feet in elevation; primarily in coarse granitic sands of decomposing outcrops. Blooms April - August.	Absent. Coarse granitic sands required by this species are absent from the site.
Lassics Lupine (<i>Lupinus constancei</i>)	FE, CRPR 1B.1	This species occurs in barren serpentine soils of lower montane coniferous forest in Humboldt and Trinity Counties between 4,920 and 6,560 feet in elevation. Blooms in July.	Absent. The study area is well outside the range of this species and suitable habitat and soils are absent from the site.
Abrams' Onion (<i>Allium abramsii</i>)	CRPR 1B.2	Occurs in montane coniferous forest on sandy soils derived from disintegrated granite between 2,900 and 10,000 ft. in elevation. Blooms May-June	Unlikely. Strictly coniferous forest and sandy soils are absent from the site. Graded areas of the site are unsuitable for this species. LOA's survey of the site, which occurred during this species' blooming period, did not detect this species.
Rawson's Flaming Trumpet (<i>Collomia rawsiana</i>)	CRPR 1B.2	Occurs on stabilized alluvium in riparian zones between 2,500 and 6,600 feet. Endemic to Madera and Mariposa Counties. Blooms July – August.	Absent. Riparian habitat required by this species is absent from the study area. Locally, this species is not known to occur west of Willow Creek.
Jepson's Dodder (<i>Cuscuta jepsonii</i>)	CRPR 1B.2	Occurs on dry, undisturbed slopes in lower montane coniferous forest, broadleafed upland forest, cismontane woodland, north coast coniferous forest between 600 and 7,300 feet.	Unlikely. Graded areas of the site are unsuitable for this species. No <i>Cuscuta</i> species were observed during LOA's field survey.
Slender-stalked Monkeyflower (<i>Erythranthe gracilipes</i>)	CRPR 1B.2	Occurs within disturbed places such as burns and railroad grades; also on thin granitic soil in cracks in large granite rocks. Chaparral, cismontane woodland, lower montane coniferous forest between 1,640 and 4,265 feet. Blooms April – June.	Unlikely. Bare granitic soils and rock outcrops in which this species is found are absent from the study area. LOA's survey of the site, which occurred during this species' blooming period, did not detect this species.
Madera Leptosiphon (<i>Leptosiphon serrulatus</i>)	CRPR 1B.2	Occurs in cismontane woodlands and lower montane coniferous forests between 100 and 4,200 ft. in elevation. Prefers dry slopes often on decomposed granite in woodlands. Blooms April – May.	Unlikely. Only marginally suitable habitat occurs within development areas of the site due to past development or disturbance. The study area is outside the typical elevation range for populations in the region. The nearest known extant population of this species occurs near Kerckhoff Reservoir 9.75 miles south of the site and approximately 2,300 feet lower in elevation (CDFW 2024). This species was not observed during LOA's spring field survey.



Table 1. Regionally-Occurring Special Status Plant Species (cont.)

Species	Status	Habitat	*Occurrence on the Study Area
Orange Lupine (<i>Lupinus citrinus</i> var. <i>citrinus</i>)	CRPR 1B.2	Populations are known from Madera and Fresno Counties in coarse granitic sands of decomposing outcrops with elevational range of 2,000 – 5,500 ft. Blooms April – August.	Absent. Coarse granitic soils required by this species are absent from the site. Furthermore, this species was not observed during LOA's field survey, which was conducted when this species would have been visible.

Table 2. Regionally-Occurring Special Status Animal Species

Species	Status	Habitat	*Occurrence on the Study Area
Crotch Bumble Bee (<i>Bombus crotchii</i>)	CCE	This bee is found in Coastal California east to the Sierra-Cascade crest and south into Mexico, where it occupies open grassland and scrub habitats. Constructs nests underground in animal burrows. Overwintering sites are likely in soft soils or in debris or leaf litter. Its food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .	Possible. This species has been observed in the nearby community of North Fork by LOA biologist Jeff Gurule. <i>Clarkia</i> and <i>Eschscholzia</i> species preferred for food by this species were observed on the site. Rodent burrows typically utilized by this species for nesting were not observed on the site.
Monarch Butterfly (<i>Danaus plexippus</i>)	FC	Overwinters in coastal California and Baja California and breeds throughout California in the spring and summer along its annual migration north and east. The adult monarch lays its eggs on obligate milkweed (<i>Asclepias</i> spp.) host plants, which the resultant larvae feed on before pupating and emerging as adults. In addition to milkweed, this species requires abundant nectar resources to nourish migrating adults, and trees for roosting during migratory stopovers.	Possible. Milkweed plants required by this species for reproduction were not observed during LOA's field survey. Nectar resources for foraging occur on the site.
California Red-legged Frog (<i>Rana draytonii</i>)	FT	Perennial rivers, creeks and stock ponds of the Inner Coast Range foothills, preferring deep pools with overhanging vegetation.	Absent. This species is considered extirpated from the region. The site is outside the current known range of the species (Barry, S. J., and G. M. Fellers. 2013).
Foothill Yellow-Legged Frog - South Sierra DPS (<i>Rana boylei</i> pop. 5)	FE, CE, CSC	Found in or near streams typically with a rocky bottom and perennial flows within foothill habitats of the western Sierra Nevada Foothills. Uses submerged rocks and debris for cover. Requires gravel or rocks in moving water near stream margins for reproduction.	Absent. Aquatic habitat is absent from the project site. A small seasonal stream east of the site provides extremely marginal habitat for this species due to the very narrow channel, low flows, and expected long periods with no inundation. The closest known extant population of this species occurs in Jose Creek, approximately 13 miles to the southeast (CDFW 2024).
Western Pond Turtle (<i>Emys marmorata</i>)	FPT CSC	Associated with permanent bodies of water. Requires partially submerged rocks or logs for basking sites. Eggs are deposited in a variety of soil types on shore.	Unlikely. The small seasonal stream east of the site provides unsuitable aquatic habitat for this species due to the very narrow channel, low flows, lack of cover, and expected long periods with no inundation.



Table 2. Regionally-Occurring Special Status Animal Species (cont.)

