

memorandum

date November 21, 2024

to Jason Hays, Aaron Carlsson, and Scott Fleming, Tahoe Truckee Sanitation Agency (TTSA)

cc Uday Sant, Brown and Caldwell

from Priya Finnemore, Stephen Doyle (ESA)

Subject CEQA Notice of Exemption Supporting Information

Attachments Attachment A – Project Description, Attachment B – Biological Resources Memorandum, Attachment C – Cultural Resources Memorandum

Introduction

This memorandum was prepared by Environmental Science Associates (ESA) to support a Categorical Exemption (CE) under the California Environmental Quality Act (CEQA) for the Truckee River Interceptor Pipeline Rehabilitation Project (proposed project) located east of Lake Tahoe along State Route 89 and the Truckee River in Placer County, California. The Tahoe-Truckee Sanitation Authority (T-TSA), the CEQA lead agency, is proposing a maintenance project to rehabilitate a portion of the Truckee River Interceptor (TRI) pipeline. The California Environmental Quality Act (CEQA) Guidelines contain classes and categories of projects that have generally been determined not to have a significant effect on the environment and are exempt from CEQA provisions.

Article 19 of the CEQA Guidelines includes, as required by Public Resources Code (PRC) Section 21084, a list of classes of projects that have been determined not to have a significant effect on the environment and, as a result, are exempt from review under CEQA. This document has been prepared to serve as the basis for CEQA compliance as it pertains to the proposed project. This memorandum demonstrates that the proposed project qualifies for a CEQA exemption as an existing facility (Class 1) consistent with the provisions of the CEQA Guidelines Section 15301 (Existing Facilities). This memorandum provides information for T-TSA, as the CEQA lead agency, regarding a finding that the proposed project is exempt under CEQA.

Project Description

The T-TSA is proposing a maintenance project in the Truckee River corridor to rehabilitate a portion of the TRI pipeline between manhole (MH) 32 to MH 36. The TRI conveys wastewater from Tahoe City, California to T-TSA's Water Reclamation Plant in Martis Valley, east of the town of Truckee, California. The proposed project would rehabilitate the existing pipeline segment and its manholes utilizing trenchless cured-in-place-pipe (CIPP) methods, to support environmental stewardship of the surrounding community, and provide T-TSA with a long-term, cost-effective solution to maintaining TRI operation while reducing the likelihood of future failures. The T-

TSA would proactively rehabilitate the pipeline in the fall of 2025, with construction starting after Labor Day (September 1st) and completed by October 15th. The expected construction duration would be up to 6 weeks.

Refer to **Attachment A – Project Description** for a detailed description of the proposed project.

Environmental Considerations

As indicated in **Attachment B – Biological Resources Memorandum**, numerous standard conditions and best management practices (BMPs) are included as part of the proposed project to avoid or minimize potential impacts on the environment. Additionally, avoidance and minimization measures (AMMs) will be utilized, such as avoiding construction during nesting bird season, avoiding construction during the winter/'wet' season, conducting pre-construction surveys for sensitive species, and flagging or staking sensitive habitats for avoidance. The location of the proposed project has been the subject of a biological resources survey, database searches for sensitive species in the project vicinity, a cultural resources survey, and a pedestrian surface survey.

CEQA Exemption Discussion

A brief discussion of the applicable Class 1 exemptions under Sections 15301 (Existing Facilities) and the general "exceptions to the exemptions" pursuant to Section 15300.2 (Exemptions) of the CEQA Guidelines are summarized below.

CEQA Guidelines Section 15301, Existing Facilities (Class 1)

The Class 1 Categorical Exemption in Section 15301 of the CEQA Guidelines consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use. The types of "existing facilities" itemized below are not intended to be all-inclusive of the types of projects which might fall within Class 1. The key consideration is whether the project involves negligible or no expansion of use. Examples include but are not limited to:

- (a) Interior or exterior alterations involving such things as interior partitions, plumbing, and electrical conveyances;
- (b) Existing facilities of both investor and publicly owned utilities used to provide electric power, natural gas, sewerage, or other public utility services;
- (c) Existing highways and streets, sidewalks, gutters, bicycle and pedestrian trails, and similar facilities (this includes road grading for the purpose of public safety, and other alterations such as the addition of bicycle facilities, including but not limited to bicycle parking, bicycle-share facilities and bicycle lanes, transit improvements such as bus lanes, pedestrian crossings, street trees, and other similar alterations that do not create additional automobile lanes).
- (d) Restoration or rehabilitation of deteriorated or damaged structures, facilities, or mechanical equipment to meet current standards of public health and safety, unless it is determined that the damage was substantial and resulted from an environmental hazard such as earthquake, landslide, or flood;
- (e) Additions to existing structures provided that the addition will not result in an increase of more than:

(1) 50 percent of the floor area of the structures before the addition, or 2,500 square feet, whichever is less; or

(2) 10,000 square feet if:

(A) The project is in an area where all public services and facilities are available to allow for maximum development permissible in the General Plan and

(B) The area in which the project is located is not environmentally sensitive.

(f) Addition of safety or health protection devices for use during construction of or in conjunction with existing structures, facilities, or mechanical equipment, or topographical features including navigational devices;

(g) New copy on existing on and off-premise signs;

(h) Maintenance of existing landscaping, native growth, and water supply reservoirs (excluding the use of pesticides, as defined in Section 12753, Division 7, Chapter 2, Food and Agricultural Code);

(i) Maintenance of fish screens, fish ladders, wildlife habitat areas, artificial wildlife waterway devices, streamflows, springs and waterholes, and stream channels (clearing of debris) to protect fish and wildlife resources;

(j) Fish stocking by the California Department of Fish and Game;

(k) Division of existing multiple family or single-family residences into common-interest ownership and subdivision of existing commercial or industrial buildings, where no physical changes occur which are not otherwise exempt;

(l) Demolition and removal of individual small structures listed in this subdivision;

(1) One single-family residence. In urbanized areas, up to three single-family residences may be demolished under this exemption.

(2) A duplex or similar multifamily residential structure. In urbanized areas, this exemption applies to duplexes and similar structures where not more than six dwelling units will be demolished.

(3) A store, motel, office, restaurant, and similar small commercial structure if designed for an occupant load of 30 persons or less. In urbanized areas, the exemption also applies to the demolition of up to three such commercial buildings on sites zoned for such use.

(4) Accessory (appurtenant) structures including garages, carports, patios, swimming pools, and fences.

(m) Minor repairs and alterations to existing dams and appurtenant structures under the supervision of the Department of Water Resources.

(n) Conversion of a single-family residence to office use.

(o) Installation, in an existing facility occupied by a medical waste generator, of a steam sterilization unit for the treatment of medical waste generated by that facility provided that the unit is installed and operated in accordance with the Medical Waste Management Act (Section 117600, et seq., of the Health and Safety Code) and accepts no offsite waste.

(p) Use of a single-family residence as a small family day care home, as defined in Section 1596.78 of the Health and Safety Code.

CEQA Guidelines Section 15300.2, Categorical Exemption Exceptions

Application of this exemption, as all categorical exemptions, is limited by the factors described in the CEQA Guidelines Section 15300.2 (Exceptions). Accordingly, a project with significant cumulative impacts or which otherwise has a reasonable possibility of resulting in a significant effect does not qualify for a Class 1 categorical exemption.

The following are exceptions that would make Categorical Exemption Class 1 inapplicable to a project:

- a) **Location.** Classes 3, 4, 5, 6, and 11 are qualified by consideration of where the project is to be located – a project that is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant. Therefore, these classes are considered to apply all instances, except where the project may impact on an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies.
- b) **Cumulative Impact.** All exemptions for these classes are inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant.
- c) **Significant Effect.** A categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances.
- d) **Scenic Highways.** A categorical exemption shall not be used for a project which may result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a highway officially designated as a state scenic highway. This does not apply to improvements which are required as mitigation by an adopted negative declaration or certified EIR.
- e) **Hazardous Waste Sites.** A categorical exemption shall not be used for a project located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code.
- f) **Historical Resources.** A categorical exemption shall not be used for a project which may cause a substantial adverse change in the significance of a historical resource.

Applicability of Categorical Exemption Exceptions to the Proposed Project

The applicability of CEQA Guidelines Section 15300.2 (Exceptions) to the proposed project are presented below.

(a) Location

Because the location exception is only applicable to Classes 3, 4, 5, 6, and 11, this exception does not apply to the Class 1 exemption. Therefore, this exception does not apply to the proposed project.

(b) Cumulative Impacts

The cumulative impact exception applies to projects of the same type in the same place. Various sources of information (e.g., public databases, records, published information, direct email correspondence) were consulted to determine whether there are other projects of the same type (i.e., pipeline projects) in the proposed project vicinity occurring in fall 2025, and therefore would meet the criteria of this exception. **Table 1** summarizes the results of the cumulative impacts project search that determined no other pipeline projects meet the criteria of this exception. Additionally, the proposed project would not generate long-term or growth-inducing impacts, and all temporary construction impacts from the proposed project would be less than significant with the implementation of standard conditions described in Attachment A. Therefore, this exception does not apply to the proposed project.

TABLE 1 – PROJECT SEARCH FOR POTENTIAL CUMULATIVE IMPACTS

Agency/Entity	Determination
Tahoe Truckee Sanitation Agency (T-TSA)	Based on review of the T-TSA website, there are no pipeline projects currently proposed in Tahoe City or within the proposed project's timeline. An email was sent November 7, 2024, to confirm.
Tahoe City Public Utility District (TCPUD)	Based on review of the TCPUD website, there are no pipeline projects currently proposed in Tahoe City or within the proposed project's timeline. Other projects in the vicinity of the proposed project include: the West Lake Tahoe Regional Treatment Plant Project (to be completed in 2024), and a Tahoe City Sewer Line Replacement Project (anticipated to start in May 2026).
Tahoe City Downtown Association	Based on review of the Tahoe City Downtown Association website, there are no pipeline projects currently proposed in Tahoe City or within the proposed project's timeline.
Placer County	Based on a Placer County database search, there are no pipeline projects currently proposed in Tahoe City or within the proposed project's timeline.
California Department of Transportation (Caltrans)	Based on a Caltrans database search, there are no pipeline projects currently proposed in Tahoe City or within the proposed project's timeline.
Auerbach Engineering Corporation	Based on correspondence with Auerbach Engineering Corporation, a bridge replacement project at 1615 River Road was completed in the fall 2024, with subsequent residential construction planned for 2025. However, there are no pipeline projects currently proposed in Tahoe City or within the proposed project's timeline.
Southwest Gas	Based on review of Southwest Gas' website, there exists one pipeline project along State Route 28 between Kings Beach and Tahoe City: the North Lake Tahoe Lateral Pipeline Replacement Project. However, project activities are underway and were to be completed in October 2024.
Liberty Utilities	Based on review of Liberty Utilities' website, there are no pipeline projects currently proposed in Tahoe City or within the proposed project's timeline. An email was sent November 7, 2024, to confirm.
State Clearing House (SCH)	Based on review of the SCH website, there are no pipeline projects currently proposed in Tahoe City or within the proposed project's timeline. Other projects in the vicinity of the proposed project include: the Rubicon Tank No. 1 Water Feed Line Replacement Project and the Lower Meeks Bay Ave. Pressure Reducing Valve Project (May 2025 – Sep 2025).

Source: Compiled by ESA 2024.

(c) Significant Effect

As indicated above, a categorical exemption cannot be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances. The proposed project includes rehabilitation of existing pipeline and associated infrastructure on the existing TRI pipeline in the Truckee River corridor. The proposed project's circumstances as an existing pipeline requiring rehabilitation are typical of replacement or reconstruction of existing structures and facilities and thus are not considered unusual. Aging pipeline infrastructure routinely needs to be rehabilitated or replaced after years of routine use. The TRI pipeline was found to be in a dilapidated condition requiring proactive repair to avoid a future failure that would

compromise the pipeline's structural integrity which could result in raw sewage being spilled into the Truckee River.

Additionally, the following applies to the proposed project:

- Standard conditions, BMPs and AMMs included as part of the proposed project would avoid or minimize potential impacts during construction (refer to Attachment A).
- Construction would be temporary, with a total duration of up to 6 weeks. The potential noise and odor generating periods would be shorter in duration.
- Once construction is completed, temporarily disturbed areas would be restored to pre-project conditions.
- Construction methods and materials are considered 'standard'. The proposed pipeline rehabilitation methods (CIPP) are far less impactful (in terms of spatial extent, duration, and intensity) compared to alternative methods (open cut trenching) in terms of area of disturbance and duration and intensity of construction.
- Construction would not occur in the Truckee River. For work occurring in the Truckee River floodplain/riparian corridor, the CEQA lead agency would obtain required permits from the California Department of Fish and Wildlife (CDFW) and Lahontan Regional Water Quality Control Board and comply with the permit terms and conditions.
- The proposed project would not result in adverse impacts on sensitive species or habitats, corridors, natural community conservation plans / habitat conservation plans (refer to Attachment B – Biological Resources Memorandum).
- The proposed project would not result in adverse impacts on cultural resources (refer to **Attachment C - Cultural Memorandum**).
- Additional analyses found that the proposed project would not result in adverse impacts on air quality and hazardous materials.

