CEQA INITIAL STUDY
FOR THE KONOCTI COUNTY WATER DISTRICT
CACHE CREEK MOBILE HOME ESTATES PROJECT,
CLEARLAKE, CALIFORNIA

JUNE 28, 2020

APPLICANT FOR STATE WATER REVOLVING FUNDS:

CACHE CREEK MOBILE HOME PARK

CEQA LEAD AGENCY:

KONOCTI COUNTY WATER DISTRICT

TABLE OF CONTENTS

GENERAL INFORMATION ABOUT THIS DOCUMENT

This Initial Study with Mitigated Negative Declaration has been prepared for the proposed Cache Creek Mobile Home Estates Water Service Connection Project located in Clearlake, California. The Konocti Water District is the lead agency under the California Environmental Quality Act (CEQA).

This document explains the project purpose, alternatives that have been considered for the project, how the existing environment could be affected by the project, the potential impacts of the project, and the proposed avoidance, minimization, and/or mitigation measures. The Initial Study will be circulated to the public for 30 days. Comments received during this period will be considered by the Lead Agency before making the determination.

The Drinking Water State Revolving Fund (DWSRF) program is a federal-state partnership to help ensure safe drinking water. Created by the 1996 Amendments to the Safe Drinking Water Act (SDWA), the program provides financial support to water systems and to State safe water programs (https://www.epa.gov/drinkingwatersrf). In California, the State Water Resources Control Board (SWRCB) administers the DWSRF program. As part of the DWSRF application process, applicants are required to submit an Environmental Package that includes applicable CEQA documents and additional supporting technical reports. Typically, the applicant is the CEQA Lead Agency and the SWRCB is a CEQA Responsible Agency. As a Responsible Agency, the SWRCB must make its own findings using information provided by the Lead Agency before funding a project. During the environmental review process, the DWSRF Environmental Review Staff will review the documents to determine adequacy of environmental information and compliance with state and federal environmental laws and regulations. The environmental review process must be completed prior to the SWRCB financing approval and project construction.

The DWSRF Program is partially funded by the United States Environmental Protection Agency and therefore projects financed by the DWSRF Program must comply with the federal cross-cutting requirements. The SWRCB has the authority to initiate consultation with the relevant federal agencies having jurisdiction over the federal environmental laws and regulations. Any issues raised by the relevant federal agencies must be resolved prior to completing the SWRCB environmental review process and financing approval.

PERMITS AND APPROVALS NEEDED

State Water Resources Control Board

As part of the DWSRF application process, applicants are required to submit an Environmental Package, applicable CEQA documents, and additional supporting technical reports. The environmental review process must be completed prior to the SWRCB financing approval.

Any construction project that disturbs at least one acre of land requires enrollment in the SWRCB's Construction General Permit Order 2009-0009-DWQ under the National Pollutant Discharge Elimination System and implementation of a storm water pollution prevention plan (SWPPP).

County of Lake
A traffic control plan or a grading permit may be required by the County.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Potentially Significant Unless Mitigated" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agricultural/Forest Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Energy
☐ Geology / Soils	☐ Greenhouse Gas Emissions	☐ Hazards &Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation	☒ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

PROPOSED MITIGATED NEGATIVE DECLARATION

This proposed Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is the Lead Agency's intent to adopt a MND for this project. This does not mean that the Lead Agency's decision regarding the project is final. This MND is subject to change based upon comments received by interested agencies and the public.

The Lead Agency has prepared an Initial Study for this project, and pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment

Determination. (To be completed by the Lead Agency.)
On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

_____ _____

(name and title) Date
(agency)

PROJECT DESCRIPTION

The proposed project would provide safe drinking water distribution by Konocti County Water District (KCWD) to the Cache Creek Mobile Home Estates in Clearlake. The project is the installation of an 8-inch PVC underground water pipeline for approximately 3,420-feet (0.65-miles) in Dam Road to connect the Cache Creek Mobile Home Estates to the KCWD water distribution system. The new pipeline would be installed in Dam Road from the Cache Creek Mobile Home Estates entrance west to the Dam Road/Konocti Avenue intersection. Continuing west beyond Lake Street, the proposed project would replace an existing 4-inch diameter pipe in Dam Road with a new 8-inch diameter pipe. The pipeline would be installed by open-trenching aligned through the existing asphalt surface in Dam Road. The water pipeline would be placed 10 feet horizontally away from an existing sewer pipeline, which is also located within the Dam Road alignment. The trench depth would be approximately 46 inches and the width approximately 20 inches. Excavation and other construction activities would be limited to the existing roadway corridor.

PROJECT ALTERNATIVES

No Project Alternative

The No-Project Alternative would require the existing groundwater supply well and associated treatment facility to continue operating under conditions that struggle to comply with current regulatory drinking water standards. It is difficult and expensive for this disadvantaged community and small water system to provide safe drinking water from an outdated water supply well and a complex water treatment facility. As such, the No-project Alternative is not acceptable.

ENVIRONMENTAL SETTING

The Project Area is located within the Inner North Coast Ranges geographic subregion, which is contained within the Northwestern California geographic subdivision of the larger California Floristic Province (Baldwin et al. 2012). This region has a Mediterranean-type climate, characterized by distinct seasons of hot, dry summers and wet, moderately cold winters. The Project Area and vicinity is in climate Zone 7, California's Gray Pine Belt, with hot summers and mild but pronounced winters without severe winter cold or high humidity (Brenzel, 2012). The topography of the Project Area is rolling, with subtle elevation changes along the roadway. The elevation ranges from approximately 1,340 feet to 1,395 feet above mean sea level. Cache Creek flows just south of the Project Area. Drainage from the entire Project Area flows into roadside ditches or infiltrates into soils in the road right-of-way. On a larger scale, drainage from the project vicinity flows south to Cache Creek, a tributary of the Sacramento River.

EVALUATION OF ENVIRONMENTAL IMPACTS

This section identifies the environmental impacts of this project by answering questions from Appendix G of the CEQA Guidelines, the Environmental Checklist Form. The analyses take in to account the entire action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational, impacts.

Impacts are categorized as follows:

- **Potentially Significant Impact** is appropriate if there is substantial evidence that an effect is significant, or where the established threshold has been exceeded. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) may be required.
- **Less Than Significant with Mitigation Incorporated** applies where the incorporation of mitigation measures would reduce an effect from Potentially Significant Impact to a Less Than Significant Impact. Mitigation measures are prescribed to reduce the effect to a less than significant level.
- **Less Than Significant** applies when the project will affect or is affected by the environment, but based on sources cited in the report, the impact will not have an adverse effect. For the purpose of this report, beneficial impacts are also identified as less than significant. The benefit is identified in the discussion of impacts, which follows each checklist category.
- A **No Impact** answer is adequately supported if referenced information sources show that the impact simply does not apply to projects like the one involved. A 'No Impact' answer is explained where it is based on project-specific factors as well as general standards.

1. AESTHETICS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

SETTING

The setting is a residential community, with some agricultural and aquatic recreational uses in the vicinity, in the City of Clearlake. Where not obscured by buildings or tall trees, mountains can be seen in all directions.

DISCUSSION

1 a-d) There are no scenic vistas or historic buildings in the project area or immediate vicinity. There is no designated or eligible State Scenic Highway in the vicinity of the Project. The nearest Scenic Highway is Route 12 Danielli Avenue east of Santa Rosa to London Way, which is many miles south of the Project Area. The nearest wild and scenic river is the Eel River, 42 miles to the north. The project will not affect a scenic vista, a scenic highway, or a wild and scenic river. The project will not introduce a new manmade feature into the viewscape because the project involves the trenching and placement of new underground water pipeline. The proposed Project does not propose any new development, construction or physical change to the environment that would directly or indirectly result in any impacts to aesthetic resources. The proposed project will not include any new lighting to the subject area and/or otherwise compromise any views. The proposed project will have no impacts upon aesthetic resources.

MITIGATION

No mitigation is required.

2. AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

DISCUSSION

2a-2e) In the vicinity of the proposed project, there are no special agricultural designations and the land is identified as "Urban and Built-Up Land" on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. As there is no farmland in the project area, no land will be converted to non-farm uses. The project area is not enrolled in a Williamson Act contract. The project involves placing approximately 3,420 feet of and underground PCV water pipeline. The proposed water pipeline is located along Dam Road in Clearlake in a residential area. The project will not involve any loss of forest land or conversion of any land to new uses. There will be no impact upon agricultural or forestry resources.

MITIGATION

No mitigation is required.

3. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or result in a cumulatively considerable net increase in an existing or projected air quality violation?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in substantial emissions (such as odors or dust) adversely affecting a substantial number of people?	☐	☐	☒	☐

SETTING

The following air quality impact assessment was performed for this project (bound separately):

- Natural Investigations Co. 2020. Air Quality Impact Assessment for the Cache Creek Mobile Home Estates Water Service Connection Project. 90 pp.

The proposed project is located within the Lake County Air Basin. The Air Basin is a federally and state recognized geographical area that is the same as the county boundary. The Air Basin is regulated by the Lake County Air Quality Management District (LCAQMD). Lake County was rated the 15th cleanest county in the Nation by the American Lung Association (2019). The U.S. Environmental Protection Agency (EPA) sets acceptable levels for seven air pollutants. Lake County currently is in attainment or is unclassified for these pollutants.

Construction and operational activities from any land use project can generate air pollutants and greenhouse gasses. This assessment estimated the types and quantities of air emissions associated with construction and operation of the proposed project on both the daily maximum and annual average levels. Emissions were calculated using the California Emissions Estimator Model (CalEEMod)®, Version 2016.3.2 (California Air Pollution Control Officers Association, 2017). Model output and reports from CalEEMod® are provided in the air quality assessment. This assessment then determined if project emissions would cause a significant air quality impact by comparison to established air quality thresholds.

DISCUSSION

3a) LCAQMD does not have an adopted air quality plan. A project would conflict with applicable air quality plans if it generated significant quantities of criteria pollutants, particulate matter (PM10 or PM2.5), toxins, odors, or if it exceeded the thresholds established by BAAQMD (2017) CEQA Guidelines. Air emissions modeling performed for this project demonstrates that the project, in both the construction phase and the operational phase, will not generate significant quantities of criteria pollutants or particulate matter and does not exceed the project-level thresholds established by LCAQMD or the BAAQMD (2017) CEQA Guidelines. Furthermore, the project, in both the construction phase and the operational phase, will not generate odors or toxins. Therefore, implementation of the project will have a less than significant impact upon implementation of the applicable air quality plans.

3b) The region (Lake County) is in attainment for all criteria pollutants under applicable federal and state ambient air quality standards. Thus, the project cannot contribute to an increase in non-attainment of a criteria pollutant. Nevertheless, a significant incremental contribution to non-attainment could occur if the project exceeded any of the thresholds established by LCAQMD or the BAAQMD (2017) CEQA Guidelines. Air emissions modeling performed for this project demonstrates that the project, in both the construction phase and the operational phase, will not exceed the project-level thresholds established by the BAAQMD (2017) CEQA Guidelines. This indicates that project emissions are less than significant for cumulative contributions for any criteria pollutant. The project, in both the construction and operational phases, has annual emissions of greenhouse gasses well below the threshold annual quantity of 3,000 CO_{2e} established by other air quality districts. Implementation of the project will have a less than significant cumulative impact upon any criteria air pollutant.