Species	Status	Habitat	*Occurrence on the Study Area
California Condor (<i>Gymnogyps californianus</i>)	FE, CE, CFP	Vast expanses of open savannah, grasslands, and foothill chaparral in mountain ranges of moderate altitude. Nests in deep canyons containing clefts in rocky walls.	Absent. The study area is well outside this species nesting range. This species may, on very rare occasions, fly over the study area.
California Spotted Owl (<i>Strix occidentalis occidentalis</i>)	FPT, CSC	Nests in dense, old growth forests, but often forages in open forest habitats and forest clearings.	Possible. A few CNDDDB occurrences of this species are found in the project vicinity. While the study area is at an elevation typically not utilized by this species for breeding, wintering owls may occasionally make use of the site for foraging. This species is not expected to nest on the site.
Willow Flycatcher (<i>Empidonax trailii</i>)	CE	Breeds during summer in willow riparian thickets in the Sierra, particularly near mountain meadows.	Possible. Suitable breeding habitat is absent on the study area due to the lack of willow thickets, relatively low elevation of the site, and the disturbed and developed nature of the site and immediately surrounding lands. This species may utilize the study area during migration and has been observed along the Fresno River in Oakhurst and Cascadel Woods in North Fork in the spring and fall (LOA observations).
Fisher - southern Sierra Nevada ESU (<i>Pekania pennanti</i> pop. 2)	FE, CT, CSC	Occurs in coniferous forests and deciduous-riparian areas with a high percentage of canopy closure; uses cavities, snags, logs, and rocky areas for denning and cover. Requires large areas of dense, mature forest.	Possible. Fishers are not expected to den on or adjacent to the site, or to use the site for other sensitive activities such as resting. The study area is situated outside of modeled fisher foraging habitat and denning habitat (Thompson et al. 2020), and just outside the range of local fisher movements that have been documented through telemetry and camera trapping, with the nearest fisher occurrence recorded approximately 0.5 miles west of the site (Sweitzer et al. 2015). Furthermore, the site's woodland is in an early successional stage following the insect-induced die-off of ponderosa pine and has been further degraded by human use of the site. The site also experiences high levels of ambient disturbance associated with Road 222 and surrounding residential development. At most, this species may occasionally wander onto the site and perhaps forage.
Western Mastiff Bat (<i>Eumops perotis</i> ssp. <i>californicus</i>)	CSC	Frequents open, semi-arid to arid habitats, including conifer, and deciduous woodlands, coastal scrub, grasslands, palm oasis, chaparral and urban. Roosts in cliff faces, high buildings, and tunnels.	Possible. Roosting habitat is absent from the study area. At most, this species may occasionally forage over the site.



* Explanation of Occurrence, Designations, and Status Codes

Present: Species observed on the site at time of field surveys or during recent past.

Likely: Species not observed on the site, but it may reasonably be expected to occur there on a regular basis.

Possible: Species not observed on the site, but it could occur there from time to time.

Unlikely: Species not observed on the site, and would not be expected to occur there except, perhaps, as a transient

Absent: Species not observed on the Site and precluded from occurring there because habitat requirements not met.

STATUS CODES

FE	Federally Endangered	CE	California Endangered
FT	Federally Threatened	CT	California Threatened
FPT	Federally Proposed Threatened	CSC	California Species of Special Concern
FC	Federal Candidate	CRPR	California Rare Plant Ranking
FPD	Federally (Proposed) Delisted	CFP	California Fully Protected
		CCE	California Candidate Endangered

Jurisdictional Waters

Jurisdictional waters are those rivers, creeks, drainages, lakes, ponds reservoirs, and wetlands that are subject to the authority of the U.S. Army Corps of Engineers (USACE), CDFW, and/or the Regional Water Quality Control Board (RWQCB). In general, the USACE regulates navigable waters, tributaries to navigable waters, and wetlands with a continuous surface connection to these waters, where wetlands are defined by the presence of hydric soils, hydrophytic vegetation, and wetland hydrology. All waters under USACE jurisdiction are also regulated by the RWQCB as waters of the State. Additionally, the RWQCB asserts jurisdiction over certain isolated features outside the jurisdiction of the USACE. The CDFW has jurisdiction over waters that have a defined bed and bank.

Aquatic resources are absent from the study area.

Sensitive Habitats and Designated Critical Habitat

California contains a wide range of natural communities, or unique assemblages of plants and animals. These communities have largely been classified and mapped by CDFW as part of their Vegetation Classification and Mapping Program (VegCAMP). Natural communities are assigned state and global ranks according to their rarity and the magnitude and trend of the threats they face. Any natural community with a state rank of 3 or lower (on a 1 to 5 scale) is considered “sensitive” and must be considered in CEQA review.

The USFWS often designates areas of “critical habitat” when it lists species as threatened or endangered. Critical habitat is a specific geographic area(s) that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection.

Sensitive natural communities and designated critical habitat are absent from the study area.

Wildlife Movement Corridors

Wildlife movement corridors are routes that animals regularly and predictably follow during seasonal migration, dispersal from native ranges, daily travel within home ranges, and inter-



population movements. Movement corridors in California are typically associated with valleys, ridgelines, and rivers and creeks supporting riparian vegetation.

Geographic features creating a movement corridor for wildlife are absent from the study area.

Local Policies and Ordinances

In compliance with CEQA, the lead agency must consider project conformance with applicable goals and policies of the Madera County General Plan. The Madera County General Plan includes goals and policies designed to protect significant biotic resources of the Planning Area. Resource elements addressed by this plan include: (1) wetland and riparian areas, (2) fish and wildlife habitat, (3) vegetation, and (4) open space for the preservation of natural resources.

The project does not appear to be in conflict with these policies.

Habitat Conservation Plans and Natural Community Conservation Plans

Section 10 of the federal Endangered Species Act establishes a process by which non-federal projects can obtain authorization to incidentally take listed species, provided take is minimized and thoroughly mitigated. A Habitat Conservation Plan (HCP), developed by the project applicant in collaboration with the USFWS and/or NMFS, ensures that such minimization and mitigation will occur, and is a prerequisite to the issuance of a federal incidental take permit. Similarly, a Natural Community Conservation Plan (NCCP), developed by the project applicant in collaboration with CDFW, provides for the conservation of biodiversity within a project area, and permits limited incidental take of state-listed species.

No HCPs or NCCPs are in effect for the project vicinity.