Therefore, the proposed project does not present unusual circumstances that would have a significant effect on the environment, and this exception does not apply to the proposed project.

(d) Scenic Highways

The nearest officially designated scenic highway is located approximately 9.3 miles southeast on the segment of the State Route 89 that runs from the Placer / El Dorado County line to the junction for US Highway 50 in the city of South Lake Tahoe. The northern portion of State Route 89 that runs from the Placer County line to the town of Truckee where the proposed project is located is deemed eligible but is not officially designated.

The next nearest officially designated scenic highway is located approximately 28.2 miles northwest of the proposed project on the segment of State Route 20 east of the Skillman Flat Campground and west of the Interstate 80 junction in Nevada County.

The proposed project site is not visible from officially designated highways, and therefore the proposed project would not result in damage to scenic resources within a highway officially designated as a scenic highway. Therefore, this exception does not apply to the proposed project.

(e) Hazardous Waste Sites

The State Water Resources Control Board GeoTracker database¹ and the Department of Toxic Substances Control EnviroStor database² were consulted to determine the presence of active, designated or mapped hazardous material sites within the proposed project site. None of these sites were found in the proposed project site. The nearest sites are:

- **RB Case #: 6T0405A** - closed leaking underground storage tanks (LUST) cleanup for unknown contaminants at 1321 Mineral Springs Place, Alpine Meadows, CA 96145. The cleanup status for this site is: Completed-case closed as of 3/13/2015.
- **RB Case #: 6T0229A** - closed leaking underground storage tanks (LUST) cleanup site heating oil / fuel oil at 9921 River Road. The cleanup status for this site is: Completed-case closed as of 2/4/2000.

The proposed project would be completely confined to the area described further in the project location section of Attachment A. The proposed project would not involve ground disturbing activities within a cleanup site, nor would work occur in a designated hazardous waste site. Therefore, this exception does not apply to the proposed project.

(f) Historical Resources

In June 2024, ESA prepared a Cultural Resources Survey Report for the proposed project (Attachment C). The results of a records search were obtained from the North Central Information Center of the California Historical Resources Information System on June 3, 2024 (File No. PLA-24-61). ESA utilized historic aerial imagery and maps to review historical resources. On June 3, 2024, ESA also contacted the Native American Heritage Commission (NAHC), to request a search of the NAHC's Sacred Lands File (SLF) and a list of Native American representatives who may have interest in the proposed project. On June 11, 2024, the NAHC responded indicating that the SLF has no record of any cultural resources in the vicinity of the proposed project and included a list of Native American representatives who may be interested in the proposed project. The reports recorded the existing conditions of the proposed project site with regard to cultural resources, including historic architectural resources and archaeological resources. Based on the results of the records search, background research, and surface survey, the proposed project would not result in adverse impacts to cultural resources, including historical resources. Therefore, the proposed project would not cause a substantial adverse change in the significance of a historical resource, and this exception does not apply to the proposed project.

Conclusion

As demonstrated in this memorandum, the proposed project meets the criteria for a CEQA categorical exemption as an existing facility (Class 1) consistent with the provisions of CEQA Guidelines Section 15301 (Existing Facilities). This memorandum provides substantial evidence documenting that the exceptions to Class 1 categorical exemptions pursuant to CEQA Guidelines Section 15300.2 (Exceptions) do not apply to the proposed project. Therefore, the proposed project is exempt from environmental review under CEQA.

¹ State Water Resources Control Board, Geotracker, 2023. Available online at <https://geotracker.waterboards.ca.gov/map/>. Accessed on October 31, 2024.

² Department of Toxic Substances Control, EnviroStor, 2023. Available online at <https://www.envirostor.dtsc.ca.gov/public/map/>. Accessed on October 31, 2024.

Attachment A

Truckee River Interceptor Pipeline Rehabilitation Project – Project Description

PROJECT DESCRIPTION

Truckee River Interceptor Pipeline Rehabilitation Project

Background and Location

Tahoe-Truckee Sanitation Agency (T-TSA) is proposing a maintenance project to rehabilitate a portion of the Truckee River Interceptor (TRI) pipeline located east of Lake Tahoe along Highway 89 and the Truckee River in Placer County, California (Figure 1). The Truckee River corridor is a highly used recreation area for whitewater rafting, fly fishing, bicycling, and hiking. The project would take place along the section of the TRI pipeline between manhole (MH) 32 to MH 36 (Figure 2). The TRI conveys wastewater from Tahoe City to T-TSA's Water Reclamation Plant in Martis Valley, east of the town of Truckee, California. The majority of the TRI was installed in the 1970s. The TRI flows south to north and is comprised of 19.5 miles of gravity pipeline with 181 manholes ranging in diameter from 18 to 42 inches. Most of the pipeline is unlined reinforced concrete pipe (RCP) with approximately 0.5-miles of epoxy-lined ductile iron pipe (DIP) and 0.5-miles of pipe that has been rehabilitated using cured-in-place pipe (CIPP). The T-TSA owns and operates the TRI and the regional Water Reclamation Plant (WRP). The TRI conveys wastewater via gravity from five member districts in the north and west Lake Tahoe region along the Truckee River to the WRP. The member districts are Alpine Springs County Water District, North Tahoe Public Utility District, Olympic Valley Public Service District, Tahoe City Public Utilities District (TCPUD), and Truckee Sanitary District.

T-TSA does not own or operate any of the gravity sewer mains or laterals that convey wastewater to the TRI. There is no redundancy for the TRI in the event of a failure. The majority of the TRI follows the Truckee River and is located in or adjacent to the floodplain, with multiple crossings of the Truckee River.

Project Purpose

The purpose of the proposed project is to rehabilitate an existing section of the 19.5-mile-long sewer pipeline located under and adjacent to the Truckee River between MH 33 and 35 that is showing signs of deterioration and potential failure. TRI pipeline failure in this vicinity would have significant consequences on the ecologically sensitive Truckee River and the riverbanks and to the adjacent communities of Tahoe City, Alpine Meadows, Olympic Valley, and Truckee. Currently, there is no redundancy for the TRI if it were to experience a failure, which could result in untreated sewage spilling into the Truckee River. The project will rehabilitate the existing pipeline segment and its manholes, to support environmental stewardship of the surrounding community, and provide T-TSA with a long-term, cost-effective solution to maintaining TRI operation while reducing the likelihood of future failures.

This project is the result of T-TSA's February 2022 Collection System Master Plan, which included rehabilitation recommendations for two segments of the TRI that cross the Truckee River. Using closed-circuit television (CCTV) data, it was determined that these segments have a high chance of failure due to coating failures and corrosion that will compromise the pipeline's structural integrity. A pipeline failure in this vicinity would run the risk of untreated sewage spilling into the Truckee River and necessitate emergency response/repair, which would likely require major construction activities in and near the Truckee River.

This pipeline rehabilitation project would reduce the likelihood of future failures, using non-invasive (trenchless) rehabilitation methods that will avoid direct impacts to or work in the Truckee River, only require temporary construction-related impacts, and result in far fewer impacts to the Truckee River corridor, as well as reduce potential public health risks, as P to traditional open-cut trenching methods.

Project Description

The Project would consist of pipeline rehabilitation work utilizing trenchless CIPP methods on approximately 1,410 linear feet (LF) of 24-inch DIP and include rehabilitation of manholes (MH) 33 to 35 located along the same segment (Figure 3). As there is no redundancy to the TRI pipeline, the limits of construction are likely to extend from MH-32 to MH-36 due to the associated flow bypassing requirements, and access constraints during construction. To address this critical aging pipeline and protect the pristine Truckee River and adjoining habitats and communities, T-TSA is planning to proactively rehabilitate the pipeline in 2025, with a targeted construction window of post Labor Day through October 15th. As part of the project, three manholes (MH-33, MH-34, MH-35) would be concurrently rehabilitated with the pipeline. The proposed temporary flow bypass route would start on the upstream end at MH-32, which is located next to the Truckee River Bike Trail, and would terminate on the downstream end at (i.e., discharge into) MH-36, which is located off the bike path in a developed / gated dirt road in a private property area with secured right of entry for construction. T-TSA also owns an easement along the TRI that will be utilized during the project.

Construction activities will include the following:

Installation of Temporary Erosion and Sediment Controls and Visible Construction Limits:

The project will comply with the California Regional Water Quality Control Board Lahontan Region's Order No R6T-2203-0004 (*General Waste Discharge Requirements for Small Construction Projects, including Utility, Public Works, and Minor Streambed / Lakebed Alteration Projects in the Lahontan Region excluding the Lake Tahoe Hydrologic Unit*). The contractor will install temporary best management practices (BMPs) to protect water quality; BMPs may include installation of straw wattles, silt fencing, and other typical temporary erosion and sediment controls. The contractor, in coordination with a qualified biologist, will also install fencing or other materials to visibly define construction limits in the vicinity of any potentially sensitive environmental resources such as the Truckee River banks and any adjacent wet or ponded areas.

Installation of Temporary Bypass Pumping, Bike Trail Detours, and Traffic Controls: The current recommended set of temporary bypass piping and bike detour options attempt to minimize traffic disruptions on Hwy 89, when construction activities necessitate the need for temporary but complete bike trail closures. Tourist and local vehicular traffic on Hwy 89 is expected to experience nominal delays around work zones, especially near the turnout parking

areas where construction vehicles will park and stage to have better access to the project area. The following traffic control measures will be incorporated into the contract documents to aid the contractor in developing its traffic control plan:

- Place barriers around bypass pumping equipment and CIPP staging areas
- Place “No Parking” signs on both sides of streets. Locations will be identified at the 75% design stage.
- Maintain emergency access
- Establish temporary detours and cross walks along the bike trail, as required, over the bypass piping
- Assign flaggers to direct traffic around closed bike lanes and possibly along Hwy 89 when construction vehicles are parking or unloading equipment.
- Have contract documents consider Hwy 89 bus and school traffic, along with traffic associated with holidays and regional events.
- Confirm contract documents mandate a post-Labor-Day start to minimize the peak traffic season in and around the trails and project area.

Temporary Sewer Bypass System: Once the erosion and traffic controls are in place, the contractor will install a temporary sewer bypass system that includes pumps, valves and temporary pipelines to maintain wastewater flows around the project area 24 hours a day during rehabilitation. Pumps would be operated using generators.

Temporary Staging and Access: Temporary staging will occur primarily along the TCPUD-operated bike trail and the immediately adjacent lands, as well as on adjacent private land. There is a parking area along Hwy 89 near MH-33 that will likely be used for staging construction trucks. The contractor may clear and grub several small access paths adjacent to the MHs (32-36) to perform the bypass pumping, bypass piping installation, and pipeline rehabilitation.

Pipeline Rehabilitation: The project will utilize CIPP, which is a trenchless rehabilitation method, to rehabilitate the existing pipeline segment. The project is expected to utilize either ultraviolet (UV)-cured CIPP or water-cured CIPP.

UV-cured CIPP utilizes a liner composed of an epoxy composite layer with resin (polyester or vinyl ester) and reinforced with glass materials, and a polypropylene layer on the pipe’s inside surface. The host pipe is dewatered, cleaned, and inspected using CCTV. UV-curing can be performed by pulling the UV liner through the pipes from existing manholes, then installing UV cure equipment in the existing manholes. The liner tube is then pulled into the host pipe and inflated with air. After installation, the resin is cured by UV light, by pulling a light train through the pipeline. Following completion, the rehabilitated pipeline is once again inspected using CCTV, and bypass flows are re-introduced. A staging area that can accommodate the lining equipment (CCTV truck, UV-cure truck, winch) is expected to be approximately 50 ft by 15 ft, but the dimensions can vary based on the configuration of the insertion manhole and available space.

Water-cured CIPP utilizes a liner comprised of an epoxy and polyester fiber composite layer. A polypropylene layer on the inside surface acts as a barrier between the resin and the water used to cure the liner. The liner tube is either inverted into the host pipe using water or pulled into the pipeline using a winch. After installation, the resin is cured by circulated heated water. For this project, the curing can be performed through existing manholes. A temporary staging area approximately 25 ft by 25 ft around one manhole is required for an inversion tower, and an

approximately 10 ft by 50 ft area will also be necessary to temporarily accommodate the liner storage truck and boiler trucks.

Construction demobilization and stabilization: After the pipeline and manhole rehabilitation is complete, the contractor will install permanent BMPs to stabilize the disturbed soils. BMPs may include hydroseeding of native seed mixes, container planting, temporary irrigation, weeding of invasives, or other revegetation activities, and the installation of biodegradable soil binders. Potential effects on these resources are expected to be short-term and less than significant. Based on the limited construction-related temporary impacts anticipated to the ‘uplands’ and riparian habitats within floodplain of the Truckee River, the project is not expected to trigger the need for federal permits (e.g., USACE Section 404) and is only expected to require a limited number of environmental regulatory permits from state agencies.