3c) Those who are sensitive to air pollution consist of children, the elderly, and persons with preexisting respiratory, immune, or cardiovascular illness. A sensitive receptor is typically a location that houses or attracts these sensitive people; examples include hospitals, day care centers, parks, residential areas, convalescent facilities, and schools. No specific sensitive receptors exist in the project area, although residences are adjacent to the project area. While sensitive receptors do exist in the project vicinity, the project will not emit significant concentrations of any criteria pollutants. The project does not emit odors or toxic substances. Therefore, the project will have a less than significant impact upon sensitive receptors.

3d) Odor impacts on residential areas and other sensitive receptors, such as hospitals, day-care centers, schools, etc. warrant the closest scrutiny, but consideration should also be given to other land uses where people may congregate, such as recreational facilities, worksites, and commercial areas. Two situations create a potential for odor impact. The first occurs when a new odor source is located near an existing sensitive receptor. The second occurs when a new sensitive receptor locates near an existing source of odor.

The project is not significantly close to any facility that is odor producing (e.g., wastewater treatment plant, landfill, transfer station, chemical manufacturing, feed lot, etc.) Implementation of the proposed project will not locate sensitive receptors closer to an odor generator. No sensitive receptors exist in the project area. While sensitive receptors do exist in the project vicinity, the project will not emit significant concentrations of criteria air pollutants. The project does not emit odors or toxic substances. Therefore, the project will have a less than significant impact of odors or other emissions affecting people.

MITIGATION

No mitigation necessary.

Comparison of Daily Construction Emissions Impacts with Thresholds of Significance

Criteria Pollutants	Project Emissions unmitigated (pounds/day)	BAAQMD Threshold (pounds/day)	Significance
ROG (VOC)	8	54	Less than significant
NO_x	8	54	Less than significant
CO	8	548	Less than significant
SO_x	< 1	219	Less than significant
PM_{10} (total)	1	82	Less than significant
$PM_{2.5}$ (total)	1	54	Less than significant
Greenhouse Gasses (CO_2e)	1,236	No threshold established	Less than significant

Comparison of Daily Operational Emissions Impacts with Thresholds of Significance

Criteria Pollutants	Project Emissions unmitigated (pounds/day)	BAAQMD Threshold (pounds/day)	Significance
ROG (VOC)	2	54	Less than significant
NO_x	< 1	54	Less than significant
CO	2	548	Less than significant
SO_x	< 1	219	Less than significant
PM_{10} (total)	< 1	82	Less than significant
$PM_{2.5}$ (total)	< 1	54	Less than significant
Greenhouse Gasses (CO_2e)	79	No threshold established	Less than significant

Comparison of Annual Operational Emissions Impacts with Thresholds of Significance

Criteria Pollutants	Project Emissions (tons/year)	BAAQMD Threshold (tons/year)	Significance
ROG (VOC)	< 1	10	Less than significant
NO_X	< 1	10	Less than significant
CO	< 1	100	Less than significant
SO_X	< 1	40	Less than significant
PM_{10}	< 1	15	Less than significant
$PM_{2.5}$	< 1	10	Less than significant
Greenhouse gasses (metric tons / year CO_{2e})	15	10,000	Less than significant

Note: Project emissions in the operational phase are so low because no energy is consumed and no machinery is used to operate the pipeline.

Federal General Conformity Determination

In accordance with the FCAA and the CCAA, CARB designates areas of the state as attainment, nonattainment, or unclassified with respect to applicable standards. An "attainment" designation for an area signifies that pollutant concentrations do not violate the applicable standard in that area. A "nonattainment" designation indicates that a pollutant concentration violated the applicable standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. The CCAA divides nonattainment status into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The USEPA and the CARB designate air basins where ambient air quality standards are exceeded as "nonattainment" areas. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified."

The current attainment designations for the Lake County AQMD are shown in the following table. The Lake County Air Basin is designated either unclassified or is in attainment for all pollutants. The following table compares project emissions with the federal de minimis and the local air basin thresholds of significance, where available. Project emissions are well below the federal *de minimi*s levels for all pollutants. Therefore, the project conforms to federal air quality standards.

Lake County Air Basin Attainment Statuses

(Sources: California Air Resources Board 2020; USEPA 2020)

Pollutant	State Status	National Status
1-hour Ozone	Unclassified/attainment	No Standard
8-hour Ozone	Unclassified/attainment	Unclassified/attainment
Carbon monoxide	Unclassified/attainment	Unclassified/attainment
Nitrogen dioxide	Unclassified/attainment	Unclassified/attainment
Sulfur dioxide	Unclassified/attainment	Unclassified/attainment
Sulfates	Unclassified/attainment	Unclassified/attainment
PM_{10}	Unclassified/attainment	Unclassified/attainment
$PM_{2.5}$	Unclassified/attainment	Unclassified/attainment
Lead	Unclassified/attainment	Unclassified/attainment

Conformity Determination Summary

Pollutant	Federal Status (Attainment, Nonattainment, etc.)	Non-attainment Rates (marginal, serious, etc.)	*De minimis* (tons/year)	Threshold of Significance for Project Air Basin (tons/year)	Estimated Project Construction Emissions (tons/year)	Estimated Project Operation Emissions (tons/year)
Ozone (O_3)	Unclassified / attainment	n/a	50	not yet established	n/a	n/a
Carbon Monoxide (CO)	Unclassified / attainment	n/a	100	100	< 1	< 1
Oxides of Nitrogen (NOx)	Unclassified / attainment	n/a	100	10	< 1	< 1
Reactive Organic Gasses (ROG)	Unclassified / attainment	n/a	100	10	< 1	< 1
Volatile Organic Compounds (VOC)	Unclassified / attainment	n/a	100	not yet established	n/a	n/a
Lead (Pb)	Unclassified / attainment	n/a	25	not yet established	n/a	n/a
Particulate Matter < 2.5 microns ($PM_{2.5}$)	Unclassified / attainment	n/a	100	10	< 1	< 1
Particulate Matter < 10 microns (PM_{10})	Unclassified / attainment	n/a	100	15	< 1	< 1
Sulfur Dioxide (SO_2)	Unclassified / attainment	n/a	100	40	< 1	< 1

4. BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

SETTING

A biological resources assessment was prepared for the project and is provided in the Appendix:

- Natural Investigations Co., Inc. 2020. Biological Resources Assessment for the Cache Creek Mobile Home Park Water Service Connection Project, Clearlake, California. Prepared for State Water Resources Control Board, Division of Financial Assistance and Konocti County Water District. 48 pp.

The Project Area is located within the Inner North Coast Ranges geographic subregion, which is contained within the Northwestern California geographic subdivision of the larger California Floristic Province (Baldwin et al. 2012). This region has a Mediterranean-type climate, characterized by distinct seasons of hot, dry summers and wet, moderately cold winters. The Project Area and vicinity is in climate Zone 7, California's Gray Pine Belt, with hot summers and mild but pronounced winters without severe winter cold or high humidity (Brenzel, 2012). The topography of the Project Area is rolling with occasional elevation changes along the roadway. The elevation ranges from approximately 1,340 feet to 1,395 feet above mean sea level. Cache Creek flows just south of the Project Area. Drainage from the entire Project Area flows into roadside ditches or infiltrates into soils in the road right-of-way. On a larger scale, drainage from the project vicinity flows south to Cache Creek, a tributary of the Sacramento River.

The Project Area contains 2 terrestrial vegetation communities: ruderal/developed and oak woodland. These vegetation communities are discussed here and are delineated in the Exhibits. Ruderal/developed habitats consisted of disturbed or converted natural habitat that is now either in ruderal state, graded, or urbanized with

gravel roads, or structure and utility placement. Vegetation within this habitat type consists primarily of nonnative weedy or invasive species or ornamental plants lacking a consistent community structure. This habitat type provides limited resources for wildlife and is utilized primarily by species tolerant of human activities. The disturbed and altered condition of these lands greatly reduces their habitat value and ability to sustain rare plants or diverse wildlife assemblages. The northern half of the project alignment is dominated by a well-developed canopy of native trees. The mixed oak/conifer woodland consists of a moderate to dense cover of interior live oak (*Quercus wislizeni*), gray pine (*Pinus sabiniana*), and valley oak (*Quercus lobata*) with an understory of common manzanita (*Arctostaphylos manzanita ssp. manzanita*), poison oak (*Toxicodendron diversilobum*), lemonade berry (*Rhus trilobata*), annual grasses (*Bromus* spp., *Avena*, et al) and herbs. The mixed oak/pine woodland is found throughout the Project Area. This vegetation can be classified as "Quercus wislizeni woodland alliance (Sawyer et al, 2009)" or as the Holland Type "Interior live oak woodland."

The following wildlife habitat types occur within the Project Area and immediate vicinity, as classified by CDFW's Wildlife Habitat Relationship System: "Urban" and "Blue Oak Woodland." No critical habitat for any federally-listed species occurs within the Project Area. No special-status habitats were detected within the Project Area. The CNDDB reported no special-status habitats within the Project Area. The CNDDB reported the following special-status habitats within a 10-mile radius outside of the Project Area: Clear Lake Drainage Resident Trout Stream; Clear Lake Drainage Cyprinid/Catostomid Stream; Northern Basalt Flow Vernal Pool; Northern Volcanic Ash Vernal Pool; Coastal and Valley Freshwater Marsh; Great Valley Mixed Riparian Forest and Northern Interior Cypress Forest.

The CNDDB was queried and any reported occurrences of special-status species were plotted in relation to the Project Area boundary using GIS software (see Exhibits). The CNDDB reported two special-status species occurrences within the Project Area: few-flowered Navarretia (*Navarretia leucocephala* ssp. *pauciflora*) and Hall's Harmonia (*Harmonia hallii*). These occurrences appear to be an artifact of the mapping process. Suitable habitat for these species (vernal pools and serpentine soil) is not present within the Project Area. Within a 10-mile buffer of the Project Area boundary, the CNDDB reported the occurrence of 71 different special-status species. A USFWS species list was generated online using the USFWS' IPaC Trust Resource Report System. The following listed species should be considered in the impact assessment: Northern Spotted Owl (*Strix occidentalis caurina*), federally threatened; California Red-legged Frog (*Rana draytonii*), federally threatened; Delta smelt (*Hypomesus transpacificus*), federally threatened; Burke's Goldfields (*Lasthenia burkei*), federally endangered; Few-flowered Navarretia (*Navarretia leucocephala ssp. pauciflora*), Endangered; Slender Orcutt Grass (*Orcuttia tenuis*), federally threatened.