Potentially Significant Project Impacts/Mitigation

Nesting Raptors and Migratory Birds

Impact: The study area contains possible nesting habitat for a few avian species. Nearly all avian species are protected under the Migratory Bird Treaty Act and related state laws. Avian species' potentially nesting on or immediately adjacent to the site include brewer's blackbird, and mourning dove, among others. If birds were to nest on or immediately adjacent to the project site at the time of construction, project-related activities could result in the destruction or abandonment of active nests. Construction activities that adversely affect the nesting success of birds and raptors or result in the mortality of individual birds may violate state and federal laws and would be considered a significant impact.

Mitigation: In order to avoid impacts to nesting birds and raptors, construction will occur, where possible, outside the nesting season, which is considered February 1 – August 31. If construction must occur during the nesting season, a qualified biologist will conduct preconstruction surveys for active raptor and migratory bird nests within 10 days of the onset of these activities. Nest surveys will include all areas on and within 200 feet of the project site and out to 500 feet for raptors, where accessible. Should any active nests be discovered in or near proposed construction zones, the biologist will identify a suitable construction-free buffer around the nest. This buffer



will be identified on the ground by flagging or fencing and will be maintained until a qualified biologist has determined that the young have fledged.

Compliance with the above mitigation measures would reduce impacts to nesting birds to a less than significant level and ensure compliance with state and federal laws.

Less Than Significant Project Impacts

Project Impacts to the Crotch's Bumble bee, Monarch Butterfly, Willow Flycatcher, California Spotted Owl, Western Mastiff Bat, and Fisher

As discussed in Table 2, the site is not expected to be utilized by these species for sensitive activities such as nesting, bat roosting, or reproduction. However, it is possible that the site may occasionally be utilized for foraging or movement by these species. Project development within the study area would further degrade the habitat value of the site for these species and result in a miniscule loss of disturbed foraging habitat. Project development would not result in a significant loss of habitat for these species as many square miles of similar to higher quality habitat occur in the region. As a result, project impacts to these species from the loss of habitat are considered less than significant.

Because these species are highly mobile and avoid human contact, individuals of these species that may be present in the area at the time of construction would be expected to avoid construction areas and are not expected to be harmed by construction related activity. Therefore, direct project impacts to individuals or regional populations of these species are considered less than significant.

No mitigation is warranted.

Waters of the U.S. and State. Aquatic features are absent from the study area. Project impacts to waters of the U.S. and State are considered less than significant and mitigation is not warranted.

Wildlife Movement Corridors. The study area does not contain any geographical features that could function as a wildlife movement corridor. Project impacts to wildlife movement corridors are considered less than significant under CEQA. No mitigations are warranted.

Consistency with Local Policies and Ordinances. The project appears consistent with the Madera County General Plan and other local policies and ordinances related to biological resources. No mitigations are warranted.

Consistency with Habitat Conservation Plans and Natural Community Conservation Plans. There are no known HCPs or NCCPs in effect for the study area. No mitigations are warranted.

Section 7 Determinations For Federally Listed Species

The following table summarizes LOA's preliminary FESA Section 7 effect determinations for Federally Listed Species found on the USFWS IPaC and CNDDB lists, based on currently available information and the analyses summarized in this report. Candidate species are not



included in Table 3 because they do not require Section 7 consultation. The project will have no effect on designated critical habitat because critical habitat is absent from the Action Area and immediately surrounding lands.

Table 3: Section 7 Determinations for Federally Listed Species

Species	FESA Status	Determination	Rationale for the Determination
Mariposa Pussy-Paws (<i>Calytridium pulchellum</i>)	Threatened	<i>No effect</i>	Suitable habitat for this species is absent from the Action Area.
Lassics Lupine (<i>Lupinus constancei</i>)	Threatened	<i>No effect</i>	Suitable habitat for this species is absent from the Action Area. The Action Area is well outside the range of this species.
California Red-legged Frog (<i>Rana draytonii</i>)	Threatened	<i>No effect</i>	Suitable habitat for this species is absent from the Action Area. This species has been extirpated from the region.
Foothill Yellow-Legged Frog - South Sierra DPS (<i>Rana boylei</i> pop. 5)	Threatened	<i>No effect</i>	Suitable habitat for this species is absent from the Action Area.
Northwestern Pond Turtle (<i>Actinemys marmorata</i>)	Proposed Threatened	<i>No effect</i>	Suitable habitat for this species is absent from the Action Area.
California Condor (<i>Gymnogyps californianus</i>)	Endangered	<i>No effect</i>	The Action Area is out of this species' nesting range. On rare occasions this species may fly over the Action Area.
California Spotted Owl (<i>Strix occidentalis occidentalis</i>)	Proposed Threatened	<i>May affect not likely to adversely affect.</i>	This species may occasionally forage or roost in the Action Area but would not nest there.
Fisher - southern Sierra Nevada ESU (<i>Pekania pennanti</i> pop. 2)	Endangered	<i>May affect not likely to adversely affect.</i>	Suitable denning and reproductive habitat for this species is absent from the Action Area. Individuals may occasionally pass through the site.

If you have any questions, please do not hesitate to contact me at jgurule@loainc.com or (559) 642-4880.