Project Impacts

The impacts from the project are anticipated to be minimal, as the project will have a limited, straight-forward scope of work with a limited disturbance area, no permanent impacts, and a construction duration of approximately 6 weeks. The proposed CIPP curing methods are considered standard, and would utilize BMPs to minimize noise and odors typically generated during the curing process itself, which has a duration of approximately 3 weeks or less. Avoidance and minimization measures (AMMs) such as avoiding construction during nesting bird season, avoiding construction during the winter/‘wet’ season, conducting pre-construction surveys for sensitive species, and flagging or staking sensitive habitats for avoidance, will be utilized. T-TSA will seek permits from the California Department of Fish and Wildlife (CDFW) and the Lahontan Regional Water Quality Control Board (RWQCB) for work within the Truckee River floodplain and its riparian habitats, and potentially a permit from the U.S Forest Service (USFS). With the complete avoidance of direct impacts to or work within the waters of the Truckee River, no permit from the U.S. Army Corps of Engineers is expected to be required.

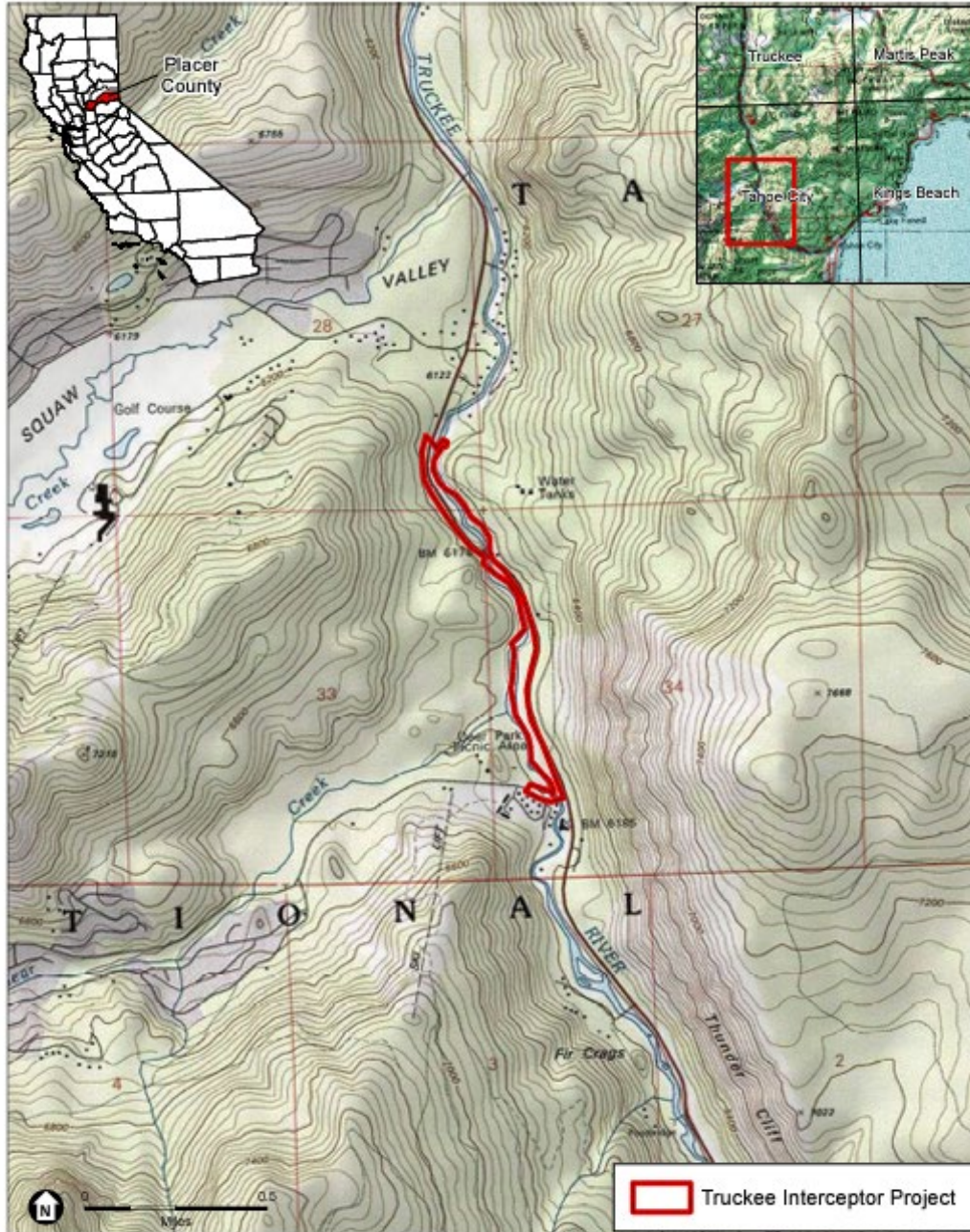
Environmental Science Associates (ESA) conducted a biological resources survey for the project on June 5, 2024, as well as conducting database searches for known sensitive species in the project vicinity. In summary, nesting birds, special-status fish, special-status reptiles and amphibians, and potentially jurisdictional waters and wetlands could be present in the vicinity of the Project site, and therefore there is potential for direct or indirect impacts from construction activities on these biological resources. However, the project’s proposed BMPs and AMMs will avoid, and where complete avoidance is not feasible, will minimize, any potential temporary project-related disturbances to these sensitive biological resources. With design strategies to completely avoid impacts to the Truckee River and limit project impacts to temporary construction-related impacts only, and with the implementation of BMPs and AMMs designed to protect these resources, potential effects on these resources are expected to be less than significant. Furthermore, no incidental take permits for impacts to state- or federal- listed species or designated critical habitats are expected to be required.

ESA also conducted a cultural resources survey for the project in June 2024. The results of a records search were obtained from the North Central Information Center of the California Historical Resources Information System on June 3, 2024 (File No. PLA-24-61). ESA also contacted the Native American Heritage Commission (NAHC) on June 3, 2024, to request a search of the NAHC’s Sacred Lands File (SLF) and a list of Native American representatives who may have interest in the Project. The NAHC replied on June 11, 2024, indicating that the

SLF has no record of any cultural resources in the Project vicinity, and included a list of Native American representatives who may be interested in the Project. T-TSA will contact the representatives on that list with a description of the project and an opportunity to communicate any concerns and/or participate in the identification of sensitive resources.

ESA archaeologists also completed a pedestrian surface survey of the project area on June 10, 2024. Based on the results of the records search, background research, and surface survey, no cultural resources would be impacted by the project and there is a low potential to uncover buried cultural materials during project implementation. This conclusion is in part based upon the project's proposed trenchless pipeline rehabilitation methods (which require very minimal ground/below ground disturbance) and the ability to limit the extent and location of above-ground temporary staging and bypass piping disturbance. Despite the negative findings and low potential, the discovery of buried archaeological resources during ground disturbance cannot be entirely discounted. As such, the contractor will be required to halt work and allow a qualified archaeologist to inspect any pre-contact or historic-era archaeological resources encountered during construction, within 24 hours of discovery.

Figure 1 TRI Overview Map



SOURCE: USGS

Truckee River Interceptor Project . D2023000789

Figure 2 Proposed Project Area / Sewer Alignment / MH Locations

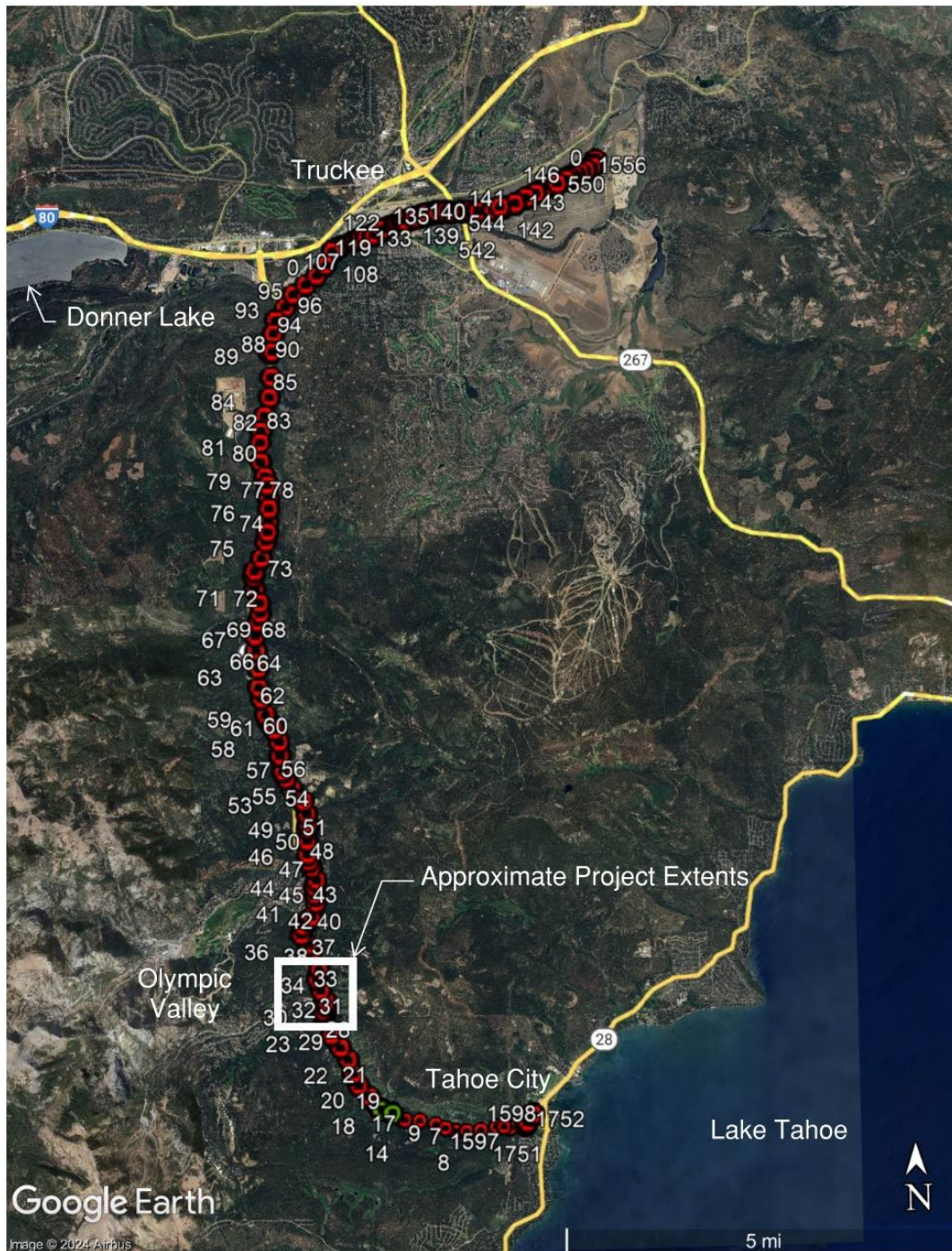
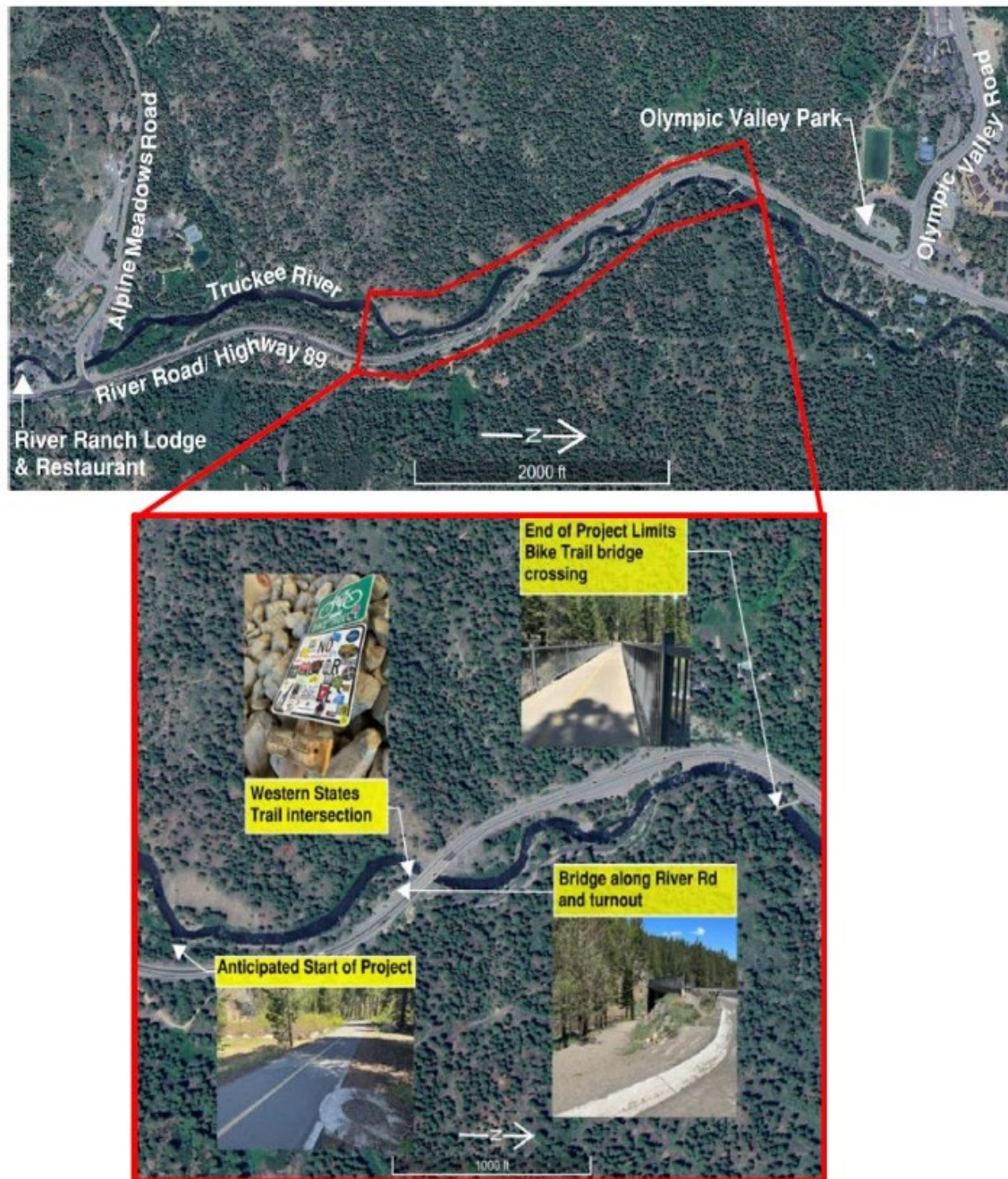