DISCUSSION

4a) During the field survey, no federally-listed species were observed within the Project Area. One special-status species was detected near the western end of the Project Area—Hall's bush mallow (*Malacothamnus hallii*) (see Exhibits). The identification of this plant was based upon late-season vegetative plant material and should be considered as tentative. The nearest confirmed populations of this species is approximately 75 miles south of the project site, in Contra Costa County. Identification of this specimen could be confirmed by examination of flowering material during the blooming period. An elderberry shrub was detected within the project area, which may serve as the habitat for Valley Elderberry Longhorn Beetle. However, according to USFWS, Valley Elderberry Longhorn Beetle is not found, or known to be found, in Lake County. Implementation of the project will not require disturbance of the habitat for Hall's bush mallow nor will it destroy the elderberry shrub. No additional special-status plant species are likely to occur within the Project Area, and no adverse impacts to listed species or special-status species are expected. No regionally-occurring special-status species were determined to have a medium or high potential to occur within the Project Area.

Special-status species are not expected to thrive in the Project Area because of the preponderance of invasive and non-native plants, and habitat degradation associated with urbanization and road maintenance.

Special-status bird species were reported in databases (CNDDB and USFWS) in the vicinity of the Project Area. The Project Area, and adjacent trees and utility poles, contain suitable nesting habitat for various bird species. However, no occupied nests were observed during the field survey. If construction activities are conducted during the nesting season, nesting birds could be directly impacted by tree removal and indirectly impacted by noise, vibration, and other construction-related disturbance. Therefore, Project construction is considered a potentially significant adverse impact to nesting birds.

4b) The Project Area is not within any designated listed species' critical habitat. The Project Area contains no riparian habitat or other special-status habitats. The CNDDB reported no special-status habitats within the Project Area. The CNDDB reported several special-status habitats in a 10-mile radius outside of the Project Area: The CNDDB reported the following special-status habitats within a 10-mile radius outside of the Project Area: Clear Lake Drainage Resident Trout Stream; Clear Lake Drainage Cyprinid/Catostomid Stream; Northern Basalt Flow Vernal Pool; Northern Volcanic Ash Vernal Pool; Coastal and Valley Freshwater Marsh; Great Valley Mixed Riparian Forest and Northern Interior Cypress Forest. The Proposed Project will have no impact upon riparian habitat or other special-status habitats. Because the project area is not within a critical habitat, and because no sensitive habitats will be impacted, the Project will have No Effect upon federally-designated critical habitat.

4c) An informal assessment for the presence of potentially-jurisdictional water resources within the Project Area was also conducted during the field survey. The USFWS National Wetland Inventory (see Exhibits) reported no water features within the Project Area. No water features were detected within the Project Area during the field survey (see Exhibits). Surface flows are directed into roadside ditches, which are upland swales. The Proposed Project will have no impact upon wetlands. However, during construction of the proposed project, surface water quality has the potential to be degraded from storm water transport of sediment from disturbed soils or by accidental release of hazardous materials or petroleum products from sources such as heavy equipment servicing or refueling. This is a potentially significant impact. For projects that disturb 1 acre of more of land, the project proponent must enroll under the State Water Quality Control Board's General Permit for Discharges of Storm Water Associated with Construction Activity prior to the initiation of construction. In conjunction with enrollment under this Permit, a SWPPP, Erosion Control Plan, and a Hazardous Materials Management/Spill Response Plan must be created and implemented during construction to avoid or minimize the potential for erosion, sedimentation, or accidental release of hazardous materials. Implementation of these measures mandated by law would reduce potential construction-related impacts to water quality to a less-than-significant level. No mitigation is necessary.

4d) No designated wildlife corridors or fisheries exist within the Project Area. The nearest wildlife corridor is Cache Creek. Cache Creek is also a fishery resource and Essential Fish Habitat and is within 0.5 miles south of the proposed project. In the vicinity of the project, some barriers to movement exist, such as roadways, residential fences, and barbed wire fences. The proposed project will not create any barriers or other impediments to wildlife movement. Because the project will not destroy any new habitat, but will dig a trench for a water pipeline along an existing road (Dam Road), animal movement will not be impaired. Implementation of the project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

4e,f) Tree resources are present in the Project Area. Forty-seven trees were inventoried within the Project Area, consisting of 42 native oak trees and 5 non-native oak and non-oak trees (Natural Investigations Co. 2020). A specific development plan was not available at the time of the preparation of this report. For installation of the water pipeline, no tree impacts are expected because the pipe will be installed under the road.

Small areas needed for construction material and equipment staging may impact trees. Under the City of Clearlake Native Tree Protection and Removal Permits provisions, native oak trees and trees designated by the City Council as "Heritage Tree" trees are protected. The City of Clearlake Article 18-5.14 "Native Tree Protection and Removal Permits" provides for compensatory mitigation and protection measures for protected trees. A Native Tree Removal Permit shall be approved or approved with conditions by the Director of Community Development if, based upon information provided by the applicant, all of the findings of 18-5.1403 or 18-4.1406 are made. (Ord. #2010-146, S2).

The project does not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or another approved governmental habitat conservation plan. The Project Area is not within the coverage area of any adopted Habitat Conservation Plan or Natural Community Conservation Plan.

MITIGATION

Bio-1: Pre-construction Special-status Species and Nesting Bird Survey.

Because special-status species that occur in the vicinity could migrate onto the Project Area between the time that the field survey was completed and the start of construction, a pre-construction survey for special-status species should be performed by a qualified biologist to ensure that special-status species are not present. If any listed species are detected, construction should be delayed, and the appropriate wildlife agency (CDFW and/or USFWS) should be consulted and project impacts and mitigation reassessed. With the implementation of this mitigation measure, adverse impacts upon special-status species would be reduced to a less-than-significant level.

If construction activities would occur during the nesting season (usually March to September), a pre-construction survey for the presence of special-status bird species or any nesting bird species should be conducted by a qualified biologist within 500 feet of proposed construction areas. If active nests are identified in these areas, CDFW and/or USFWS should be consulted to develop measures to avoid "take" of active nests prior to the initiation of any construction activities. Avoidance measures may include establishment of a buffer zone using construction fencing or the postponement of vegetation removal until after the nesting season, or until after a qualified biologist has determined the young have fledged and are independent of the nest site. With the implementation of this mitigation measure, adverse impacts upon special-status bird species and nesting birds would be reduced to a less-than-significant level.

Because no federally-listed species occur in the Project Area, and because of the avoidance measures that will be implemented, the Project will have No Effect upon federally-listed species.

5. CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

DISCUSSION

The following cultural resources assessment was prepared for this project:

- Natural Investigations Company. 2020. Cultural Resources Inventory and Effects Assessment for the Konocti County Water District Cache Creek Mobile Home Estates Project, City of Clearlake, Lake County, California. Prepared for Konocti County Water District, Clearlake, CA.

ENVIRONMENTAL SETTING

Prehistoric Setting

The prehistoric timeframes in the Clear Lake Basin, part of the southern area of northwest California, include the Post Pattern (13,400–10,000 B.P. [before present]), Borax Lake Pattern (10,000–6300 B.P.), Mendocino and Berkeley Patterns (3200–1200 B.P.), and Augustine Pattern (1200–150 B.P.). A gap in the Clear Lake Basin archaeological record between 6300–3200 B.P. is likely the result of unstable geomorphic conditions that prohibited cultural use of a non-existent stable landscape. Otherwise, the archaeological record attests to a rich record of prehistoric occupation and repeated use of resources found in a productive natural environment, including the making of tools from Borax Lake and Mt. Konocti obsidian. Excavations of a number of archaeological sites show changes in distinct artifact types, subsistence orientation, and settlement patterns, and of an established trade network, that lasted until historic contact in the early 1800s. Anderson Marsh State Historic Park preserves over 20 prehistoric sites that are contributors to an archaeological district (Natural Investigations Company 2020).

Ethnographic Setting

The Southeastern Pomo and Lake Miwok historically occupied the project vicinity. The north bank of Cache Creek was claimed and occupied by the Koi Band of Southeastern Pomo, while the south side of Cache Creek was within Lake Miwok territory. Although these adjacent groups accessed similar resources, they maintained distinct cultural practices and spoke different languages. The land provided these two groups with an abundance of natural resources. The Koi controlled their territory at the southeastern extent of Clear Lake near the Cache Creek outlet, now part of Anderson Marsh State Historic Park, from a permanent settlement on Koi Island (now known as Indian Island). Lake Miwok also occupied villages near today's Lower Lake and Middletown in their territory south of Cache Creek. Similar to other California Native American groups, the Southeastern Pomo and Lake Miwok employed a variety of tools, implements, and enclosures for fishing, hunting, collecting, and processing natural resources (Callaghan 1978; Kroeber 1925; McLendon and Oswalt 1978; cited in Natural Investigations Company 2020).

The traditional culture and lifeways of the Southeastern Pomo and Lake Miwok were disrupted beginning in the early 1800s as part of Spanish exploration, settlement, and missionization, by disease epidemics in the 1830s that swept through the densely populated region and decimated native populations, by massacres or imprisonment by the U.S. Calvary and ranchers, and by forced labor and increasing settlement and ranching that drastically altered their subsistence strategies. Even though the Lower Lake Rancheria had been secured by the U.S. government for the Koi people in 1916 after their island home had been overrun by Euro-Americans by the 1870s, the majority was erroneously sold in 1956 by the U.S. Congress to Lake County to build an airport. Today, the Koi Nation of the Lower Lake Rancheria remains landless. The Lake Miwok also found themselves landless and homeless as newcomers settled in Lake County and the Middletown area in the 1800s. Tribal members initiated the purchase of land in 1910 that today includes descendants of other indigenous groups, including Pomo, on the Middletown Rancheria.

Historic Setting

The history of the project region is tied to agriculture, ranching, mining, and the tourist industry. By the mid-1800s, settlers were tending cattle, farming, and planting fruit and nut orchards and vineyards. In the mid- to late-1800s mining of mercury, borax, and sulfur also supported the county's economy. Borax Lake was the first source of the mineral mined in California. The Sulphur Bank Mine near Clearlake Oaks was an important producer of sulfur and mercury. By the latter half of the 1800s, the tourist industry had begun to flourish, with visitors ferried by steamers around the towns lining the shores of Clear Lake or partaking of the waters at a growing number of health resorts and spas blossoming at the region's mineral springs. Although the 1906 earthquake caused changes to the hot springs and many resorts closed, the popularity of "auto camps" in the 1940s also drew visitors to the area around Clear Lake (Natural Investigations Company 2020).

Today's City of Clearlake, incorporated in 1980, had become known as a resort destination and grew slowly outward from the first resorts established on the shores of the lake in the late 1800s. KCWD was founded in 1961 and serves the south and east portions of the city, with an average of 1,800 connections. Anderson Marsh State Historic Park, which includes the southwest corner of the city and continues south within the community of Lower Lake, was established in 1982. The park preserves a historic-era ranch complex, initially settled in 1855, a natural tule marsh and oak woodland area, and over 20 prehistoric archaeological sites.