Sincerely,

Jeff Gurule
Senior Project Manager

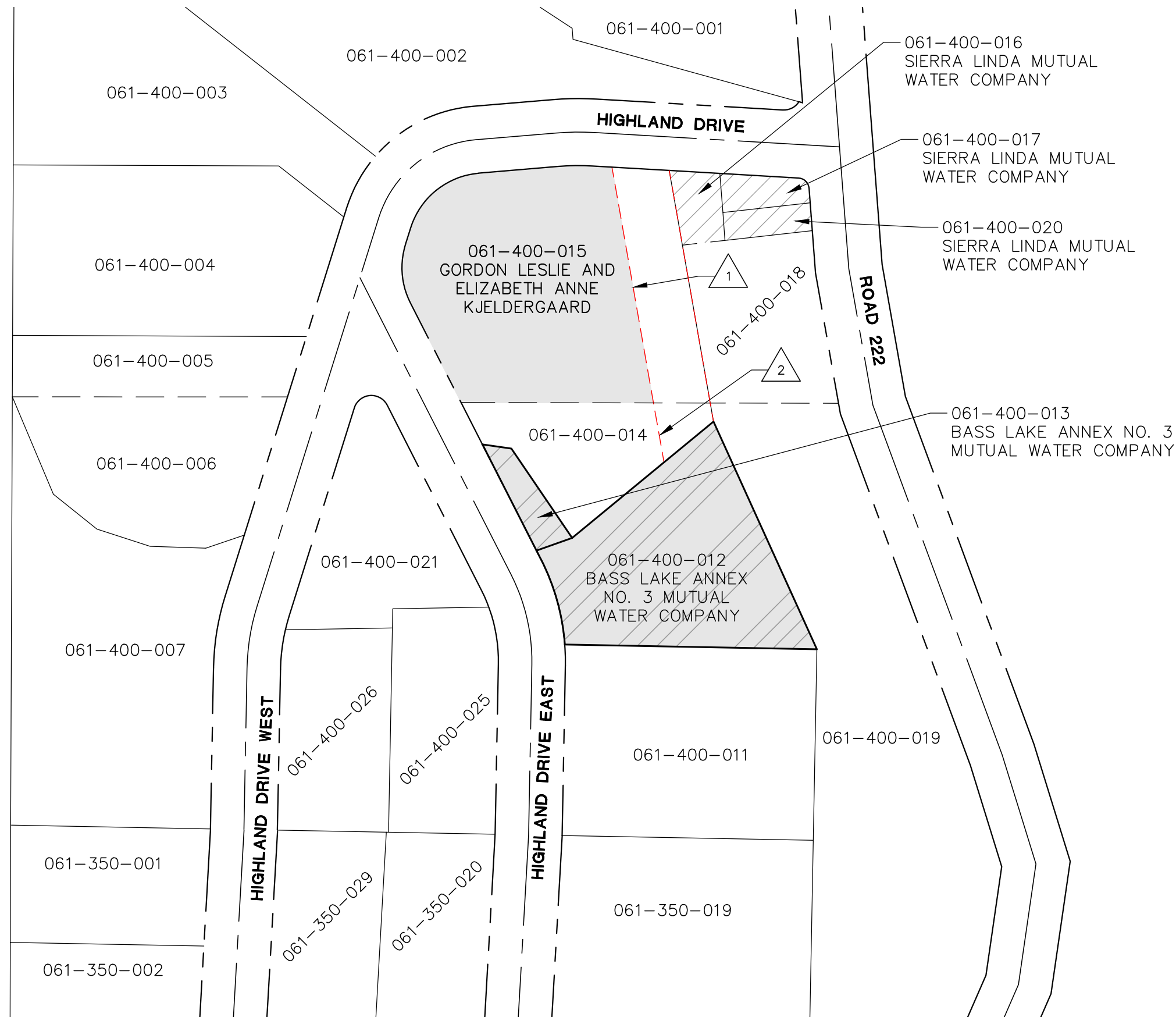


LITERATURE REFERENCED

- Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D. G. Wilken, editors. 2012. The Jepson Manual: Vascular Plants of California, second edition. University of California Press, Berkeley.
- Barry, S. J., and G. M. Fellers. 2013. History and status of the California red-legged frog (*Rana draytonii*) in the Sierra Nevada, California. *Herpetological Conservation and Biology*
- Calflora. 2024. Calflora: An online database of plant identification and distribution [web application]. Calflora, Berkeley, California. Available: <http://www.calflora.org>.
- California Department of Fish and Wildlife (CDFW). 2024. California Natural Diversity Database. The Resources Agency, Sacramento, CA.
- _____. 2002. California Fish and Game Code. Gould Publications. Binghamton, NY.
- California Soil Resource Lab. 2008. Streaming, seamless interface to USDA-NCSS SSURGO and STATSGO Soil Survey Products.
- eBird. 2024. eBird: An online database of bird distribution and abundance [web application]. eBird, Cornell Lab of Ornithology, Ithaca, New York. Available: <http://www.ebird.org>.
- iNaturalist. 2024. Available: <https://www.inaturalist.org/>
- National Park Service (NPS). 2024. World California Condor Update: 2022 Population Status. Available: <https://www.nps.gov/articles/000/caco-world-2022.htm>.
- Natural Resources Conservation Service. 2011. National Hydric Soils List by State, California. U.S. Department of Agriculture.
- Sweitzer, R., C. Thompson, K. Purcell, and R. Barrett. 2015. Fisher Team Final Report. In *Learning Adaptive Management of Sierra Nevada Forests: An Integrated Assessment*. Sierra Nevada Adaptive Management Project, August 31, 2015.
- Thompson, C., Spencer, W., Romsos, H., Sawyer, S. 2020. Southern Sierra Nevada Fisher Conservation Strategy Interim Recommendations. Unpublished report produced by the Conservation Biology Institute.
- Thompson, C., H. Romsos, W. Spencer, S. Sawyer, J. Tucker, R. Green. 2021. Southern Sierra Nevada Fisher Conservation Strategy Supplemental Report - Fisher Reproductive Habitat Model Following Severe Drought. Conservation Biology Institute. 19 pp. <https://doi.org/10.6084/m9.figshare.16828570.v1>
- Zeiner, David C., William F. Laudenslayer, Kenneth E. Mayer and Marshal White. Ed. 1988. California's wildlife, volume I, amphibians and reptiles, volume II, birds, and volume III, mammals. Department of Fish and Game. Sacramento, CA. Online: <http://www.dfg.ca.gov/biogeodata/cwhr/cawildlife.aspx>



**ATTACHMENT 1:
SITE PLAN AND PARCEL MAPS**



EASEMENTS

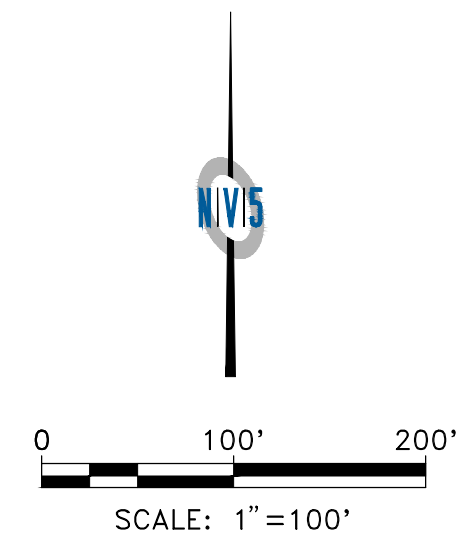


50 FT ROAD EASEMENT PER B927 P278
50 FT ROAD EASEMENT PER B927 P278

LEGEND

	MADERA COUNTY ROW
	PREVIOUS LOCATION FOR THE PROPOSED WATER TREATMENT FACILITY, SEE NOTE 1
	WATER TREATMENT PLANT AREA OF POTENTIAL EFFECTS
	PROJECT STUDY AREA FOR WATER TREATMENT PLANT COMPONENT
	EX. EASEMENT

NOTE 1: LOCATIONS FOR THE PROPOSED WATER TREATMENT FACILITY EVALUATED IN PREVIOUS CEQA DOCUMENT (SCH 2017031075).