Figure 3 Project Site / Location Details



Attachment B

Truckee River Interceptor Pipeline Rehabilitation Project – Biological Resources Memorandum



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memorandum

date November 21, 2024

to Uday Sant, Brown and Caldwell; Aaron Carlsson, Jason Hays, and Scott Fleming, Tahoe Truckee Sanitation Agency

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subject Truckee River Interceptor Rehabilitation Project – Biological Resources Memorandum

Biological Resources

Introduction

This memorandum summarizes Environmental Science Associate's (ESA) biological resources evaluation for the Tahoe Truckee Sanitation Agency's (T-TSA) proposed Truckee River Interceptor Rehabilitation Project (Project), located west of Lake Tahoe along Highway 89 and the Truckee River, in Placer County, California (**Figure 1**). In summary, nesting birds, special-status¹ fish, special-status reptiles and amphibians, and potentially jurisdictional waters and wetlands could be present in the vicinity of the Project site. There is potential for direct or indirect impacts from construction activities on these special-status species and other protected biological resources. The Project's proposed Best Management Practices (BMPs) and Avoidance and Minimization Measures (AMMs) will avoid, and where complete avoidance is not feasible, will minimize, any potential Project-related disturbances to nesting birds, special-status fish, special-status amphibians and reptiles, and other sensitive biological resources. With design strategies to completely avoid impacts to the Truckee River and limit project impacts to temporary construction-related impacts only, and with the implementation of BMPs and AMMs designed to protect these resources, potential effects on these resources are expected to be less than significant.

Project Background

The proposed project would repair a small section of the 19.5 mile-long sewer pipeline located under and adjacent to the Truckee River, River Road/California Highway 89, and the Truckee River Bike Trail, which is a multi-use (pedestrian, bike, etc.) trail (**Figure 2**). The sewer pipeline is showing signs of deterioration and potential failure, which would have significant consequences on the ecologically sensitive Truckee River and the riverbanks and to the adjacent communities of Tahoe City, Alpine Meadows, Olympic Valley, and Truckee. To address this critical aging pipeline and protect the pristine Truckee River and adjoining habitats and communities, T-TSA is planning to proactively rehabilitate the pipeline in 2025, with a targeted construction window of post

¹ Formally federally and/or State listed; California Species of Special Concern, Fully Protected, and Rare; California Rare Plant Rank 1 and 2 species; and other species relevant for consideration under the California Environmental Quality Act (CEQA).

Labor Day through October 15th. The Project team is evaluating rehabilitation methods, project design, and timing of implementation for minimal disruption to the ecology and communities of the impacted area.

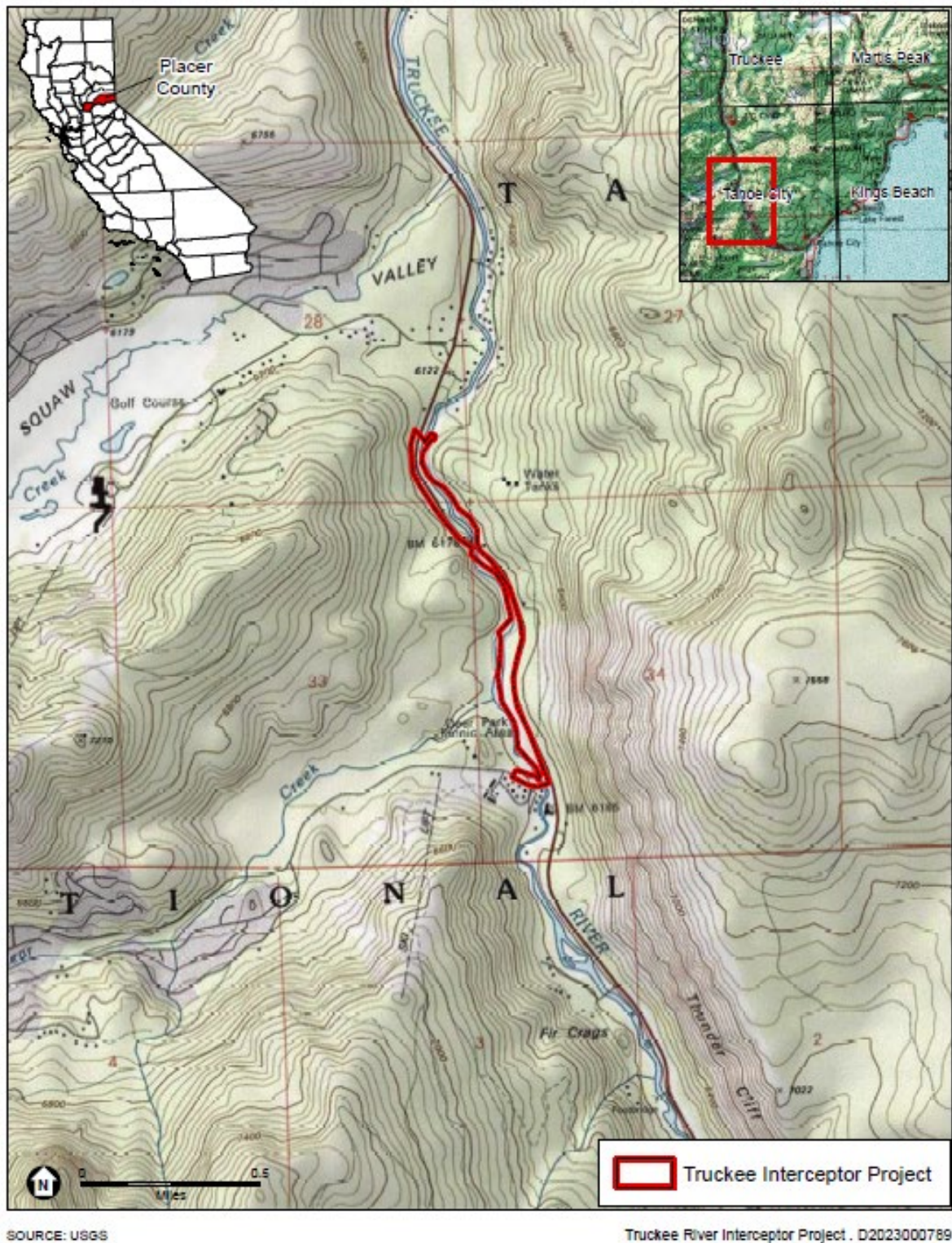


Figure 1
Project Location



Figure 2
Project Overview and Limits

Methodology

To determine the potential for special-status species to occur at the Project site, ESA queried the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) (CDFW, 2024) (**Appendix A**), California Native Plant Society (CNPS) Rare Plant Inventory (CNPS, 2024) (**Appendix B**), and U.S Fish and Wildlife Service (USFWS) Information for Planning and Consulting (IPaC) resource list (USFWS, 2024) (**Appendix C**). ESA queried CNDDDB and CNPS records for the *Tahoe City* USGS 7.5-minute quadrangles and queried the USFWS IPaC using a hand-drawn polygon encompassing the Project site. ESA reviewed local data from the eBird database adjacent to the proposed Project site (eBird, 2024). ESA also reviewed USFWS-designated critical habitat for threatened and endangered species in the proposed Project vicinity (USFWS, 2024). ESA reviewed current and historical Google Earth aerial imagery of the Project site (Google Earth, 2024) to assess the presence of suitable habitat for special-status species as well as for potentially jurisdictional waters and wetlands. Lastly, a pedestrian biological resources site survey of the Project site was performed on June 5, 2024 by two ESA biologists: Natalie Lamas and Joseph Huang. They assessed the site for special status species habitat suitability and surveyed for special status species individuals and potentially jurisdictional waters and wetlands within the Project area (**Figure 3**).

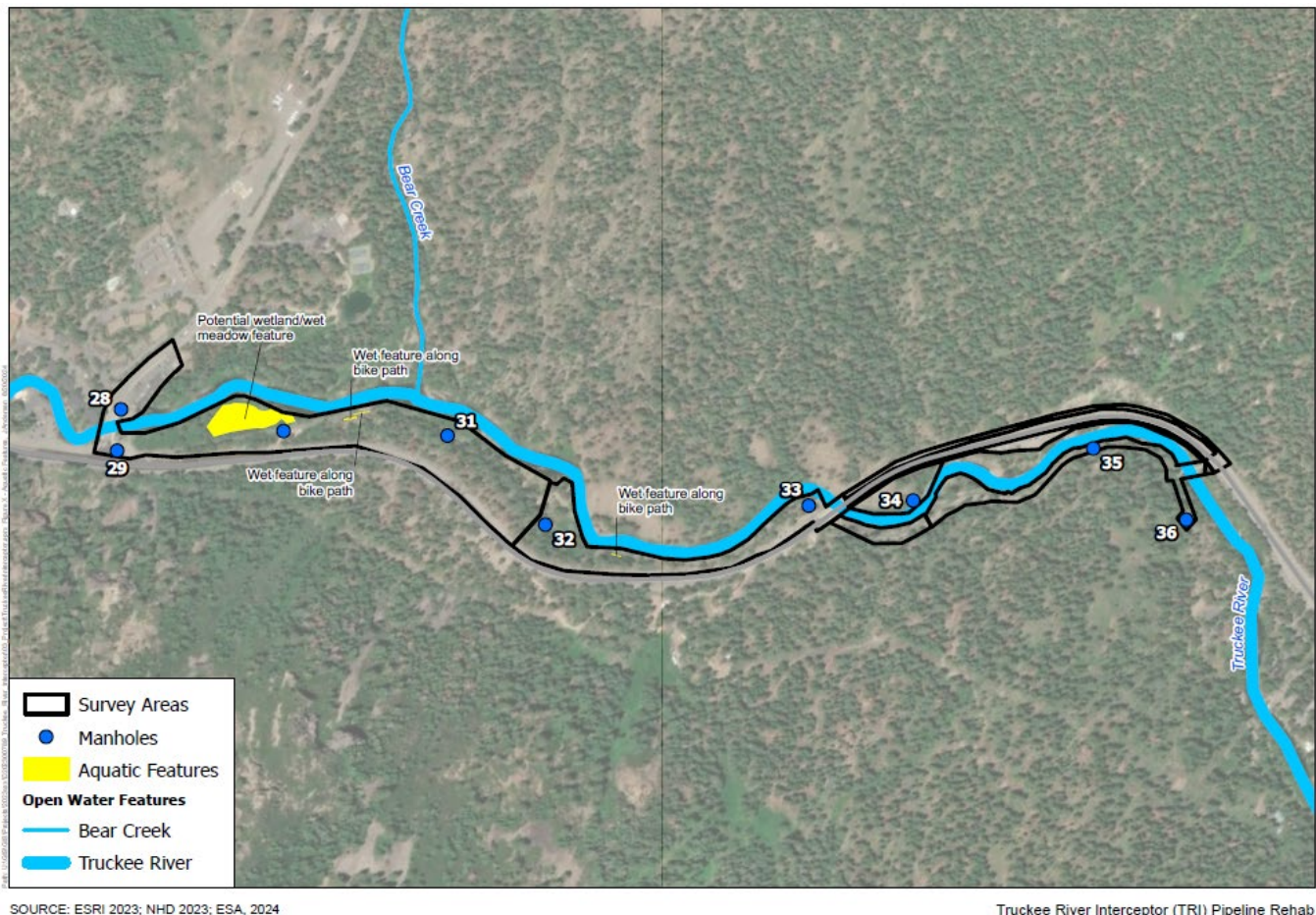


Figure 3
Aquatic Features

Results and Potential Project Impacts

This section addresses survey results and biological resources according to the current California Environmental Quality Act (CEQA) Environmental Checklist. The Project site is surrounded by development, coniferous forest, and riverine habitats. The developed area along the project site includes a paved multi-use trail for pedestrians and bicyclists. Nearby infrastructure includes the Highway 89 corridor with concrete highway high walls and margins, one Highway 89 overpass bridge, and one multi-use trail overpass bridge. Adjacent to the multi-use trail, highway, and river are patches of mixed coniferous forest habitat (**Photograph 1**). Dominant species in the mixed conifer forest are comprised of Jeffrey pine (*Pinus jeffreyi*), sugar pine (*Pinus lambertiana*), and lodgepole pine (*Pinus contorta*) in the upper canopy, deciduous cottonwood and aspen (*Populus* sp.) in the secondary canopy, and shrubs such as antelope bitterbrush (*Purshia tridentata*), wax currant (*Ribes cereum*), and greenleaf manzanita (*Arctostaphylos patula*) in the understory.