Results of Background Research and Survey

On March 20, 2018, a records search was completed by the Northwest Information Center (NWIC) of the California Historical Resources Information System at Sonoma State University in Rohnert Park. The NWIC is the official repository for cultural resource reports and records for Lake County. The records search, completed at the request made by Natural Investigations Company, included the project site and a 0.5-mile radius. The NWIC search results found 17 prior investigations overlapped portions of the project site and identified four cultural resources previously recorded within portions of the project site (Natural Investigations Company 2020).

The following table provides a summary of these four previously cultural resources within the project site, and whether each resource has been listed in, or has been determined eligible for listing in the National Register of Historic Places (NRHP) or California Register of Historical Resources (CRHR).

Known Cultural Resources within Project Site		
Primary No. (Trinomial)	**Brief Description**	**NRHP/CRHR Eligibility Status**
P-17-00026 (CA-LAK-510)	Prehistoric habitation site	Contributor to Anderson Marsh Archaeological District (P-17-02627) listed in 1978 in NRHP and CRHR (status code 1D)
P-17-00098 (CA-LAK-73/H)	Prehistoric and ethnohistoric site, with Lower Lake Pomo Indian Cemetery and former Lower Lake Rancheria village of Bedai (Budai)	Contributor to Upper Cache Creek Archaeological District determined eligible for NRHP listing in 1991, listed in CRHR (status code 2D2)
P-17-00247 (CA-LAK-225)	Prehistoric lithic scatter	Assumed eligible for purposes of this project
P-17-02627	Anderson Marsh Archaeological District	Listed in NRHP and CRHR in 1978 (status code 1S); eligible for NRHP listing in 1986, listed in CRHR (status code 2S2)

Archival research indicates the project vicinity around Clear Lake was being divided and settled by immigrants in the mid- to late-1800s. Historic maps show earlier alignments for Dam Road and Lake Street, while aerial photographs show development was relatively slow until the early 1990s. By 1982, only a few scattered residences and the mobile home park were present along Dam Road. The distribution of buildings and road networks on the 1993 aerial and topographic map approximates present-day observations (Natural Investigations Company 2020).

An intensive-level pedestrian survey of the project site along the paved segment of Dam Road, plus a 10 to 15-foot wide buffer along the unpaved shoulders, was conducted by Natural Investigations Company on December 19, 2019. Survey transects were spaced apart at intervals no greater than 15 meters. All visible ground surface was carefully examined for cultural material, soil discoloration that might indicate the presence of a cultural midden, soil depressions and features indicative of the former presence of structures or buildings, or historic-era debris. Ground visibility outside the asphalted surface was poor to moderate, limited by vegetation cover. The project site has been disturbed by grading and construction of Dam Road, aboveground and belowground utility installations, adjacent residential and commercial development, and by a network of intersecting roads. Other than the four resources previously mentioned, no other prehistoric or ethnographic sites, no tribal cultural resources, no built-environment resources, and no historic-era archaeological resources were identified during the survey or through the background research as being located within the project site (Natural Investigations Company 2020).

As detailed in the cultural resources report discussing the results of the background research and pedestrian survey, Natural Investigations Company (2020) concluded that:

- P-17-00026 (CA-LAK-510): Prior subsurface testing has demonstrated there are no principal components of this prehistoric habitation site in the project within Dam Road that contribute importantly to its significance and listing as a contributor to the Anderson Marsh Archaeological District, which is listed in the NRHP and the CRHR. Only a fraction of the site is located within Dam Road, and that portion has been previously disturbed by construction of the road, existing utilities beneath the road surface, and adjacent modern development. The project will not diminish the integrity and significance of this historical resource, will not change the character of physical features within the resource's setting, and will not introduce any visual, atmospheric, or audible elements out of character with existing conditions that would diminish the integrity of significant features. The project will thus not cause a substantial adverse change in the significance of this historical resource.

- P-17-00098 (CA-LAK-73/H): The principal ethnohistoric components that contribute importantly to this site's significance and its listing as a contributor to the Upper Cache Creek Archaeological District, which has been determined eligible for NRHP and CRHR listing, are not located in the project within Dam Road. Only a fraction of the site is located within Dam Road, and that portion has been previously disturbed by construction of the road, existing utilities beneath the road surface, and adjacent modern development. The project will not diminish the integrity and significance of this historical resource, will not change the character of physical features within the resource's setting, and will not introduce any visual, atmospheric, or audible elements out of character with existing conditions that would diminish the integrity of significant features. The project will thus not cause a substantial adverse change in the significance of this historical resource.

- P-17-00247 (CA-LAK-225): This sparse prehistoric lithic scatter site is assumed eligible for NRHP and CRHR listing, without further investigation, for purposes of the current project. Only a fraction of the site is located within Dam Road, and portion has been disturbed by Dam Road, underground utilities, and adjacent modern development. The project will not diminish the integrity and significance of this historical resource, will not change the character of physical features within the resource's setting, and will not introduce any visual, atmospheric, or audible elements out of character with existing conditions that would diminish the integrity of significant features. The project will thus not cause a substantial adverse change in the significance of this historical resource.

- P-17-02627: Prior subsurface testing has demonstrated there are no principal components of the Anderson Marsh Archaeological District in the project within Dam Road that contribute importantly to its significance and listing in the NRHP and CRHR. Only a fraction of the District is located within Dam Road, and that portion has been previously disturbed by construction of the road, existing utilities beneath the road surface, and adjacent modern development. The project will not diminish the integrity of or alter the physical or existing visual characteristics of this expansive District. The project will thus not cause a substantial adverse change in the significance of this historical resource.

The sensitivity of the project area within the Dam Road corridor for the overall potential for the presence of archaeological material varies from moderate to high. The project is located within a markedly disturbed area that is underlain by bedrock formed thousands of years prior to the presence of humans in this region, and by colluvial soils lacking buried soils that represent former stable landscapes. Based on the results of previous investigations and natural and anthropogenic factors (e.g., modern development, roads, rapid colluviation, secondary deposition, etc.) that have disturbed, and possibly destroyed, any archaeological record within the Dam Road corridor, the discovery of intact cultural deposits by implementation of the project would appear to be low.

Native American Outreach

Natural Investigations Company contacted the Native American Heritage Commission (NAHC), requesting a search of their Sacred Lands File for traditional cultural resources within or near the project site. The reply from the NAHC, dated October 30, 2019, states that their search was positive for the presence of Native American sacred lands in the project vicinity. Specific locational information was not provided, and the NAHC recommended contacting the Elem Indian Colony Pomo Tribe directly for information.

By letters dated December 5, 2019, KCWD notified five tribes of the project pursuant to AB 52: Big Valley Band of Pomo Indians, Elem Indian Colony Pomo Tribe, Koi Nation of Northern California, Middletown Rancheria, and Mishewal-Wappo Tribe of Alexander Valley. By letters dated November 20, 2019, Natural Investigations Company also contacted each of the five tribes to inform them of the NAHC response and requesting any information regarding sacred lands or other heritage sites that might be impacted by the proposed project. Responses to letters and voice mail messages have not been received from Big Valley Band

of Pomo Indians or Mishewal-Wappo Tribe of Alexander Valley. Responses received from three of the tribes is summarized below.

- Elem Indian Colony Pomo Tribe: During a telephone call on November 12, 2019, Sarah Garcia said she would discuss the project with tribal members and then reply further. On December 10, 2019, Mr. Lamont Brown, the tribe's Environmental Cultural Specialist, indicated the tribe would be responding per the AB 52 notification and provided a Cultural Resources Preservation Agreement used for a different KCWD project.

- Middletown Rancheria: On December 10, 2019, Ryan Peterson, Project Coordinator, responded that the project does fall within the tribe's area of concern and requested consultation pursuant to AB 52. On December 9, 2019, Mr. Peterson stated in a telephone call that a tribal member would be joining the survey and to notify him of the date. He was notified of the survey schedule via email later the same day.

- Koi Nation of Northern California: During a telephone call on November 16, 2019, Dino Beltran expressed the tribe's concern about the project and arranged for an onsite meeting for tribal consultation. Koi Nation representatives, Darin Beltran, Dino Beltran, Judy Morgan-Faber, and Nora Morinda, plus Dr. John Parker were present at the onsite meeting held on November 20, 2019, and discussed their concerns and recommendations. Dino Beltran expressed concern that the current boundary of the Lower Lake Pomo Indian Cemetery south of Dam Road is not accurate, that he has knowledge of skeletal remains eroding out of existing slopes under the current cemetery fence, and the possibility of existing burials underneath Dam Road. Dino Beltran also confirmed that the immediate area is "the center of the Koi Nation" and of extreme importance to their culture and was inhabited by the Koi Nation as recently as 1959. The Koi Nation considers this area to be highly sensitive and requested a Tribal Monitor be present to monitor all ground-disturbing activity for the project.

Representatives of the Koi Nation and Middletown Rancheria were present during the intensive-level pedestrian survey of the project site conducted by Natural Investigations Company on December 19, 2019. No tribal cultural resources listed in or eligible for listing in the CRHR, or listed in a local register, were identified in the project site during the pedestrian survey, through the background research, or by the tribal representatives.

Consultation regarding the project in accordance with AB 52 by KCWD with the three responding tribes is ongoing. Mitigation measures, however, were recommended by Elem Indian Colony Pomo Tribe, Koi Nation of Northern California, and Middletown Rancheria in the event resources are discovered during construction.

DISCUSSION

5a) No historical resources, herein referring to historic-era architectural or built-environment resources, were identified through background research or during the pedestrian survey of the project site (Natural Investigations Company 2020). Therefore, no impact would occur to historical resources and no mitigation is necessary.

5b) Four archaeological resources, which are listed in or found eligible for listing in the NRHP and CRHR and thus qualify as historical resources of an archaeological nature, were identified in the project site through the background research and pedestrian survey: P-17-00026 (CA-LAK-510), P-17-00098 (CA-LAK-73/H), P-17-00247 (CA-LAK-225), and P-17-02627 (Anderson Marsh Archaeological District) (Natural Investigations Company, 2020). Only a fraction of each of these resources is mapped in the project within previously disturbed Dam Road. No principal components of these resources will be directly or indirectly impacted by the project. The project within Dam Road would not have a substantial adverse change on the overall historic

character, integrity, or setting of these four historical resources. Any effect of the project to these resources would therefore be less than significant.