PRELIMINARY
NOT FOR CONSTRUCTION

DATE: 8/18/25 TIME: 9:56:39 AM
SERVER: LAYOUT: Layout1
PATH: P:\2281-24\228124-0001831-02\EXHIBIT\CEQA AMENDMENT\1
DRAWING NAME: EXHIBIT-1.DWG
PAGE SETUP: ----
DESIGNER: ZS PROJ. MGR: JFO

N|V|5

15092 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P: 858.385.0500 WWW.NV5.COM

SIERRA LINDA MUTUAL WATER COMPANY - CONSOLIDATION PROJECT PROPOSED WATER TREATMENT FACILITY RELOCATION OVERVIEW

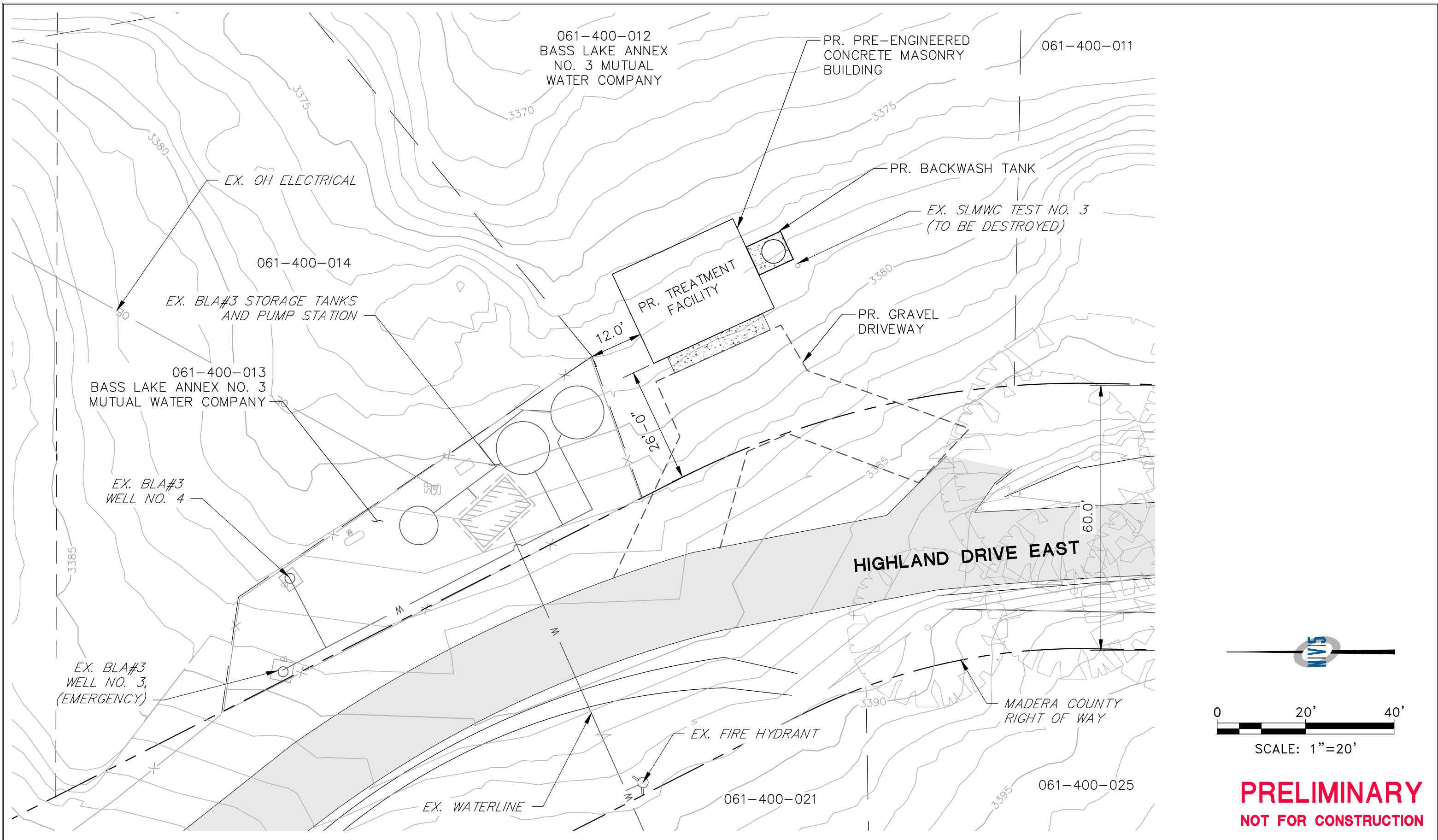
PREPARED FOR: SLMWC

DATE SUBMITTED: AUG 2025

EXHIBIT NUMBER

1

JOB NUMBER
228124-0001831.02



DATE: 1/7/25 TIME: 3:02:14 PM SERVER: LAYOUT: Layout1 PATH: P:\2281-24\228124-0001831-02\CA00\EXHIBIT\228124-0001831-02\CA00\EXHIBIT-2.DWG DRAWING NAME: EXHIBIT-2.DWG PAGE SETUP: ---- DESIGNER: ZS PROJ. MGR: JFO		N V 5 15092 AVENUE OF SCIENCE, SUITE 200 SAN DIEGO, CA 92128 P: 858.385.0500 WWW.NV5.COM	SIERRA LINDA MUTUAL WATER COMPANY - CONSOLIDATION PROJECT PROPOSED WATER TREATMENT FACILITY - APN 061-400-012 PREPARED FOR: SLMWC DATE SUBMITTED: JAN 2025	EXHIBIT NUMBER 2 JOB NUMBER 228124-0001831.02
---	--	---	--	--



**ATTACHMENT 2:
PHOTOGRAPHS OF THE PROJECT SITE**



Photo 1: Study area. Existing water treatment facilities at left.