Photograph 1. Mixed coniferous forest along the multi-use path.

During the evaluation of species databases for the Project, multiple special status plant species were considered. However, no special status plant species were observed during a site visit and are unlikely to occur in the Project area. Trees in the surrounding area provide suitable nesting habitat for some bird species. However, the lack of connectivity to larger habitats necessary for foraging reduces the area's suitability for terrestrial mammals. No

mammals, including bats, mammal burrows or dens were observed during the biological resources site survey. The Project does not propose the removal of any trees or existing buildings or other infrastructure that could provide suitable habitat for birds or bats. Given the developed surroundings, constant road and trail traffic, and daily human presence, the habitat within and adjacent to the Project site does not provide suitable habitat for special-status plants, mammals, amphibians, or reptiles. Thus, there is no potential for construction of the proposed Project to directly impact these species. Furthermore, there is no USFWS-designated critical habitat present on the Project site. Several ponded features were observed and mapped during the biological resources site survey (**Photographs 2 and 3**). No formal aquatic delineation has been performed, as potential impacts to these ponded areas are expected to be completely avoided during project activities. No other sensitive natural communities were observed during the biological resources site survey or background database review; therefore, impacts to these resources are not expected to occur during proposed Project activities.



Photograph 2. Potentially jurisdictional wetland feature near the multi-use path.



Photograph 3. Wet ponded area adjacent to the multi-use path.

Although the Project does not require in-water work, it does involve minimal ground disturbance along the developed multi-use trail adjacent to the Truckee River. Such disturbance along the trail could result in possible indirect impacts on special-status fish, water quality, western pond turtle, nesting birds, and roosting bats, if measures to prevent these indirect impacts are not implemented. The Project area and multi-use trail run parallel to the Truckee River, which receives hydrological flow from Lake Tahoe. The Truckee River is classified as a water of both the United States and State of California, and as such, is regulated by the U.S. Army Corps of Engineers, the Regional Water Quality Control Board, and the California Department of Fish and Wildlife. However, the Project does not propose any discharges of dredged or fill material, any in-water work, or any ground disturbance within the Truckee River or along its banks, so potential impacts on federally- and/or state-protected waters or potentially jurisdictional wetlands are not anticipated.

No wildlife movement corridors have been identified within the Project site. While wildlife may occasionally pass through parts of the Project site, their presence is expected to be temporary due to the developed surroundings and high vehicular and human activity. As a result, the project is not expected to interfere with the

movement of native, resident or migratory fish or wildlife species or impede the use of native wildlife nursery sites.

Several small potentially jurisdictional aquatic features were observed within the Project area (Figure 3). It is anticipated that these areas can be completely avoided during construction activities; therefore, no impacts to these resources are anticipated during Project activities.

No adopted habitat conservation plans (HCP), natural community conservation plans (NCCP), or other approved local, regional, or State conservation plans are known to occur within or encompassing the Project site. Therefore, Project construction would not conflict with such plans.

Special Status Plants

As mentioned in the summary results above, multiple special status plant species were considered during the evaluation of species databases for the Project. However, no special status plant species were observed during a site visit and are unlikely to occur in the Project area. Implementation of the following BMPs and AMMs built into the Project would avoid direct impacts to sensitive plants:

Pre-Construction Survey for Special Status Plants: To avoid and minimize disturbance to special status plants, the project will implement the following measures:

- A qualified botanist will conduct a pre-construction survey for special status plants within 30 days prior to construction initiation.
- Any special status plants observed will be documented and a no-work buffer zone will be established around them with high-visibility fencing or staking for avoidance.

Active Bird Nests

Various habitats around the project site, including trees, shrubs, vegetated areas of river shoreline, and anthropogenic structures (such as telephone poles) can provide suitable nesting habitat for a variety of common bird species, such as barn swallow (*Hirundo rustica*), dark-eyed junco (*Junco hyemalis*), California towhee (*Melospiza crissalis*), American bushtit (*Psaltirparus minimus*), killdeer (*Charadrius vociferus*), house finch (*Haemorrhous mexicanus*), Anna's hummingbird (*Calypste anna*), black-crowned night heron (*Nycticorax nycticorax*), and American crow (*Corvus brachyrhynchos*). No active nesting birds were observed during the biological resource survey, however, the presence of suitable habitat means these and other bird species could potentially nest within or near the Project site. These and other bird species that could nest in suitable trees or substrate on and around the Project are protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code sections 3503, 3503.5, and 3513².

Construction activities conducted during the nesting bird season (typically February 1 through September 15) could potentially impact an active nest, if present. The risk increases when vegetation, infrastructure, or other

² Under these California Fish and Game Code sections, a project is not allowed to conduct activities that would result in the taking, possessing, or destroying of any birds of prey; the taking or possessing of any migratory non-game bird; the taking, possession, or needless destruction of the nest or eggs of any raptors or non-game birds; or the taking of any non-game bird under California Fish and Game Code section 3800. California Fish and Game Code section 3513 adopts the U.S. Department of the Interior's take provisions under the Migratory Bird Treaty Act. As described above, in 2017, the U.S. Department of the Interior redefined incidental take under the Migratory Bird Treaty Act; however, CDFW subsequently issued an advisory that affirms that California law continues to prohibit incidental take of migratory birds.

nesting habitats are removed as part of the construction process. Any direct impacts would be limited to the Project construction period, as the project does not propose permanent alterations to terrestrial habitats. It is expected any open manholes will be resealed and the multi-use trail will be restored to its original state upon completion of construction. Indirect impacts from project construction activities, such as increased noise and vibration could disrupt actively nesting birds. These project-related disturbances have the potential to interrupt incubation or brooding, potentially leading to nest failure, or even cause breeding birds to abandon their nests.

To avoid indirect impacts, BMPs and AMMs related to sensitive species and habitat protection will be implemented. These measures include Worker Environmental Awareness Training and Nesting Bird Avoidance (see below), which are designed to avoid and prevent Project-related disturbance to nesting birds.

Implementation of the following BMPs and AMMs built into the Project would avoid direct impacts to nesting birds.

Worker Environmental Awareness Training: Prior to any construction, a qualified biologist will prepare worker environmental awareness training materials. The training materials will be distributed to the construction contractor to ensure a copy is available to all construction workers on-site.

Implementation of the training will include the following:

- Before any work occurs, the contractor's field staff will attend a mandatory environmental education training for construction personnel. A qualified biologist will provide the worker environmental awareness training to site management and construction personnel. Minimum qualifications for a qualified biologist will be a four-year college degree in biology or related field and demonstrated experience with the species of concern.
- The training will cover all of the sensitive biological resources that are known to occur in the area of the Project site [e.g., species protected by the Migratory Bird Act, Sierra Nevada yellow legged frog (*Rana sierrae*), Lahontan mountain sucker (*Catostomus lahontan*), Lahontan cutthroat trout (*Oncorhynchus clarkia henshawi*), northwestern pond turtle (*Actinemys marmorata*) and sensitive habitats to be avoided such as wet meadows]. The training will include a description, representative photographs, and the legal status of each species; terms and conditions of any permits to be obtained for the project; and the penalties for not complying with biological conservation measures. The training will include the following requirements: 1) If a listed wildlife species is discovered, construction activities will not begin in the immediate vicinity of the individual until the appropriate wildlife agencies are contacted and the individual has been allowed to leave the construction area; and 2) Any special-status species observed during surveys will be reported to CDFW so the observations can be added to the CNDDB.
- The program will cover restrictions and guidelines that must be followed by all construction personnel to avoid or reduce effects on sensitive biological resources during Project implementation. All contractor's or subcontractor's construction workers will be required to receive training, and when new workers are added to the crew, they will receive the training before being allowed to work on-site. A record of those contractor individuals who have received the training will be maintained for the Project.

Nesting Bird Avoidance: To avoid and minimize the disturbance to nesting birds during construction, the project will implement the following measures:

- If construction must occur during the bird nesting season (typically February 1–September 15), a biologist will conduct pre-construction nesting bird survey(s) within 14 days prior to the start of vegetation removal, demolition or construction activities.

- If active bird nests are found, the biologist will establish no-construction buffer zones around active bird nests to avoid or minimize impacts to the active nest. The no-disturbance zone will be marked with flagging or fencing that is easily identified by the construction crew and will not affect the nesting birds. The minimum buffer zone widths will be as follows: 20–25 feet (radius) for non-raptor ground-nesting species; 50 feet (radius) for non-raptor shrub- and tree-nesting species; and 500 feet (radius) for raptor species. Buffers will remain in place as long as the nest is active or young remain in the area and are dependent on the nest.
- In coordination with the wildlife agencies (CDFW and/or USFWS), the agency-approved biologist may decrease the no-disturbance buffer zone while monitoring the active nest until the biologist confirms that Project activities do not cause changes in nesting bird behavior that could result in nest failure.
- If any bird species initiate nests within the established buffer distances while construction is happening, then it is assumed that they are habituated to the construction activities, and construction can continue as long as the birds or their nests are not physically harmed.

Special-Status Fish

Historically, the Truckee River watershed has supported special status fish species such as the Lahontan cutthroat trout (*Oncorhynchus clarkii henshawi*) and Lahontan mountain sucker (*Catostomus lahontan*). The Truckee River provides suitable habitat for these special-status fish species due to its adequate freshwater flow, good water quality, suitable water temperatures, and presence of riparian habitats within the watershed. Since all construction activities are expected to occur on land, and none are proposed within the Truckee River, it is anticipated that both common and special status fish species will not be impacted during construction activities. However, to further minimize and avoid the potential for indirect effects to fish and water quality, the BMPs referred to in the discussion of water quality below are recommended to be included in the proposed project description and implemented during construction.

Special Status Amphibians and Reptiles

The northwestern pond turtle (*Actinemys marmorata*), a species of special concern, primarily inhabits aquatic environments but also requires terrestrial habitat for nesting. Nesting typically occurs from late May to the mid-July. This native freshwater turtle can be found in a variety of aquatic habitats including rivers, ponds, and irrigation ditches, where they can often be found basking on tree stumps, rock piles, and floating vegetation. Although no northwestern pond turtles were observed during the biological resource site survey, they are known to occur in the Tahoe-Truckee area and have the potential to occur near the Project area.

The Sierra Nevada yellow-legged frog (*Rana sierrae*), listed as threatened under the California Endangered Species Act, is known to occur in the western range of the Sierra Nevada favoring rocky rivers and streams. The surrounding Project area provides suitable habitat for the species. However, no frogs or tadpoles were observed in the accessible areas along the river during the biological resource site survey. Since there are no planned project activities that directly alter or impact the Truckee River, it is anticipated that potential impacts on these species can be effectively avoided.

Implementation of the below BMPs and AMMs built into the Project would avoid potential direct impacts to special status amphibians and reptiles:

Pre-Construction Survey for Northwestern Pond Turtle: To avoid and minimize impacts to northwestern pond turtle, the project will implement the following measures:

- A qualified biologist will conduct a pre-construction survey for northwestern pond turtles within 48 hours prior to the start of construction activities near the Truckee River.
- If any individuals are found during the survey, they will be relocated to a location along the Truckee River away from the construction sites.
- The resource agencies will be notified within 24 hours regarding the encounter with the northwestern pond turtle individuals. The northwestern pond turtles' locations will be recorded and submitted to the CNDDDB within 60 days.

Worker Environmental Awareness Training: implement as outlined in *Active Bird Nests* above.

Mammal Species of Special Concern

The upper montane coniferous environment of the Tahoe National Forest is known to support the Sierra Nevada mountain beaver (*Aplodontia rufa californica*), a species of special concern, and the American beaver (*Castor canadensis*). Both species exhibit a preference for deciduous trees to fell to construct dams. The Sierra Nevada mountain beaver prefers dense understories for food and soft soils for burrowing, which the Project area had neither. While signs of beaver activity were observed along the trail, differentiating whether these were attributable to the American beaver or the Sierra Nevada mountain beaver remains uncertain. Furthermore, assessing the timeline of tree felling presents a challenge as to when this species utilized the area as habitat. Given that the American beaver is a more common, it is likely the observed signs of beaver activity were from the American beaver. However, because no individuals, dens or lodges were observed, it is unlikely any beavers are consistently occurring in or near the Project area. Given the unlikelihood of the Sierra Nevada mountain beaver's presence around the Project area, it is anticipated that there will be no impact on this species of concern.

Based on database searches, roosting bats are not expected to be within the Project area. While bats are most active at dusk, no evidence of bat roosting or foraging was observed during the biological site survey, which was conducted during daylight hours. The project does not propose the removal of trees or existing buildings that might serve as potential habitat; thus, no direct impacts to roosting bats are anticipated.