As the project is located in a region where significant prehistoric and ethnohistoric cultural resources have been recorded, there remains a potential that undocumented cultural resources could be unearthed or otherwise discovered during ground-disturbing and other construction activities associated with the project. Inadvertent discovery or damage to archaeological resources could be a significant impact. Implementation of the following mitigation would reduce this impact to a less-than-significant level.

c) There is no evidence that any prehistoric, ethnohistoric, or historic-era marked or unmarked human interments are present within the project site, which is the previously disturbed Dam Road corridor. Based on the background research and pedestrian survey, however, the Lower Lake Pomo Indian Cemetery is adjacent to the south side of Dam Road in close proximity to the project site (Natural Investigations Company 2020). Representatives of the Koi Nation have expressed a concern that modern development may have affected the cemetery boundary (see Section 18 on Tribal Cultural Resources). There is thus a potential for unmarked, previously unknown Native American or other graves to be present outside the current fenced cemetery boundary and to be uncovered during construction activities. California law recognizes the need to protect Native American and historic-era human burials, skeletal remains, and grave-associated items from vandalism and inadvertent destruction and any substantial change to or destruction of these resources would be a significant impact. Implementation of the following mitigation would reduce this impact to a less-than significant level.

MITIGATION

Mitigation Measure CUL-1: Worker Awareness Training for Cultural Resources.
A consultant and construction worker cultural resources awareness brochure and training program for all personnel involved in project implementation shall be developed in coordination with interested Native American Tribes. The brochure shall be distributed and the training will be conducted in coordination with qualified cultural resources specialists and Native American Representatives and Monitors from culturally affiliated Native American Tribes before any stages of project implementation and construction activities begin on the project site. The program shall include relevant information regarding sensitive tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The worker cultural resources awareness program shall also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and shall outline what to do and whom to contact if any potential archaeological resources or artifacts are encountered. The program shall also underscore the requirement for confidentiality and culturally-appropriate treatment of any kind of significance to Native Americans and for behavior consistent with Native American Tribal values.

Mitigation Measure CUL-2: Cultural Resources Discovery and Archaeological Monitoring Plan.
Due to the archaeological sensitivity of the area, a Cultural Resources Discovery and Archaeological Monitoring Plan (Discovery & Monitoring Plan) shall be prepared prior to the start of any ground-disturbance for the project. A qualified professional archaeologist (36 CFR 61) shall prepare the Discovery & Monitoring Plan with input by the Koi Nation of Northern California and Middletown Rancheria. The Discovery & Monitoring Plan shall be intended to resolve adverse effects to archaeological resources that might be encountered during construction by establishing a Research Design and Thresholds of Significance with which to analyze any newly identified cultural sites, deposits, or features. The Discovery & Monitoring Plan shall include a monitoring component and shall outline monitoring procedures and responsibilities for both Archaeological Monitors and Native American Monitors during ground disturbance for the construction phase of the project. The Archaeological Monitoring Program shall be in place during the construction phase of the

project, and shall ensure direct or indirect impacts to known historical resources or to previously unidentified resources are avoided, minimized, or mitigated by additional work, such as data recovery excavation. The Koi Nation of Northern California and Middletown Rancheria shall be apprised of the construction schedule in order to provide Tribal Monitors for construction or ground-disturbing activity for the project. In the event of a discovery, ground-disturbing activities shall halt within a 50-foot radius of the find to evaluate eligibility, assess effects, and potentially remove the find with consultation and approval by the relevant regulatory agencies of appropriate treatment measures. As relevant, the Native American Monitor shall contribute to evaluation of a discovered cultural resource. In order to assure complete understanding by construction supervisory personnel of the sensitivity of the project site, the requirement for Archaeological and Native American monitoring shall be clearly stated on the construction plans or blueprints for the project. Such construction plans or blueprints showing this requirement shall be actively used during all construction or ground-disturbing activity for the project. The Discovery & Monitoring Plan shall be approved by KCWD or other relevant regulatory agencies prior to the start of any project-related ground disturbance.

Mitigation Measure CUL-3: Inadvertent discovery of historical and archaeological resources.
If buried cultural deposits (e.g., prehistoric stone tools, milling stones, historic glass bottles, foundations, cellars, privy pits) are inadvertently discovered during project implementation, a qualified professional archaeologist (36 CFR 61) shall be notified immediately and all ground-disturbing activity within 50 feet of the resources shall be halted until the archaeologist can assess the significance of the find. As relevant, the Native American Monitor shall contribute to evaluation of a discovered cultural resource. If the discovery proves to be significant (i.e., because it is determined to constitute a historical resource, unique archaeological resource, or tribal cultural resource), appropriate procedures to protect the integrity of the resource and ensure that no additional resources are affected may be warranted and would be discussed in consultation with the property owner, KCWD, or any other relevant regulatory agency. Procedures could include but would not necessarily be limited to preservation in place, archival research, subsurface testing, or contiguous block unit excavation and data recovery. During evaluation or mitigative treatment, ground disturbance and construction work could continue on other parts of the project site but not resume in the vicinity of the find until the property owner, KCWD or other relevant regulatory agency provides written permission.

Mitigation Measure CUL-4: Inadvertent discovery of human remains.

In accordance with the California Health and Safety Code (CHSC), Section 7050.5, and the Public Resources Code (PRC) 5097.98, regarding the discovery of human remains, if any such finds are encountered during project construction, all work within the vicinity of the find shall cease immediately, a 50-foot-wide buffer surrounding the discovery shall be established, and KCWD shall be immediately notified. The County coroner shall be contacted immediately to examine and evaluate the find. If the coroner determines that the remains are not recent and are of Native American descent, the Coroner will notify the Native American Heritage Commission, which will determine and notify a Most Likely Descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

6. ENERGY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation?	☐	☐	☐	☒
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

DISCUSSION

6a,b) The construction period would be just a few months and require only temporary use of heavy equipment. Operation of the project does not require any energy because water pressure is provided by gravitational head. Thus, construction and operation of the Proposed Project would not result in excessive or inefficient consumption of energy. Since the Proposed Project is simply the installation of an 8-inch PVC water pipeline along an existing road, energy usage will remain the same. No agency plans for renewable energy resources or energy efficiency plans would be impacted as a result of implementation of the Proposed Project.

MITIGATION

No mitigation is required.

7. GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

SETTING

The Project Area is located within the California Coast Ranges Section, which is contained within the Pacific Border Physiographic Province. The surficial geology of the Project Area is Quaternary volcanic flow rocks, unit 3 (Clear Lake Volcanic Field) (Quaternary (0-4 Ma) (Jennings et al. 1977). According to the Natural Resources Conservation Service's soil database "SSURGO/STATSGO", there is one mapped soil unit within the parcel: "Benridge-Sodabay loams", which has 8 to 15 percent slopes and is well drained.

DISCUSSION

7 a-d) The Parcel is not within a mapped fault zone, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning maps. However, the nearest mapped earthquake fault is an unnamed fault which intersects the western end of the Project Area. The California Geological Survey Information Warehouse / Regulatory Maps Portal was queried in February 2020. The Project Area and surrounding area is within or near a mapped landslide region as described in the following report: Landslides and Geology along Cache Creek Between Clear Lake and Capay Valley, Colusa, Lake, and Yolo Counties, California (1990). However, the Project is located in a relatively flat area with no steep slopes that could be considered a landslide risk. Construction of the proposed project will require conformance to applicable seismic building standards (e.g. California Building Code and International Building Code seismic building standards). These standards vary by zone and require structures and infrastructure to be built to withstand seismic effects such as rupture, shaking, or

liquefaction. Therefore, the proposed project would have a less than significant impact regarding seismic forces and failures.

During construction of the proposed project, trench digging activities could result in minor soil erosion or the loss of topsoil. To address soil erosion, an erosion control plan and spill control plan will be implemented. The area of disturbance from project implementation is anticipated to be a maximum of 1.5 acres. For any project that disturbs 1 acre or more, the project proponent must enroll under the State Water Quality Control Board's Construction General Permit prior to the initiation of construction. In conjunction with enrollment under this Permit, a SWPPP, Erosion Control Plan, and a Hazardous Materials Management/Spill Response Plan must be created and implemented during construction to avoid or minimize the potential for erosion, sedimentation, or accidental release of hazardous materials. No mitigation is necessary.

There is no potential for the soils present in the Project Area to be expansive because mapped soil units are high in loam and low in clay. Therefore, the proposed project would have a less than significant impact regarding geologic instability or expansive soils.

7 e) The Project does not involve a residence or human occupation of the site. The project does not include the use of, or construction of, new septic tanks and associated disposal facilities. Portable toilets will be available for construction workers. Therefore, the Project would have no impact upon human waste disposal.

7 f) Setting information and impact conclusions are derived from the paleontological resources assessment performed for this project by Natural Investigations Company (2020). Project plans, geologic maps of the project site, and relevant geological and paleontological literature were reviewed to determine which geologic units are present within the project site and whether fossils have been recovered within the project site or from those or similar geologic units elsewhere in the region. A search for known fossil localities was also conducted on November 14, 2019, through the online collections database of the University of California Museum of Paleontology (UCMP) in order to determine the status and extent of previously recorded paleontological resources within and surrounding the project site (Natural Investigations Company 2020).

The UCMP database indicates there are three vertebrate localities, 140 invertebrate localities, three marine microfossil localities, two fossil plant localities, and 309 Holocene-age microfossil/plant localities in Lake County, none of which are in the project vicinity. The three vertebrate localities have yielded Pliocene-age (4.9–1.8 million years ago) horse, deer, ground sloth, and racoon specimens from the Cache Formation and an extinct shark specimen from the Paleocene-age (62–55 million years ago) Martinez Formation.

None of the rock units listed in the UCMP database for Lake County are present within the project site. The project site is underlain by Pleistocene-age dacite of Cache Creek (dcc), deposited approximately 400,000 years ago and part of the Clear Lake volcanic field (Natural Investigations Company 2020). The igneous rocks that underlie the project site have a zero sensitivity for paleontological resources, as fossils are absent due to the high temperature and pressure conditions associated with their formation. Additionally, the project site contains no unique geologic features.

No paleontological resources or unique geologic features are known to exist within or near the project site (Natural Investigations Company 2020). As noted, the project site is underlain by Pleistocene-age dacite that has zero sensitivity for paleontological resources. No mitigation measures for paleontological resources are required.

MITIGATION

No mitigation is required.

8. GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

DISCUSSION

The following air quality impact assessment was performed for this project (bound separately):

- Natural Investigations Co. 2020. Air Quality Impact Assessment for the Cache Creek Mobile Home Park Water Service Connection Project, Clearlake. 90 pp.

8a,b) LCAQMD does not have a greenhouse gas emissions threshold. Greenhouse gas thresholds exist for other air districts. Sutter County (2016) has determined that projects that generate less than 3,000 metric tons CO_{2e} per year will have a less than significant impact on greenhouse gas emissions. BAAQMD CEQA Guidelines (2017) have a threshold of 10,000 metric tons CO_{2e} per year. As modeled by CalEEMod, the project will generate approximately 79 metric tons CO_{2e} per year in the construction phase and 15 metric tons CO_{2e} per year in the operational phase. A comparison with these thresholds of significance indicates that project emissions are less than significant for both the construction and operational phases.

LCAQMD does not have any applicable plans to reduce emissions of greenhouse gasses. It was assumed that if the project exceeded greenhouse gas thresholds, then it would conflict with the goal of reducing greenhouse gasses. A comparison with these thresholds of significance indicates that project emissions are less than significant for both the construction and operational phases. Therefore, the project would have a less than significant impact upon any plan to reduce greenhouse gas emissions.