Photo 2: Study area with existing water treatment facilities on left.



Photo 3: Eastern end of study area. This area is not anticipated to be impacted by project development.



**ATTACHMENT 3:
CNDDDB AND IPAC SPECIES LISTS**



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad (Bass Lake (3711935) OR Shuteye Peak (3711934) OR Cascadel Point (3711924) OR North Fork (3711925) OR O'Neals (3711926) OR Ahwahnee (3711936) OR Fish Camp (3711946) OR White Chief Mtn. (3711945) OR Little Shuteye Peak (3711944))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Allium abramsii Abrams' onion	PMLIL02360	None	None	G3	S3	1B.2
Ambystoma californiense pop. 1 California tiger salamander - central California DPS	AAAAA01181	Threatened	Threatened	G2G3T3	S3	WL
Anaxyrus canorus Yosemite toad	AAABB01040	Threatened	None	G2	S2	SSC
Andrena macswaini An andrenid bee	IIHYM35130	None	None	G2	S2	
Big Tree Forest Big Tree Forest	CTT84250CA	None	None	G3	S3.2	
Botrychium minganense Mingan moonwort	PPOPH010R0	None	None	G5	S4	4.2
Botrychium montanum western goblin	PPOPH010K0	None	None	G3G4	S2	2B.1
Bruchia bolanderi Bolander's bruchia	NBMUS13010	None	None	G3	S3	4.2
Calasellus longus An isopod	ICMAL34020	None	None	G1	S1	
Calyptridium pulchellum Mariposa pussypaws	PDPOR09060	Threatened	None	G1	S1	1B.1
Camissonia sierrae ssp. alticola Mono Hot Springs evening-primrose	PDONA031H1	None	None	G3T2	S2	1B.2
Carpenteria californica tree-anemone	PDHDR04010	None	Threatened	G1?	S1?	1B.2
Central Valley Drainage Hardhead/Squawfish Stream Central Valley Drainage Hardhead/Squawfish Stream	CARA2443CA	None	None	GNR	SNR	
Central Valley Drainage Rainbow Trout/Cyprinid Stream Central Valley Drainage Rainbow Trout/Cyprinid Stream	CARA2422CA	None	None	GNR	SNR	
Central Valley Drainage Resident Rainbow Trout Stream Central Valley Drainage Resident Rainbow Trout Stream	CARA2421CA	None	None	GNR	SNR	
Clarkia australis Small's southern clarkia	PDONA05040	None	None	G2	S2	1B.2
Collomia rawsoniana Rawson's flaming trumpet	PDPLM02080	None	None	G2	S2	1B.2
Cryptantha hooveri Hoover's cryptantha	PDBOR0A190	None	None	GH	SH	1A



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Cuscuta jepsonii</i> Jepson's dodder	PDCUS011T0	None	None	G3	S3	1B.2
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T3	S3	
<i>Desmona bethula</i> amphibious caddisfly	IITRI77010	None	None	G2G3	S2S3	
<i>Empidonax traillii</i> willow flycatcher	ABPAE33040	None	Endangered	G5	S3	
<i>Emys marmorata</i> western pond turtle	ARAAD02030	Proposed Threatened	None	G3G4	S3	SSC
<i>Epilobium howellii</i> subalpine fireweed	PDONA06180	None	None	G4	S4	4.3
<i>Erethizon dorsatum</i> North American porcupine	AMAFJ01010	None	None	G5	S3	
<i>Erythranthe gracilipes</i> slender-stalked monkeyflower	PDSCR1B1C0	None	None	G2	S2	1B.2
<i>Erythronium pluriflorum</i> Shuteye Peak fawn lily	PMLIL0U0Q0	None	None	G2	S2	1B.3
<i>Eumops perotis californicus</i> western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
<i>Fissidens aphelotaxifolius</i> brook pocket moss	NBMUS2W290	None	None	G3G4	S1	2B.2
<i>Gonidea angulata</i> western ridged mussel	IMBIV19010	None	None	G3	S2	
<i>Gulo gulo</i> wolverine	AMAJF03010	Threatened	Threatened	G4	S1	FP
<i>Haliaeetus leucocephalus</i> bald eagle	ABNKC10010	Delisted	Endangered	G5	S3	FP
<i>Hulsea brevifolia</i> short-leaved hulsea	PDAST4Z020	None	None	G3	S3	1B.2
<i>Hydroporus leechi</i> Leech's skyline diving beetle	IICOL55040	None	None	G1?	S2S3	
<i>Leptosiphon serrulatus</i> Madera leptosiphon	PDPLM09130	None	None	G3	S3	1B.2
<i>Lupinus citrinus var. citrinus</i> orange lupine	PDFAB2B103	None	None	G2T2	S2	1B.2
<i>Martes caurina sierrae</i> Sierra marten	AMAJF01014	None	None	G4G5T3	S3	
<i>Myotis evotis</i> long-eared myotis	AMACC01070	None	None	G5	S3	
<i>Myotis volans</i> long-legged myotis	AMACC01110	None	None	G4G5	S3	



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



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Myotis yumanensis</i> Yuma myotis	AMACC01020	None	None	G5	S4	
<i>Oncorhynchus clarkii henshawi</i> Lahontan cutthroat trout	AFCHA02081	Threatened	None	G5T3	S2	SSC
<i>Pekania pennanti pop. 2</i> Fisher - southern Sierra Nevada ESU	AMAJF01022	Endangered	Threatened	G5T1	S1	SSC
<i>Peltigera gowardii</i> western waterfan lichen	NLVER00460	None	None	G4?	S3	4.2
<i>Potamogeton epihydrus</i> Nuttall's ribbon-leaved pondweed	PMPOT03080	None	None	G5	S2S3	2B.2
<i>Rana boylei pop. 5</i> foothill yellow-legged frog - south Sierra DPS	AAABH01055	Endangered	Endangered	G3T2	S2	
<i>Rana sierrae</i> Sierra Nevada yellow-legged frog	AAABH01340	Endangered	Threatened	G1	S2	WL
<i>Spea hammondi</i> western spadefoot	AAABF02020	Proposed Threatened	None	G2G3	S3S4	SSC
<i>Strix nebulosa</i> great gray owl	ABNSB12040	None	Endangered	G5	S1	
<i>Taxidea taxus</i> American badger	AMAJF04010	None	None	G5	S3	SSC
<i>Tetrix sierrana</i> Sierra pygmy grasshopper	IIORT27010	None	None	G1G2	S1	
<i>Trifolium bolanderi</i> Bolander's clover	PDFAB400G0	None	None	G3	S3	1B.2
<i>Viola pinetorum ssp. grisea</i> grey-leaved violet	PDVIO04431	None	None	G4G5T3	S3	1B.2
<i>Vulpes vulpes necator pop. 2</i> Sierra Nevada red fox - Sierra Nevada DPS	AMAJA03017	Endangered	Threatened	G5TNR	S1	