Implementation of the below BMPs and AMMs built into the Project would avoid potential direct impacts to special status bats:**Pre-Construction Survey for Special Status Bats:** To avoid and minimize disturbance to roosting special status bats, the project will implement the following measures:

- A qualified biologist will conduct a pre-construction survey for roosting bats. All trees and/or structures in the immediate vicinity of the Project area will be surveyed for bat roosts.
- If any roosting bats are observed, the biologist will establish a no-construction buffer zone around the bat roost. The no-disturbance zone will be marked with flagging or fencing that is easily identified by the construction crew and will not affect the roosting bats. The minimum buffer zone width will be 100 feet (radius). Buffers will remain in place as long as the bat roost is occupied.

Water Quality

There are no planned construction activities that would temporarily or permanently degrade water quality within the Project area. Any work performed along the multi-use trail near the river that could generate construction debris or turbidity-laden construction water that could potentially come in contact with the waters of the Truckee River will be contained within the Project area.

To ensure potential indirect water quality impacts remain less than significant, the following BMPs should be implemented during construction.

Define avoidance areas: Visually marking (i.e. staking, flagging, fencing) the Truckee River banks and any potentially jurisdictional wetlands that are located within 25 feet of construction activities, to prevent accidental disturbance.

Containment Controls: Installation and application of epoxy, resin, or cementitious grout/fill, if employed, shall be conducted when predicted weather conditions allow effective control, full containment, and will remain dry until cured, in order to prevent any leaching of uncured treatment materials into river waters. Work will cease during inclement weather (heavy rain). The construction contractor shall be responsible for checking daily weather reports.

Any containment storage areas will consist of a row of hay or straw bales, filter fabric, or similar material placed around the perimeter of the staging area.

Containment Basin: Containment basins shall be constructed of durable plastic sheeting with continuous sidewalls supported by haybales, ecology blocks, other non-contaminated materials, or support structure to contain all sediment.

Erosion Controls: Erosion control materials, such as silt fences, straw bales, or erosion control blankets, shall be installed immediately upslope of the waters or wetlands before the start of any ground-disturbing activities or before the use of chemicals or liquids in their immediate vicinity. Any installed erosion control measures will be regularly inspected to ensure they are functioning effectively. No erosion control materials with plastic monofilament netting may be used on this project.

Clear Weather Forecast: The construction contractor shall be responsible for checking daily weather reports. Work will cease during inclement weather (heavy rain or snow) that could increase the risk of erosion or runoff into nearby waters or wetlands.

Conclusions

Based on the results of database searches and a biological resources site survey presented in this document, the proposed Project area has the potential to support a number of species-status plants, birds, mammals, fish, reptiles and their suitable habitats (**Table 1**). However, the project is only expected to have a short term, if any, and less than significant impact on these resources. Furthermore, with the implementation of BMPs and AMMs also presented in this document, any potential impacts to these biological resources would effectively be avoided or minimized. Thus, the Project qualifies for a categorical exemption under CEQA, as the potential effects on special-status species and other sensitive biological resources are anticipated to be less than significant.

Table 1
Sensitive Species and Habitats Evaluated for the Project

Common Name	Scientific Name	Status (Federal/State)	Primary Habitat and Critical Seasonal Periods	Biological Resources Site Survey Findings
Wildlife				
Sierra Nevada yellow-legged frog	<i>Rana sierrae</i>	FE/ST	High elevation lakes, ponds, slow moving streams in the Sierra Nevada mountains. Highly aquatic but also rely on nearby terrestrial habitats near water bodies.	Project location does not overlap with critical habitat, but surrounding Project area provides suitable habitat for the species. No frogs were observed during the survey. No in-water work proposed by project.
Northwestern pond turtle	<i>Actinemys marmorata</i>	Proposed FT/CSC	Highly aquatic, occupies lakes, rivers, streams, creeks, ponds, marshes, ditches/canals. Basks on logs, bank slopes, or other structures for thermoregulation.	Known to occur along the Truckee River. No turtles were observed during the survey.
Lahontan cutthroat trout	<i>Oncorhynchus clarkia henshawi</i>	FT/—	Cold, clear lakes or rivers.	Truckee River provides suitable habitat. No in-water work proposed by project.
Sierra Nevada red fox – Sierra Nevada DPS	<i>Vulpes vulpes necator pop.2</i>	FE/ST	High elevation, mountainous areas with dense forest, alpine meadows, and rocky slopes.	No critical habitat has been designated for this species. Project is adjacent to suitable habitat.
Sierra Nevada mountain beaver	<i>Aplodontia rufa californica</i>	--/CSC	Dense growth of small deciduous trees and shrubs, wet soil, and abundance of forbs in the Sierra Nevada and east slope. Needs dense understory for food. Burrows in soft soils.	Habitat in Project area consists of mixed coniferous trees with an open understory, and is suitable for beaver. Soils are not soft for burrows.
Wolverine	<i>Gulo gulo</i>	FT/ST	Remote, rugged wilderness areas, primarily in northern boreal forests, subalpine, and alpine regions.	Project area lacks large habitats and connectivity of habitats required by this species.
Plants				
Tahoe yellow cress	<i>Rorippa subumbellata</i>	—/SE	Endemic to Lake Tahoe. Prefers sandy, well-drained soils found along nearshore areas.	Project location does not overlap with critical habitat.
Lassics Lupine	<i>Lupinus constancei</i>	—/SE	Serpentine soils. Often found in rocky, open areas, steep slopes and ridges at high elevations.	Project location does not overlap with critical habitat.

Federal Status:

FE: Endangered

FT: Threatened

State Status:

SE: Endangered

ST: Threatened

CSC: CA species of special concern

While some wetted/ponded areas, which may be considered state or federal jurisdictional wetlands, were observed within the Project area, these aquatic features have been mapped and the project will be designed to fully avoid any impacts, direct or indirect, to these features. No other sensitive natural communities were observed during the biological resources site survey or background data review; therefore, impacts to sensitive natural communities are not expected to occur during Project construction (i.e., no impact).

No wildlife movement corridors or wildlife nursery sites (other than potential bird nests discussed under *Active Bird Nests*) are known to occur within the Project site. However, the project will start sometime in mid-September after the end of the nesting bird season on September 15. Therefore, the Project is not expected to substantially interfere with the movement of native resident or migratory fish or wildlife species or impede the use of native wildlife nursery sites (i.e., no impact).

The removal of trees is not proposed by Project construction (i.e. no impact). Any tree trimming or vegetation removal necessary for access of equipment or temporary bypass pipeline installation would be minimal and monitored by a qualified biologist. Following implementation, all areas of temporary vegetation disturbance would be returned to pre-project conditions, through implementation of a Restoration Plan for temporary impacts from site grading. No impacts are anticipated to trees as a result of construction activities.

No adopted HCPs, NCCPs, or other approved local, regional, or State conservation plans are known to occur within or encompassing the Project site. Therefore, Project construction would not conflict with such plans (i.e., no impact).

Appendix A

California Department of Fish and Wildlife, California Natural Diversity Database (CNDDB) Search Results



Selected Elements by Element Code

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad IS (Meeks Bay (3912011)> OR Kings Beach (3912021)> OR Martis Peak (3912031)> OR Wentworth Springs (3912013)> OR Tahoe City (3912022)> OR Granite Chief (3912023)> OR Homewood (3912012)> OR Norden (3912033)> OR Truckee (3912032))

Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
AAAAA01085	<i>Ambystoma macrodactylum sigillatum</i> southern long-toed salamander	None	None	G5T4	S2	SSC
AAABH01170	<i>Lithobates pipiens</i> northern leopard frog	None	None	G5	S2	SSC
AAABH01340	<i>Rana sierrae</i> Sierra Nevada yellow-legged frog	Endangered	Threatened	G1	S2	WL
ABNKC01010	<i>Pandion haliaetus</i> osprey	None	None	G5	S4	WL
ABNKC10010	<i>Haliaeetus leucocephalus</i> bald eagle	Delisted	Endangered	G5	S3	FP
ABNKC12040	<i>Accipiter cooperii</i> Cooper's hawk	None	None	G5	S4	WL
ABNKC12061	<i>Accipiter atricapillus</i> American goshawk	None	None	G5	S3	SSC
ABNMK01014	<i>Antigone canadensis tabida</i> greater sandhill crane	None	Threatened	G5T5	S2	FP
ABNUA01010	<i>Cypseloides niger</i> black swift	None	None	G4	S3	SSC
ABNYF07090	<i>Picoides arcticus</i> black-backed woodpecker	None	None	G5	S2	
ABPAE33040	<i>Empidonax traillii</i> willow flycatcher	None	Endangered	G5	S3	
ABPBX03010	<i>Setophaga petechia</i> yellow warbler	None	None	G5	S3	SSC
AFCHA02081	<i>Oncorhynchus clarkii henshawi</i> Lahontan cutthroat trout	Threatened	None	G5T3	S2	SSC
AFCHA03060	<i>Prosopium williamsoni</i> mountain whitefish	None	None	G5	S3	SSC
AFCJB1303P	<i>Siphateles bicolor pectinifer</i> Lahontan Lake tui chub	None	None	G4T3	S1S2	SSC
AFCJC02330	<i>Catostomus lahontan</i> Lahontan mountain sucker	None	None	GNR	S2	SSC
AMACC01110	<i>Myotis volans</i> long-legged myotis	None	None	G4G5	S3	
AMAEA0102L	<i>Ochotona princeps schisticeps</i> gray-headed pika	None	None	G5T4	S2S4	
AMAEB03012	<i>Lepus americanus tahoensis</i> Sierra Nevada snowshoe hare	None	None	G5T3T4Q	S2	SSC



Selected Elements by Element Code
California Department of Fish and Wildlife
California Natural Diversity Database



Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
AMAE03041	<i>Lepus townsendii townsendii</i> western white-tailed jackrabbit	None	None	G5T5	S3?	SSC
AMAF01013	<i>Aplodontia rufa californica</i> Sierra Nevada mountain beaver	None	None	G5T3T4	S2S3	SSC
AMAFJ01010	<i>Erethizon dorsatum</i> North American porcupine	None	None	G5	S3	
AMAJA03017	<i>Vulpes vulpes necator pop. 2</i> Sierra Nevada red fox - Sierra Nevada DPS	Endangered	Threatened	G5TNR	S1	
AMAJF01014	<i>Martes caurina sierrae</i> Sierra marten	None	None	G4G5T3	S3	
AMAJF01020	<i>Pekania pennanti</i> Fisher	None	None	G5	S2S3	SSC
AMAJF03010	<i>Gulo gulo</i> wolverine	Threatened	Threatened	G4	S1	FP
CARC2320CA	<i>Great Basin Cutthroat Trout/Paiute Sculpin Stream</i> Great Basin Cutthroat Trout/Paiute Sculpin Stream	None	None	GNR	SNR	
CTT51200CA	<i>Fen</i> Fen	None	None	G2	S1.2	
ICMAL05970	<i>Stygobromus lacicolus</i> Lake Tahoe amphipod	None	None	G1	S1	
ICMAL05A40	<i>Stygobromus sheldoni</i> Sheldon's amphipod	None	None	G1	S1	
ICMAL05A70	<i>Stygobromus tahoensis</i> Lake Tahoe stygobromid	None	None	G1	S1	
IICOL58010	<i>Atractelmis wawona</i> Wawona riffle beetle	None	None	G3	S1S2	
IIHYM24252	<i>Bombus occidentalis</i> western bumble bee	None	Candidate Endangered	G3	S1	
IIHYM24460	<i>Bombus morrisoni</i> Morrison bumble bee	None	None	G3	S1S2	
IIPLE03200	<i>Capnia lacustra</i> Lake Tahoe benthic stonefly	None	None	G1	S1	
IITRI11010	<i>Cryptochia excella</i> Kings Canyon cryptochian caddisfly	None	None	G1G2	S2S3	
IITRI77010	<i>Desmona bethula</i> amphibious caddisfly	None	None	G2G3	S2S3	
IMBIV27020	<i>Margaritifera falcata</i> western pearlshell	None	None	G5	S1S2	
IMGASM6020	<i>Helisoma newberryi</i> Great Basin rams-horn	None	None	G1	S1S2	
NBHEP2A080	<i>Nardia hiroshii</i> Hiroshi's flapwort	None	None	G4G5	S1	2B.3



Selected Elements by Element Code
California Department of Fish and Wildlife
California Natural Diversity Database



Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
NBMUS13010	<i>Bruchia bolanderi</i> Bolander's bruchia	None	None	G3	S3	4.2
PDAP11B0Q0	<i>Lomatium grayi</i> Gray's lomatium	None	None	G5	S1S2	2B.3
PDAST0S1S2	<i>Artemisia tripartita ssp. tripartita</i> threetip sagebrush	None	None	G5T4T5	S2	2B.3
PDAST3M2K0	<i>Erigeron miser</i> starved daisy	None	None	G3?	S3?	1B.3
PDASTEB030	<i>Eurybia merita</i> subalpine aster	None	None	G5	S3	2B.3
PDBRA061R1	<i>Arabis rigidissima var. demota</i> Galena Creek rockcress	None	None	G3T3Q	S1	1B.2
PDBRA270M0	<i>Rorippa subumbellata</i> Tahoe yellow cress	None	Endangered	G1	S1	1B.1
PDFAB0F120	<i>Astragalus austiniiae</i> Austin's astragalus	None	None	G2G3	S2S3	1B.3
PDHYD0C4D0	<i>Phacelia stebbinsii</i> Stebbins' phacelia	None	None	G3	S3	1B.2
PDLAM1U0J0	<i>Scutellaria galericulata</i> marsh skullcap	None	None	G5	S2	2B.2
PDLNT020A0	<i>Utricularia intermedia</i> flat-leaved bladderwort	None	None	G5	S3	2B.2
PDMAL140F0	<i>Sphaeralcea munroana</i> Munro's desert mallow	None	None	G4	S1	2B.2
PDPGN086U9	<i>Eriogonum umbellatum var. torreyanum</i> Donner Pass buckwheat	None	None	G5T2	S2	1B.2
PDPOR030A0	<i>Claytonia megarhiza</i> fell-fields claytonia	None	None	G5	S2	2B.3
PDPOR040K0	<i>Lewisia longipetala</i> long-petaled lewisia	None	None	G2	S2	1B.3
PDRHA0C010	<i>Rhamnus alnifolia</i> alder buckthorn	None	None	G5	S3	2B.2
PDROS0X0K0	<i>Ivesia sericoleuca</i> Plumas ivesia	None	None	G2	S2	1B.2
PDVIO04280	<i>Viola tomentosa</i> felt-leaved violet	None	None	G3	S3	4.2
PMCYP033H0	<i>Carex davyi</i> Davy's sedge	None	None	G3	S3	1B.3
PMCYP03720	<i>Carex lasiocarpa</i> woolly-fruited sedge	None	None	G5	S2	2B.3
PMCYP037K0	<i>Carex limosa</i> mud sedge	None	None	G5	S3	2B.2



Selected Elements by Element Code
California Department of Fish and Wildlife
California Natural Diversity Database



Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
PMJUN013J0	<i>Juncus luciensis</i> Santa Lucia dwarf rush	None	None	G3	S3	1B.2
PMPOA2Y080	<i>Glyceria grandis</i> American manna grass	None	None	G5	S3	2B.3
PMPOT03080	<i>Potamogeton epihydrus</i> Nuttall's ribbon-leaved pondweed	None	None	G5	S2S3	2B.2
PMPOT03091	<i>Stuckenia filiformis ssp. alpina</i> northern slender pondweed	None	None	G5T5	S2S3	2B.2
PMPOT030Z0	<i>Potamogeton robbinsii</i> Robbins' pondweed	None	None	G5	S3	2B.3
PPOPH010K0	<i>Botrychium montanum</i> western goblin	None	None	G3G4	S2	2B.1
PPOPH010L0	<i>Botrychium crenulatum</i> scalloped moonwort	None	None	G4	S3	2B.2
PPOPH010R0	<i>Botrychium minganense</i> Mingan moonwort	None	None	G5	S4	4.2
PPOPH010S0	<i>Botrychium ascendens</i> upswept moonwort	None	None	G4	S2	2B.3

Record Count: 70

Appendix B

California Native Plant Society, Rare Plant Inventory Database Search Results



[CNPS Rare Plant Inventory](#).

Search Results

18 matches found. Click on scientific name for details

Search Criteria: [Quad](#) is one of [3912022]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Agrostis humilis	mountain bent grass	Poaceae	perennial herb	Jul-Sep	None	None	G4Q	S2	2B.3		1980- 01-01	 © 2004 Steve Matson
Arabis rigidissima var. demota	Galena Creek rockcress	Brassicaceae	perennial herb	Jul-Aug	None	None	G3T3Q	S1	1B.2		1994- 01-01	No Photo Available
Artemisia tripartita ssp. tripartita	threetip sagebrush	Asteraceae	perennial shrub	Aug	None	None	G5T4T5	S2	2B.3		2012- 08-20	No Photo Available
Astragalus whitneyi var. lenophyllus	woolly- leaved milk- vetch	Fabaceae	perennial herb	Jul-Aug	None	None	G5T4	S4	4.3		2001- 01-01	No Photo Available
Botrychium ascendens	upswept moonwort	Ophioglossaceae	perennial rhizomatous herb	(Jun)Jul- Aug	None	None	G4	S2	2B.3		1994- 01-01	 © 2005 Steve Matson
Botrychium crenulatum	scalloped moonwort	Ophioglossaceae	perennial rhizomatous herb	Jun-Sep	None	None	G4	S3	2B.2		1984- 01-01	 © 2016 Steve Matson
Botrychium minganense	Mingan moonwort	Ophioglossaceae	perennial rhizomatous herb	Jul- Sep(Oct)	None	None	G5	S4	4.2		1994- 01-01	 © 2011 Aaron E. Sims

<u><i>Carex davyi</i></u>	Davy's sedge	Cyperaceae	perennial herb	May-Aug	None	None	G3	S3	1B.3		1974-01-01	No Photo Available
<u><i>Engellaria obtusa</i></u>	obtuse starwort	Caryophyllaceae	perennial rhizomatous herb	May-Sep(Oct)	None	None	G5	S4	4.3		1988-01-01	 ©2014 Kirsten Bovee
<u><i>Eriogonum umbellatum</i> var. <i>torreyanum</i></u>	Donner Pass buckwheat	Polygonaceae	perennial herb	Jul-Sep	None	None	G5T2	S2	1B.2	Yes	1974-01-01	No Photo Available
<u><i>Eurybia merita</i></u>	subalpine aster	Asteraceae	perennial herb		None	None	G5	S3	2B.3		2006-09-14	 ©2014 Richard Spellenberg
<u><i>Glyceria grandis</i></u>	American manna grass	Poaceae	perennial rhizomatous herb	Jun-Aug	None	None	G5	S3	2B.3		1974-01-01	 ©2004 Dean Wm. Taylor
<u><i>Hackelia amethystina</i></u>	amethyst stickseed	Boraginaceae	perennial herb	Jun-Jul(Aug)	None	None	G4	S4	4.3	Yes	1974-01-01	 © 2018 John Doyen
<u><i>Potamogeton epihydrus</i></u>	Nuttall's ribbon-leaved pondweed	Potamogetonaceae	perennial rhizomatous herb (aquatic)	(Jun)Jul-Sep	None	None	G5	S2S3	2B.2		1994-01-01	 Louis-M. Landry, 2010
<u><i>Rhamnus alnifolia</i></u>	alder buckthorn	Rhamnaceae	perennial deciduous shrub	May-Jul	None	None	G5	S3	2B.2		2008-03-26	No Photo Available
<u><i>Rorippa subumbellata</i></u>	Tahoe yellow cress	Brassicaceae	perennial rhizomatous herb	May-Sep	None	CE	G1	S1	1B.1		1974-01-01	No Photo Available
<u><i>Solidago lepida</i> var. <i>salebrosa</i></u>	Rocky Mountains Canada goldenrod	Asteraceae	perennial rhizomatous herb	Jul-Sep	None	None	G5T5	S1	3.2		2014-09-29	No Photo Available
<u><i>Sphaeralcea munroana</i></u>	Munro's desert mallow	Malvaceae	perennial herb	May-Jun	None	None	G4	S1	2B.2		2001-01-01	No Photo Available

Showing 1 to 18 of 18 entries

Suggested Citation:



[CNPS Rare Plant Inventory.](#)

Search Results

47 matches found. Click on scientific name for details

Search Criteria: [9-Quad](#) include [3912011:3912021:3912031:3912013:3912022:3912023:3912012:3912033:3912032]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
<i>Agrostis humilis</i>	mountain bent grass	Poaceae	perennial herb	Jul-Sep	None	None	G4Q	S2	2B.3		1980-01-01	 © 2004 Steve Matson
<i>Arabis rigidissima</i> var. <i>demota</i>	Galena Creek rockcress	Brassicaceae	perennial herb	Jul-Aug	None	None	G3T3Q	S1	1B.2		1994-01-01	No Photo Available
<i>Artemisia tripartita</i> ssp. <i>tripartita</i>	threetip sagebrush	Asteraceae	perennial shrub	Aug	None	None	G5T4T5	S2	2B.3		2012-08-20	No Photo Available
<i>Astragalus austinae</i>	Austin's astragalus	Fabaceae	perennial herb	(May)Jul-Sep	None	None	G2G3	S2S3	1B.3		2013-12-04	No Photo Available
<i>Astragalus whitneyi</i> var. <i>lenophyllus</i>	woolly-leaved milk-vetch	Fabaceae	perennial herb	Jul-Aug	None	None	G5T4	S4	4.3		2001-01-01	No Photo Available
<i>Bolandra californica</i>	Sierra bolandra	Saxifragaceae	perennial herb	Jun-Jul	None	None	G4	S4	4.3	Yes	1974-01-01	No Photo Available
<i>Botrychium ascendens</i>	upswept moonwort	Ophioglossaceae	perennial rhizomatous herb	(Jun)Jul-Aug	None	None	G4	S2	2B.3		1994-01-01	 © 2005 Steve Matson
<i>Botrychium crenulatum</i>	scalloped moonwort	Ophioglossaceae	perennial rhizomatous herb	Jun-Sep	None	None	G4	S3	2B.2		1984-01-01	 © 2016 Steve Matson

<u><i>Botrychium minganense</i></u>	Mingan moonwort	Ophioglossaceae	perennial rhizomatous herb	Jul-Sep(Oct)	None	None	G5	S4	4.2		1994-01-01	 © 2011 Aaron E. Sims
<u><i>Botrychium montanum</i></u>	western goblin	Ophioglossaceae	perennial rhizomatous herb	Jul-Sep	None	None	G3G4	S2	2B.1		1994-01-01	 ©2012 Belinda Lo
<u><i>Bruchia bolanderi</i></u>	Bolander's bruchia	Bruchianaceae	moss		None	None	G3	S3	4.2		2001-01-01	 ©2021 Scot Loring
<u><i>Bulbostylis capillaris</i></u>	thread-leaved beakseed	Cyperaceae	annual herb	Jun-Aug	None	None	G5	S3	4.2		2001-01-01	 ©2016 Ryan Batten
<u><i>Carex davyi</i></u>	Davy's sedge	Cyperaceae	perennial herb	May-Aug	None	None	G3	S3	1B.3		1974-01-01	No Photo Available
<u><i>Carex lasiocarpa</i></u>	woolly-fruited sedge	Cyperaceae	perennial rhizomatous herb	Jun-Jul	None	None	G5	S2	2B.3		1980-01-01	 © 2011 Sierra Pacific Industries
<u><i>Carex limosa</i></u>	mud sedge	Cyperaceae	perennial rhizomatous herb	Jun-Aug	None	None	G5	S3	2B.2		1994-01-01	 Steve Matson 2009
<u><i>Ceanothus fresnensis</i></u>	Fresno ceanothus	Rhamnaceae	perennial evergreen shrub	(Apr)May-Jul	None	None	G4	S4	4.3	Yes	1980-01-01	No Photo Available
<u><i>Claytonia megarhiza</i></u>	fell-fields claytonia	Montiaceae	perennial herb	Jul-Sep	None	None	G5	S2	2B.3		1980-01-01	No Photo Available
<u><i>Cryptantha glomeriflora</i></u>	clustered-flower cryptantha	Boraginaceae	annual herb	Jun-Sep	None	None	G4Q	S4	4.3	Yes	2001-01-01	No Photo Available

<u><i>Engellaria obtusa</i></u>	obtus starwort	Caryophyllaceae	perennial rhizomatous herb	May-Sep(Oct)	None	None	G5	S4	4.3			1988-01-01	 ©2014 Kirsten Bovee
<u><i>Erigeron miser</i></u>	starved daisy	Asteraceae	perennial herb	Jun-Oct	None	None	G3?	S3?	1B.3	Yes		1974-01-01	No Photo Available
<u><i>Eriogonum umbellatum</i> var. <i>torreyanum</i></u>	Donner Pass buckwheat	Polygonaceae	perennial herb	Jul-Sep	None	None	G5T2	S2	1B.2	Yes		1974-01-01	No Photo Available
<u><i>Eriophorum gracile</i></u>	slender cottongrass	Cyperaceae	perennial rhizomatous herb (emergent)	May-Sep	None	None	G5	S4	4.3			2006-10-31	 ©2011 Steven Perry
<u><i>Eurybia merita</i></u>	subalpine aster	Asteraceae	perennial herb		None	None	G5	S3	2B.3			2006-09-14	 ©2014 Richard Spellenberg
<u><i>Glyceria grandis</i></u>	American manna grass	Poaceae	perennial rhizomatous herb	Jun-Aug	None	None	G5	S3	2B.3			1974-01-01	 ©2004 Dean Wm. Taylor
<u><i>Hackelia amethystina</i></u>	amethyst stickseed	Boraginaceae	perennial herb	Jun-Jul(Aug)	None	None	G4	S4	4.3	Yes		1974-01-01	 © 2018 John Doyen
<u><i>Ivesia sericoleuca</i></u>	Plumas ivesia	Rosaceae	perennial herb	May-Oct	None	None	G2	S2	1B.2	Yes		1974-01-01	 © 2003 Steve Matson
<u><i>Juncus hemiendytus</i> var. <i>abjectus</i></u>	Center Basin rush	Juncaceae	annual herb	May-Jun(Jul)	None	None	G5T5	S4	4.3			1974-01-01	 ©2008 Steve Matson
<u><i>Juncus luciensis</i></u>	Santa Lucia dwarf rush	Juncaceae	annual herb	Apr-Jul	None	None	G3	S3	1B.2	Yes		2009-04-30	 © 2009 Keir Morse
<u><i>Lewisia kelloggii</i> ssp. <i>hutchisonii</i></u>	Hutchison's lewisia	Montiaceae	perennial herb	(Apr)May-Aug	None	None	G3G4T3Q	S3	3.2	Yes		2001-01-01	 Dean Wm. Taylor 2006