MITIGATION

No mitigation is required.

9. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the Project Area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

DISCUSSION

9a,b) During construction of the proposed project, surface water quality has a minor potential to be degraded from the accidental release of hazardous materials or petroleum products from sources such as heavy equipment servicing or refueling. To address potential indirect impacts to receiving water bodies from pollution during construction of the proposed project, an erosion control plan and spill control plan will be implemented. The area of disturbance from project implementation is anticipated to be a maximum of 1.5 acres. For any project that disturbs 1 acre or more, the project proponent must enroll under the State Water Quality Control Board's Construction General Permit prior to the initiation of construction. In conjunction with enrollment under this Permit, a Storm Water Pollution Prevention Plan, Erosion Control Plan, and a Hazardous Materials Management/Spill Response Plan must be created and implemented during construction to avoid or minimize the potential for erosion, sedimentation, or accidental release of hazardous materials. Operation of the project will not involve any significant quantities of hazardous materials. No mitigation is necessary.

9c) The project uses will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school, because the project has no emissions and the project area is more than one-quarter mile away from the nearest school.

9d) The following hazardous materials databases were queried in February 2020:

- EnviroStor is an online search and Geographic Information System tool for identifying sites that have

known contamination or sites for which there may be reasons to investigate further. The EnviroStor database includes the following site types: Federal Superfund sites (National Priority List); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites.

- GeoTracker is a geographic information system maintained by the California State Water Resources Control Board (SWRCB) that provides online access to environmental data at the Internet address (URL) = http://geotracker.waterboards.ca.gov/.

The Project Area is not included on a list of hazardous materials sites. Some properties in the vicinity are listed. The closest site is a closed case (Shaw's Shady Acres) approximately 700 feet west of the Project Area.

9e) The project area is not within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport. The nearest public airstrip or airport is the Lampson Field Airport which is over 16 miles to the northwest of the Project Area. The proposed project will not create a safety hazard or loud noises.

9f) The project will not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, because the project does not involve the construction of barriers such as walls or buildings in the path of emergency access. The new water pipeline will only involve digging a trench along Dam Road.

9g) The Project Area is in a Local Responsibility Area, not a State Responsibility Area. A portion of the Project Area is within, or near, an area designated "very high fire hazard severity zone" (California Department of Forestry and Fire Protection, 2020). However, existing laws, such as requirements for maintenance of defensible space around structures would reduce potential wildfire risks. The project will not expose people or structures to a significant risk of loss, injury or death involving wildland fires. No new buildings are proposed that house humans. There is no increased risk for wildfire due to operation of the Proposed Project. Adherence with existing regulations and best management practices, such as requirements for maintenance of defensible space, the use of spark arrestors, and implementation of a construction fire safety plan, would address any fire risk. Implementation of the proposed project will have a less than significant impact upon the risk of wildfire.

MITIGATION

No mitigation is required.

10. HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site; (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or (iv) impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

SETTING

The KCWD maintains and operates the drinking water system for the City of Clearlake. KCWD currently serves approximately 1,800 metered connections. The District uses a surface water source—the Clear Lake intake plant. Most of this water is used for residential purposes. The new water pipeline is designed to expand KCWD water service to the Cache Creek Mobile Home Park, which is a more reliable and higher quality water supply.

DISCUSSION

10 a) The entire Project Area has upland features and contains no channels or wetlands (i.e., no jurisdictional waters of the United States). Thus, Project construction will not directly impact any surface water bodies. To address potential indirect impacts to receiving water bodies from pollution during construction of the proposed project, an erosion control plan and spill control plan will be implemented. Implementation of the proposed project will have a less than significant impact upon water quality.

10 b) The Proposed Project does not involve groundwater. There will be no impacts to groundwater resources.

10 c) Implementation of the Proposed Project will not alter drainage patterns because no grading will occur and minimal new infrastructure will be constructed, and this will be under an existing road. To address potential indirect impacts to receiving water bodies from pollution during construction of the proposed project, an erosion control plan and spill control plan will be implemented.

The area of disturbance from project implementation is anticipated to be a maximum of 1.5 acres. For any project that disturbs 1 acre or more, the project proponent must enroll under the State Water Quality Control Board's Construction General Permit prior to the initiation of construction. In conjunction with enrollment under this Permit, a Storm Water Pollution Prevention Plan, Erosion Control Plan, and a Hazardous Materials Management/Spill Response Plan must be created and implemented during construction to avoid or minimize the potential for erosion, sedimentation, or accidental release of hazardous materials. The proposed project will have a less than significant impact upon drainage patterns.

10 d) The project will not be impacted by seiche or tsunami because the project is not adjacent to any body of water that has the potential of seiche or tsunami. The project site is not near the ocean or on a steeply sloped hill. The Proposed Project will not use hazardous materials or any pollutants which could risk release into the environment. Implementation of the proposed project will have no impact on the environment from inundation from flooding, seiche, or tsunami.

10 e) In regards to surface water, the Project Area is located within the Water Quality Control Plan for the Sacramento and San Joaquin River Basins. The Basin Plan establishes water quality objectives. Water quality will be protected by implementation of an erosion control plan during construction. In the operational phase, the project will not discharge any water or pollutants. The Proposed Project does not involve groundwater. There will be no impacts to groundwater resources. Implementation of the proposed project will have no impact upon water quality plans.

MITIGATION

No mitigation is required.

11. LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

DISCUSSION

11 a,b) The proposed project site is zoned by the County as "City." The proposed project is an existing urban land use and does not conflict with any County land use plan, policy, or regulation. The project will not physically divide an established community because the project does not involve the construction of barriers, such as new roads, and because no one will be displaced from their homes. The proposed project is the installation of a waterline. There will be no impacts to land use or planning.

MITIGATION

No mitigation is required.

12. MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

DISCUSSION

12 a,b) The Surface Mining and Reclamation Act requires that local jurisdictions enact planning procedures to guide mineral conservation and extraction at particular sites and to incorporate mineral resource management policies into their general plans. On this basis, it is presumed that counties would, as needed and as applicable, encourage the conservation (i.e., protection from incompatible land uses) of areas designated as having substantial potential for mineral extraction and discourage development that would substantially preclude the future development of mining facilities in these areas. The potential for the extraction of substantial mineral resources from lands classified by the State as areas that contain mineral resources (Mineral Resource Zone [MRZ]-3) would be considered by counties at a local level when making land use decisions.

The following Mineral Lands Classification data portal was queried in February 2020:

- The Surface Mining and Reclamation Act Mineral Lands Classification data portal is a geographic information system provided by the Department of Conservation through data maintained by the California Geological Survey. This data portal provides online access to environmental data at the Internet address (URL) = http://maps.conservation.ca.gov/cgs/informationwarehouse/.

The Mineral Lands Classification database does not designate the Project Area or surrounding parcels as a mineral resource zone. Cache Creek is a source of aggregates. The Proposed Project does not involve mineral extraction. The Proposed Project would have no impact upon mineral resources.

MITIGATION

No mitigation is required.

13. NOISE

Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐

DISCUSSION

13 a, b)
The project area is not adjacent to any noise-sensitive land uses (residential, daycare, school, medical, etc.). Noise sources consist of vehicular traffic along adjacent roads, Dam Road and Highway 53, and occasional noise from wind, boats, and airplanes. The duration of construction is just a few months but does involve heavy machinery such as a backhoe, compactor, and paving equipment. Construction will not involve extremely noisy activities such as pile driving or explosives. Once operational, vehicular traffic will be limited to occasional service trips. Therefore, construction and operation of the proposed project will have a less than significant noise or vibration impact.

MITIGATION

No mitigation is required.

14. POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

DISCUSSION

14 a,b) Clearlake is a city in Lake County and is 4.5 miles north-northwest of Lower Lake. The 2010 United States census reported Clearlake population was 15,250. The population density was 1,486 people per square mile. The racial makeup of Clearlake is predominantly white/Caucasian with a small proportion of African American and Native American (less than 5%). Median household income of approximately $19,863 per year in 2015. KCWD currently serves the majority of the city's population through 1,800 metered connections.

The project will not induce population growth in the area either directly or indirectly. The project is not proposing any new residential development and the project will not significantly expand water infrastructure which might stimulate population growth. The proposed use will not displace substantial numbers of existing people or housing units because the project site is within a previously developed parcel and will not involve the removal of housing or displacement of people. Implementation of the proposed project will have no impact upon population growth or the displacement of people or housing. The project is designed to enhance the water supply of a residential community, resulting in a beneficial impact upon all groups irrespective of race or income.

MITIGATION

No mitigation is required.

15. PUBLIC SERVICES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
i) Fire protection?	☐	☐	☐	☒
ii) Police protection?	☐	☐	☐	☒
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒

DISCUSSION

15 a i-v) The Proposed Project would not stimulate population growth or substantially increase demand for public services. The Project Area is not near a park or other public facility. The Proposed Project is simply the installation of an 8-inch waterline along an existing road. Implementation of the proposed project would have a beneficial impact upon existing water users by providing them with a more efficient water supply. Therefore, no adverse impact to public services will occur.

MITIGATION

No mitigation is required.

16. RECREATION

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

DISCUSSION

16 a-b) The Project Area is not adjacent to public parks or recreational facilities. The nearest parks and recreational facilities are: Anderson Marsh State Historic Park, 0.2 miles to the southwest; and Cache Creek, 0.4 miles to the southeast. The Proposed Project would not involve parks or recreational facilities. The proposed project would not have any potential to cause or accelerate physical deterioration of recreational facilities, or include or require construction, expansion, or increased use of such facilities.

MITIGATION

No mitigation is required.

17. TRANSPORTATION

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with a plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths?	☐	☐	☒	☐
b) For a land use project, would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(1)?	☐	☐	☐	☒
c) For a transportation project, would the project conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(2)?	☐	☐	☐	☒
d) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☒	☐

DISCUSSION

17 a-e) The Project Area is accessed by a public, two-lane paved road – Dam Road. Most regional eastbound and westbound traffic utilizes Highway 29, and northbound and southbound traffic uses Highway 53. The road closest to the Project Area, Dam Road, is used primarily for local access to residences.

Construction of the proposed project is not anticipated to generate substantial numbers of vehicle trips. The daily trip estimate is 4 to 10 roundtrips per day with pickup trucks and equipment operators for up to two months, and 1 roundtrip per day for a concrete or asphalt truck for 2 to 4 days and the same for material delivery. This low number of total trips resulting from construction will not lower the Level of Service on any roadway. Construction of the proposed project will require a lane closure, but not a full road closure. To ensure that transportation and emergency access is not disrupted, a traffic control plan will be implemented. The proposed project does not propose any new development, construction or physical change to the environment that would directly or indirectly result in any impacts to on-ground transportation and traffic, including emergency access. There will be a less than significant impact to circulation systems and emergency access.