Record Count: 53

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Madera County, California



Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📅 (916) 414-6713

Federal Building

2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

-
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
 2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Fisher <i>Pekania pennanti</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/3651	Endangered
Gray Wolf <i>Canis lupus</i> There is final critical habitat for this species. https://ecos.fws.gov/ecp/species/4488	Endangered

Birds

NAME	STATUS
California Condor <i>Gymnogyps californianus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8193	Endangered
California Spotted Owl <i>Strix occidentalis occidentalis</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7266	Proposed Threatened

Reptiles

NAME	STATUS
Northwestern Pond Turtle <i>Actinemys marmorata</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2891	Threatened

Foothill Yellow-legged Frog *Rana boylei*

Endangered

There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat.

<https://ecos.fws.gov/ecp/species/5133>

Insects

NAME

STATUS

Monarch Butterfly *Danaus plexippus*

Proposed Threatened

Wherever found

There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat.

<https://ecos.fws.gov/ecp/species/9743>

Flowering Plants

NAME

STATUS

Mariposa Pussypaws *Calyptidium pulchellum*

Threatened

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/2695>

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act ² and the Migratory Bird Treaty Act (MBTA) ¹. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate

regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds
<https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC
<https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

There are Bald Eagles and/or Golden Eagles in your [project](#) area.

Measures for Proactively Minimizing Eagle Impacts

For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the [National Bald Eagle Management Guidelines](#). You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#).

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

If disturbance or take of eagles cannot be avoided, an [incidental take permit](#) may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the [Do I Need A Permit Tool](#). For assistance making this determination for golden eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

Ensure Your Eagle List is Accurate and Complete

If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the [Supplemental Information on Migratory Birds and Eagles](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

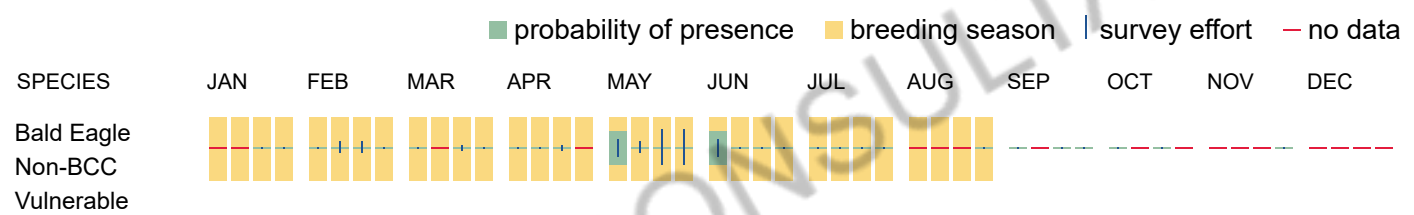
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Bald & Golden Eagles FAQs

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are an eagle ([Bald and Golden Eagle Protection Act](#) requirements may apply).

Proper interpretation and use of your eagle report

On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort line or no data line (red horizontal) means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

How do I know if eagles are breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the [RAIL Tool](#) and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Migratory birds

The Migratory Bird Treaty Act (MBTA) ¹ prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC
<https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

Measures for Proactively Minimizing Migratory Bird Impacts

Your IPaC Migratory Bird list showcases [birds of concern](#), including [Birds of Conservation Concern \(BCC\)](#), in your project location. This is not a comprehensive list of all birds found in your project area. However, you can help proactively minimize significant impacts to all birds at your project location by implementing the measures in the [Nationwide avoidance and minimization measures for birds](#) document, and any other project-specific avoidance and minimization measures suggested at the link [Measures for avoiding and minimizing impacts to birds](#) for the birds of concern on your list below.

Ensure Your Migratory Bird List is Accurate and Complete

If your project area is in a poorly surveyed area, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the [Supplemental Information on Migratory Birds and Eagles document](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31

Black-throated Gray Warbler <i>Setophaga nigrescens</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 1 to Jul 20
California Gull <i>Larus californicus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31
Cassin's Finch <i>Haemorhous cassinii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9462	Breeds May 15 to Jul 15
Clark's Grebe <i>Aechmophorus clarkii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jun 1 to Aug 31
Evening Grosbeak <i>Coccothraustes vespertinus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 15 to Aug 10
Hermit Warbler <i>Setophaga occidentalis</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 5 to Jul 15
Lawrence's Goldfinch <i>Spinus lawrencei</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20
Oak Titmouse <i>Baeolophus inornatus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Olive-sided Flycatcher <i>Contopus cooperi</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31

Western Grebe *aechmophorus occidentalis*

Breeds Jun 1 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/6743>

Wrentit *Chamaea fasciata*

Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (I)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