<u>Lewisia longipetala</u>	long-petaled lewisia	Montiaceae	perennial herb	Jul-Aug(Sep)	None	None	G2	S2	1B.3	Yes	1974-01-01	 © 2009 Gary A. Monroe
<u>Lomatium grayi</u>	Gray's lomatium	Apiaceae	perennial herb	Apr-Jun	None	None	G5	S1S2	2B.3		2001-01-01	No Photo Available
<u>Meesia triquetra</u>	three-ranked hump moss	Meesiaceae	moss	Jul	None	None	G5	S4	4.2		2001-01-01	 Steve Matson 2008
<u>Muhlenbergia jonesii</u>	Jones' muhly	Poaceae	perennial herb	Jun-Aug(Sep)	None	None	G3	S3	4.3	Yes	2001-01-01	No Photo Available
<u>Nardia hiroshii</u>	Hiroshi's flapwort	Jungermanniaceae	liverwort		None	None	G4G5	S1	2B.3		2014-06-02	No Photo Available
<u>Peltigera gowardii</u>	western waterfan lichen	Peltigeraceae	foliose lichen (aquatic)		None	None	G4?	S3	4.2		2014-03-01	 © 2021 Scot Loring
<u>Phacelia stebbinsii</u>	Stebbins' phacelia	Hydrophyllaceae	annual herb	May-Jul	None	None	G3	S3	1B.2	Yes	1974-01-01	No Photo Available
<u>Potamogeton epihydrus</u>	Nuttall's ribbon-leaved pondweed	Potamogetonaceae	perennial rhizomatous herb (aquatic)	(Jun)Jul-Sep	None	None	G5	S2S3	2B.2		1994-01-01	 Louis-M. Landry, 2010
<u>Potamogeton robbinsii</u>	Robbins' pondweed	Potamogetonaceae	perennial rhizomatous herb (aquatic)	Jul-Aug	None	None	G5	S3	2B.3		1994-01-01	 ©2014 Dana York
<u>Rhamnus alnifolia</u>	alder buckthorn	Rhamnaceae	perennial deciduous shrub	May-Jul	None	None	G5	S3	2B.2		2008-03-26	No Photo Available
<u>Rorippa subumbellata</u>	Tahoe yellow cress	Brassicaceae	perennial rhizomatous herb	May-Sep	None	CE	G1	S1	1B.1		1974-01-01	No Photo Available
<u>Scutellaria galericulata</u>	marsh skullcap	Lamiaceae	perennial rhizomatous herb	Jun-Sep	None	None	G5	S2	2B.2		1994-01-01	 © 2021 Scot Loring
<u>Solidago lepida</u> var. <u>salebrosa</u>	Rocky Mountains Canada goldenrod	Asteraceae	perennial rhizomatous herb	Jul-Sep	None	None	G5T5	S1	3.2		2014-09-29	No Photo Available
<u>Sphaeralcea munroana</u>	Munro's desert mallow	Malvaceae	perennial herb	May-Jun	None	None	G4	S1	2B.2		2001-01-01	No Photo Available

<u><i>Stuckenia</i></u> <u><i>filiformis</i> ssp.</u> <u><i>alpina</i></u>	northern slender pondweed	Potamogetonaceae	perennial rhizomatous herb (aquatic)	May-Jul	None	None	G5T5	S2S3	2B.2	1994- 01-01		Dana York (2016)
<u><i>Utricularia</i></u> <u><i>intermedia</i></u>	flat-leaved bladderwort	Lentibulariaceae	perennial stoloniferous herb (carnivorous) (aquatic)	Jul-Aug	None	None	G5	S3	2B.2	2001- 01-01		Barry Rice 2004
<u><i>Utricularia</i></u> <u><i>minor</i></u>	lesser bladderwort	Lentibulariaceae	perennial stoloniferous herb (carnivorous) (aquatic)	(May- Jun)Jul- Aug	None	None	G5	S3	4.2	2001- 01-01		Barry Rice 2009
<u><i>Viola</i></u> <u><i>tomentosa</i></u>	felt-leaved violet	Violaceae	perennial herb	(Apr)May- Oct	None	None	G3	S3	4.2	Yes	1974- 01-01	No Photo Available

Showing 1 to 47 of 47 entries

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2024. Rare Plant Inventory (online edition, v9.5). Website <https://www.rareplants.cnps.org> [accessed 28 May 2024].

Appendix C

U.S. Fish and Wildlife Information for Planning and Consulting (I-PaC) Resource List

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

Placer 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
Sierra Nevada Red Fox <i>Vulpes vulpes necator</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4252	Endangered

Birds

NAME	STATUS
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
Sierra Nevada Yellow-legged Frog <i>Rana sierrae</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/9529	Endangered

Fishes

NAME	STATUS
------	--------

Lahontan Cutthroat Trout *Oncorhynchus clarkii henshawi* Threatened

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/3964>

Insects

NAME

STATUS

Monarch Butterfly *Danaus plexippus*

Candidate

Wherever found

No critical habitat has been designated for this species.

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

Flowering Plants

NAME

STATUS

Lassics Lupine *Lupinus constancei*

Endangered

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

<https://ecos.fws.gov/ecp/species/7976>

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 Act¹ and the Migratory Bird Treaty Act².

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats³, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below.

Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

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 conservation 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 likely bald eagles present in your project area. For additional information on bald eagles, refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#).

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.

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
Golden Eagle <i>Aquila chrysaetos</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/1680	Breeds Dec 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.

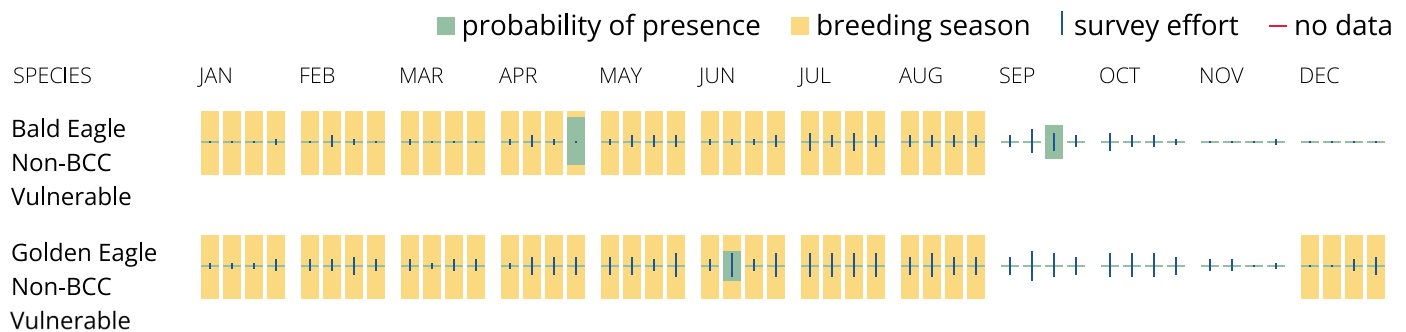
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

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.



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 a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply). To see a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

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

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

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) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle 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, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the [Eagle Act](#) should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats³ should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "[Supplemental Information on Migratory Birds and Eagles](#)".

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 conservation 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>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

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.

NAME

BREEDING SEASON

American Dipper *Cinclus mexicanus*

Breeds Mar 21 to Aug 21

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Bald Eagle *Haliaeetus leucocephalus*

Breeds Jan 1 to Aug 31

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>

Black-throated Gray Warbler *Setophaga nigrescens*

Breeds May 1 to Jul 20

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

California Gull *Larus californicus*

Breeds Mar 1 to Jul 31

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

Calliope Hummingbird *Selasphorus calliope*

Breeds May 1 to Aug 15

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

<https://ecos.fws.gov/ecp/species/9526>

Cassin's Finch *Haemorhous cassinii*

Breeds May 15 to Jul 15

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

<https://ecos.fws.gov/ecp/species/9462>

Clark's Grebe *Aechmophorus clarkii*

Breeds Jun 1 to Aug 31

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

Evening Grosbeak *Coccothraustes vespertinus*

Breeds May 15 to Aug 10

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

Golden Eagle *Aquila chrysaetos*

Breeds Dec 1 to Aug 31

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/1680>

Hermit Warbler *Setophaga occidentalis*

Breeds May 5 to Jul 15

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Lawrence's Goldfinch *Spinus lawrencei*

Breeds Mar 20 to Sep 20

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

<https://ecos.fws.gov/ecp/species/9464>

Long-eared Owl *asio otus*

Breeds Mar 1 to Jul 15

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

<https://ecos.fws.gov/ecp/species/3631>

Oak Titmouse *Baeolophus inornatus*

Breeds Mar 15 to Jul 15

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

<https://ecos.fws.gov/ecp/species/9656>

Olive-sided Flycatcher *Contopus cooperi*

Breeds May 20 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/3914>

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>

Willet *Tringa semipalmata*

Breeds Apr 20 to Aug 5

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 (|)

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.

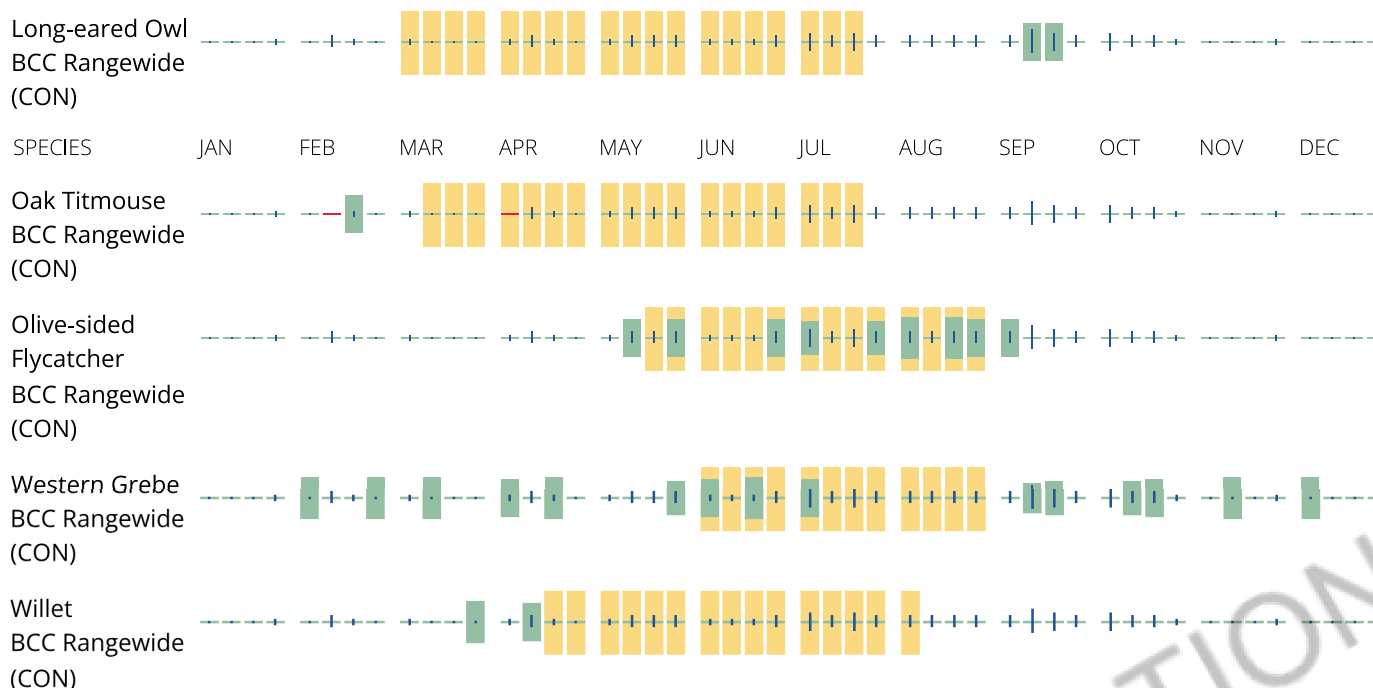
No Data (—)

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.





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

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding 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 USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

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) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle 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, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

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 year-round), you may query your location using the [RAIL Tool](#) and look at 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 migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, 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 [Eagle 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 try 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 eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

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.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

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 also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). 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 is not perfect; 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 helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

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:

FRESHWATER EMERGENT WETLAND

[PEM1C](#)

RIVERINE

[R3UBH](#)

[R5UBF](#)

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.

Attachment C

Truckee River Interceptor Pipeline Rehabilitation Project – Cultural Resources Memorandum

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