MITIGATION

No mitigation is required.

18. TRIBAL CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☒	☐	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

DISCUSSION

The following cultural resources assessment was prepared for this project:

- Natural Investigations Company. 2020. Cultural Resources Inventory and Effects Assessment for the Konocti County Water District Cache Creek Mobile Home Estates Project, City of Clearlake, Lake County, California. Prepared for Konocti County Water District, Clearlake, CA.

18a) Natural Investigations Company contacted the Native American Heritage Commission (NAHC), requesting a search of their Sacred Lands File for traditional cultural resources within or near the project site. The reply from the NAHC, dated October 30, 2019, states that their search was positive for the presence of Native American sacred lands in the project vicinity. Specific locational information was not provided, and the NAHC recommended contacting the Elem Indian Colony Pomo Tribe directly for information.

By letters dated December 5, 2019, KCWD notified five tribes of the project pursuant to Assembly Bill 52 (AB 52): Big Valley Band of Pomo Indians, Elem Indian Colony Pomo Tribe, Koi Nation of Northern California, Middletown Rancheria, and Mishewal-Wappo Tribe of Alexander Valley. By letters dated November 20, 2019, Natural Investigations Company also contacted each of the five tribes to inform them of the NAHC response and requesting any information regarding sacred lands or other heritage sites that might be impacted by the proposed project. Responses to letters and voice mail messages have not been received from Big Valley Band of Pomo Indians or Mishewal-Wappo Tribe of Alexander Valley. Responses received from three of the tribes is summarized below.

- Elem Indian Colony Pomo Tribe: During a telephone call on November 12, 2019, Sarah Garcia said she would discuss the project with tribal members and then reply further. On December 10, 2019, Mr. Lamont Brown, the tribe's Environmental Cultural Specialist, indicated the tribe would be responding per the AB 52 notification and provided a Cultural Resources Preservation Agreement used for a different KCWD project.

- Middletown Rancheria: On December 10, 2019, Ryan Peterson, Project Coordinator, responded that the project does fall within the tribe's area of concern and requested consultation pursuant to AB 52. On December 9, 2019, Mr. Peterson stated in a telephone call that a tribal member would be joining the survey and to notify him of the date. He was notified of the survey schedule via email later the same day.

- Koi Nation of Northern California: During a telephone call on November 16, 2019, Dino Beltran expressed the tribe's concern about the project and arranged for an onsite meeting for tribal consultation. Koi Nation representatives, Darin Beltran, Dino Beltran, Judy Morgan-Faber, and Nora Morinda, plus Dr. John Parker were present at the onsite meeting held on November 20, 2019, and discussed their concerns and recommendations. Dino Beltran expressed concern that the current boundary of the Lower Lake Pomo Indian Cemetery south of Dam Road is not accurate, that he has knowledge of skeletal remains eroding out of existing slopes under the current cemetery fence, and the possibility of existing burials underneath Dam Road. Dino Beltran also confirmed that the immediate area is "the center of the Koi Nation" and of extreme importance to their culture and was inhabited by the Koi Nation as recently as 1959. The Koi Nation considers this area to be highly sensitive and requested a Tribal Monitor be present to monitor all ground-disturbing activity for the project.

Representatives of the Koi Nation and Middletown Rancheria were present during the intensive-level pedestrian survey of the project site conducted by Natural Investigations Company on December 19, 2019. No tribal cultural resources listed in or eligible for listing in the CRHR, or listed in a local register, were identified in the project site during the pedestrian survey, through the background research, or by the tribal representatives.

Consultation regarding the project in accordance with AB 52 by KCWD with the three responding tribes is ongoing. Mitigation measures, however, were recommended by Elem Indian Colony Pomo Tribe, Koi Nation of Northern California, and Middletown Rancheria in the event resources are discovered during construction.

No tribal cultural resources listed, or eligible for listing, in the CRHR, or listed on a local register, were identified in the project site through the background research or during the pedestrian survey (Natural Investigations Company 2020). In addition, no tribal cultural resources were identified during consultation by the representatives for the Koi Nation of Northern California, Middletown Rancheria, or Elem Indian Colony Pomo Tribe. Therefore, no impact would occur to previously recorded or known tribal cultural resources. The project would excavate to approximately 46 inches below paved Dam Road. While unlikely, there is the potential to encounter previously unidentified tribal cultural resources during construction. Inadvertent discovery or damage to previously unidentified tribal cultural resources could be a significant impact. Implementation of the following mitigation would reduce this impact to a less-than-significant level.

MITIGATION

Implementation of **Mitigation Measures CUL-1, CUL-2, CUL-3, and CUL-4**, provided in the Cultural Resources Section would ensure that proper procedures would be followed in the event of the discovery of previously unknown tribal cultural resources. Therefore, any impact would be reduced to a less-than-significant level.

19. UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure	☐	☐	☒	☐
e) Negatively impact the provision of solid waste services or impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
f) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

DISCUSSION

19 a-f) The Proposed Project will replace an existing private water supply system by connecting a municipal waterline from KCWD to Cache Creek Mobile Home Estates. The Proposed Project would not significantly expand the KCWD water supply system, and existing water resources are sufficient to serve the community, including during droughts, because the water supply for both systems ultimately derives from the same source. The Proposed Project does not involve any public wastewater or stormwater treatment services, electric power, natural gas, or telecommunications facilities. No significant quantities of solid waste would be generated by the Proposed Project. The Project will comply with all local, state, and federal regulations regarding solid waste during disposal if waste is generated from construction. The Proposed Project does not propose any new development, construction or physical change to the environment that would directly or indirectly result in any impacts to utilities and service systems. Therefore, the Proposed Project will have a less than significant impact upon utilities and service systems.

MITIGATION

No mitigation is required.

20. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

DISCUSSION

20 a-d)

The Public Resources Code includes fire safety regulations that apply to fire hazard areas during the time of year designated as having hazardous fire conditions. During the fire hazard season, these regulations restrict the use of equipment that may produce a spark or fire, require the use of spark arrestors on engines, and specify fire-suppression equipment that must be provided on-site for various types of work in fire-prone areas. Public Resources Code section 4291 provides that a person who maintains a building or structure on land that is covered with flammable material shall at all times maintain defensible space.

The Project Area is in a Local Responsibility Area, not a State Responsibility Area. The Project Area is within, or near, an area designated "very high fire hazard severity zone" (California Department of Forestry and Fire Protection, 2020). However, existing laws, such as requirements for maintenance of defensible space around structures would reduce potential wildfire risks. The project will not expose people or structures to a significant risk of loss, injury or death involving wildland fires. No new buildings are proposed. There is no increased risk for wildfire due to operation of the Proposed Project. Adherence with existing regulations and best management practices, such as requirements for maintenance of defensible space, the use of spark arrestors, and implementation of a construction fire safety plan, would address any fire risk. Implementation of the proposed project will have a less than significant impact upon the risk of wildfire. The topography of the project site and the surrounding area is relatively flat. If a wildfire were to occur within the Project Area and surrounding areas, there would be no increased risk to people or structures due to landslides, flooding, or other post-fire instability issues. The Project Area and surrounding area is within, or near, a mapped landslide region as described in the following report: Landslides and Geology along Cache Creek Between Clear Lake and Capay Valley, Colusa, Lake, and Yolo Counties, California (1990). However, the Project is located in a built environment on a relatively flat area with no steep slopes that could be considered a landslide risk. Implementation of the proposed project will have no impact upon the risk of wildfire or post-fire instability.

MITIGATION

No mitigation is required.

21. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

DISCUSSION

21 a) Environmental Quality. As demonstrated by the preceding analyses and discussions, implementation of the Project, with mitigation measures incorporated, would not degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

21 b, c) Cumulative Impacts and Adverse Effects on Human Beings. The Project would not result in adverse impacts that are individually limited but cumulatively considerable and would not involve substantial adverse effects on human beings, either directly or indirectly. All of these potential effects would be less than significant with implementation of mitigation measures identified in this document and would not contribute in considerable levels to cumulative impacts.

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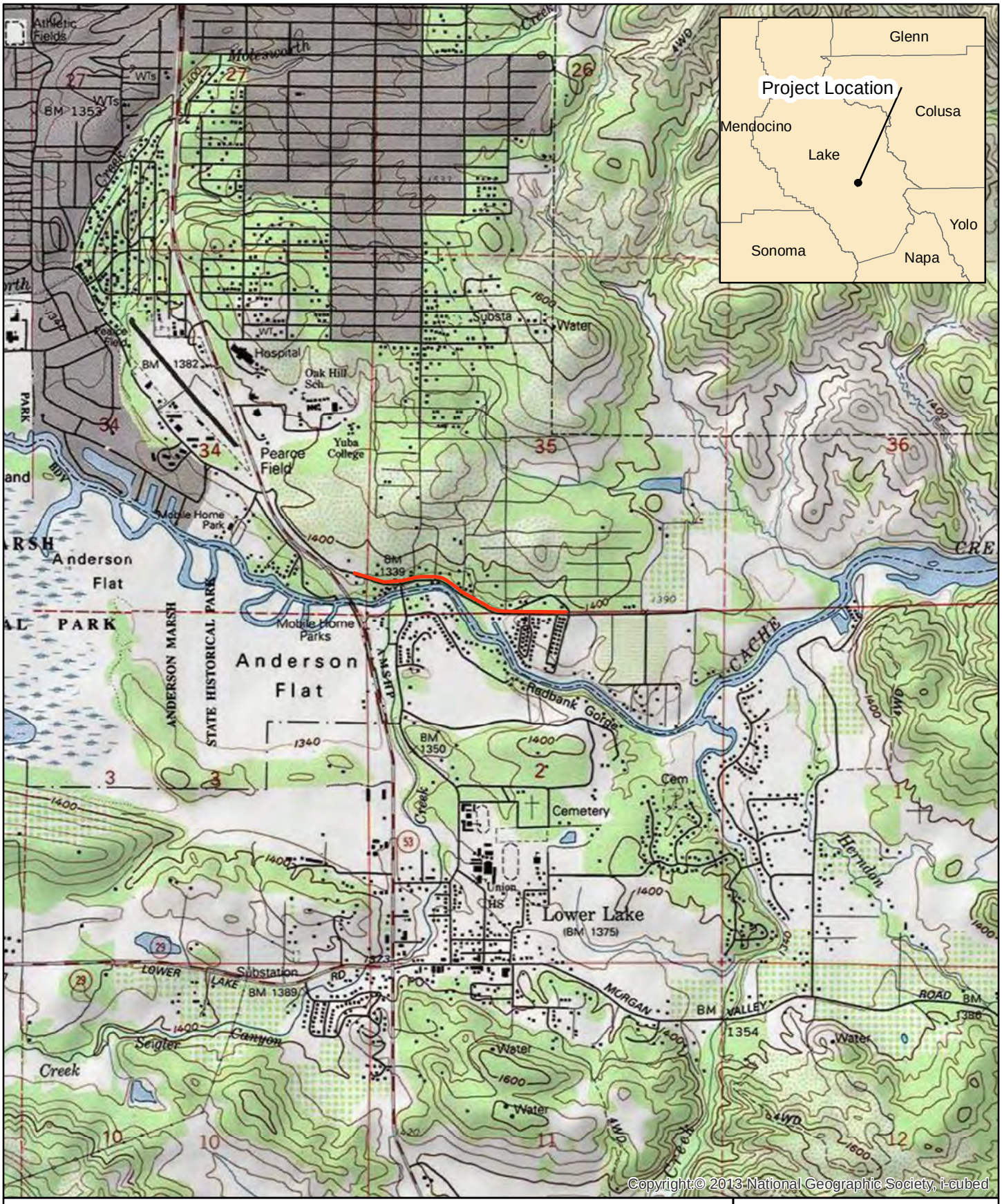
EXHIBITS