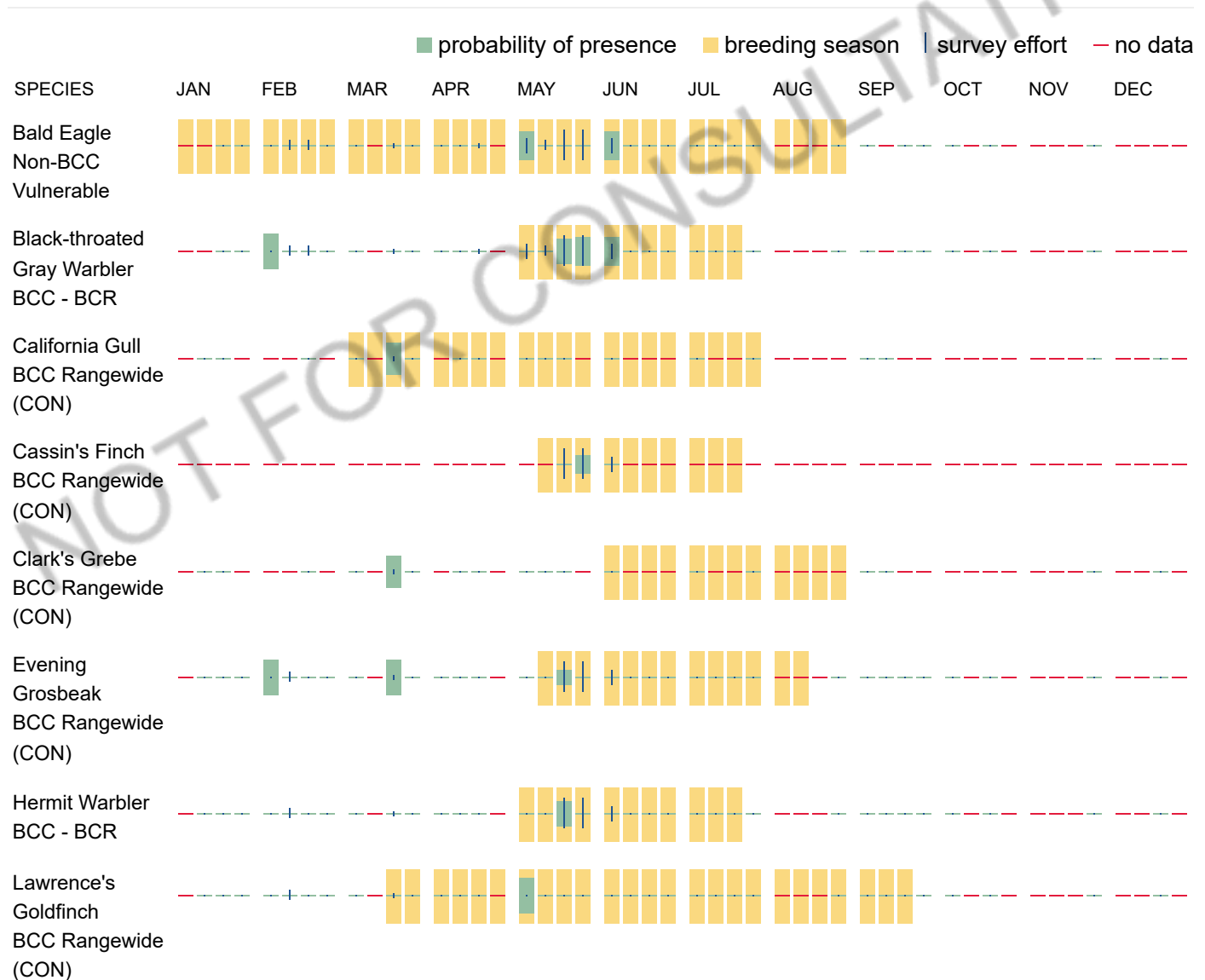
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

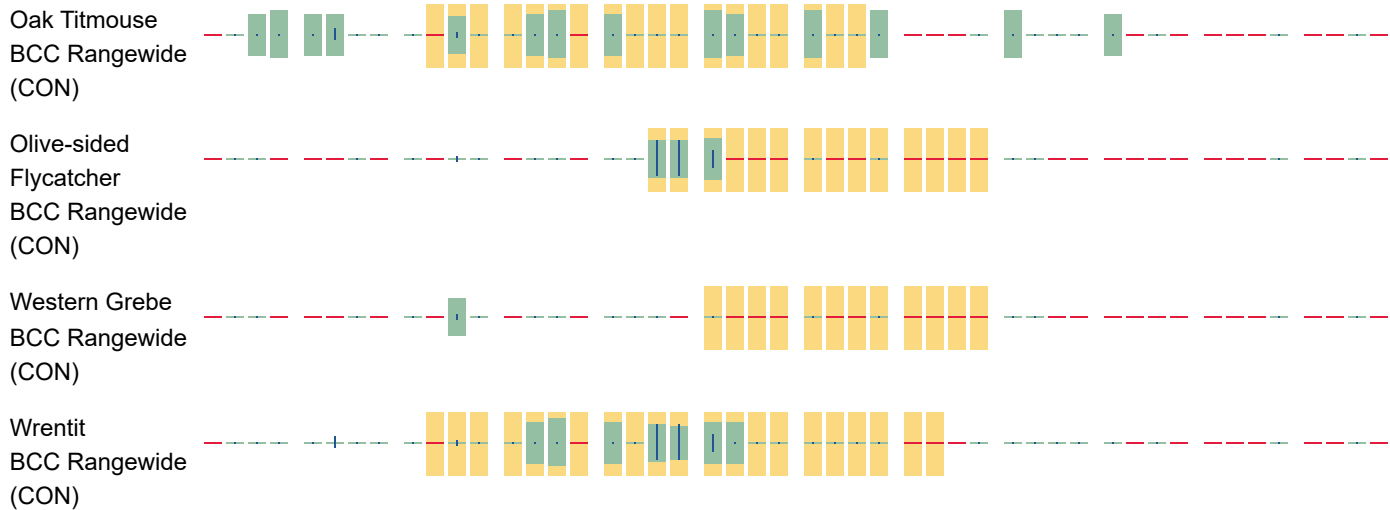
No Data (-)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Migratory Bird FAQs

Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Avoidance & Minimization Measures for Birds](#) describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see when birds are most likely to occur and breed in your project area, view the [Probability of Presence Summary](#). [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the [Bald and Golden Eagle Protection Act](#) and those species marked as “Vulnerable”. See the FAQ “What are the levels of concern for migratory birds?” for more information on the levels of concern covered in the IPaC migratory bird species list.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle ([Bald and Golden Eagle Protection Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, and to verify survey effort when no results present, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

Why are subspecies showing up on my list?

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the [RAIL Tool](#) and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Bald and Golden Eagle Protection Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ "Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project

review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Proper interpretation and use of your migratory bird report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list does not represent all birds present in your project area. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Facilities

Wildlife refuges and fish hatcheries

Refuge and fish hatchery information is not available at this time

Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

RIVERINE
[R4SBC](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error

is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

APPENDIX C – SUPPLEMENTAL ARCHAEOLOGICAL SURVEY REPORT, 2025

(Confidential – Not Available for Public Review)