Project Area

0 0.5 1 Kilometers

0 0.5 1 Miles

1:24,000

Cache Creek MHP Project Location Map

Natural Investigations Company

Map Date 12/4/2019

Lower Lake 1993 Quadrangle:Township 13N, Range 7W, Section 34, 35, Township 12N, Range 7W, Section 2

Project Alignment

Wetlands and Channels

0 200 400 Meters

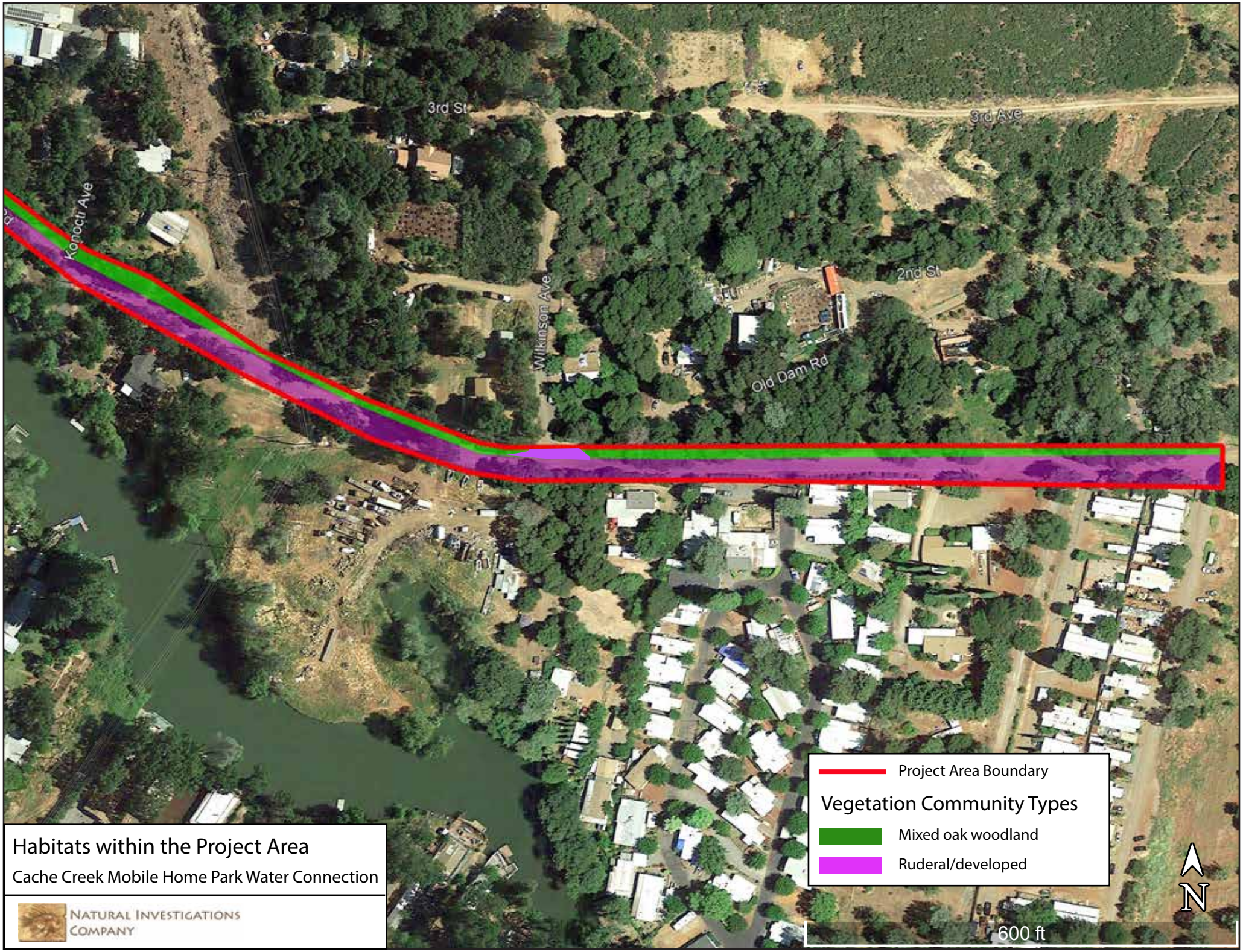
0 750 1,500 Feet

1:7,500

Cache Creek MHP
National Wetlands Inventory
Features Map

Natural Investigations Company

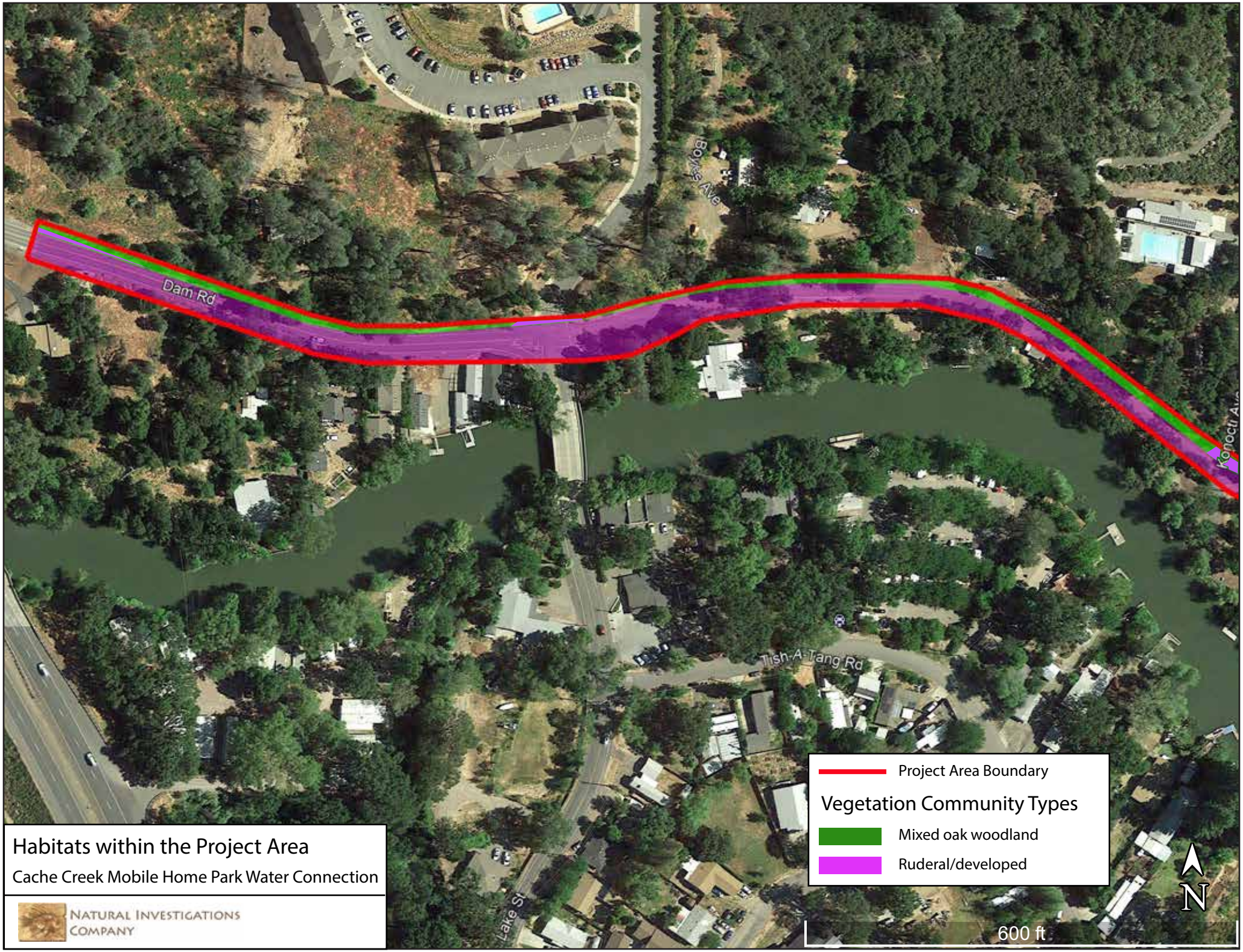
Map Date 12/4/2019 Lower Lake 1993 Quadrangle:Township 13N, Range 7W, Section 34, 35, Township 12N, Range 7W, Section 2



Habitats within the Project Area

Cache Creek Mobile Home Park Water Connection

Natural Investigations Company



Habitats within the Project Area

Cache Creek Mobile Home Park Water Connection

Natural Investigations Company

APPENDIX. BIOLOGICAL RESOURCES ASSESSMENT

BIOLOGICAL ASSESSMENT
FOR THE
CACHE CREEK MOBILE HOME ESTATES
WATER SERVICE CONNECTION PROJECT,
16535 DAM ROAD, CLEARLAKE, CALIFORNIA

June 27, 2020

Prepared for:

Konocti County Water District
15844 35th Avenue, Clearlake, CA 95422
and
State Water Resources Control Board
Division of Financial Assistance

Prepared by:

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TABLE OF CONTENTS

1. INTRODUCTION

1.1. PROJECT LOCATION AND DESCRIPTION

The proposed project would provide safe drinking water distribution by Konocti County Water District (KCWD) to the Cache Creek Mobile Home Estates in Clearlake. The project is the installation of an 8-inch PVC underground water pipeline for approximately 3,420-feet (0.65-miles) in Dam Road to connect the Cache Creek Mobile Home Estates to the KCWD water distribution system. The new pipeline would be installed in Dam Road from the Cache Creek Mobile Home Estates entrance west to the Dam Road/Konocti Avenue intersection. Continuing west beyond Lake Street, the proposed project would replace an existing 4-inch diameter pipe in Dam Road with a new 8-inch diameter pipe. The pipeline would be installed by open-trenching aligned through the existing asphalt surface in Dam Road. The water pipeline would be placed 10 feet horizontally away from an existing sewer pipeline, which is also located within the Dam Road alignment. The trench depth would be approximately 46 inches and the width approximately 20 inches. Excavation and other construction activities would be limited to the existing roadway corridor.

Although the actual project area is a long, narrow trench in the road and a material laydown area on the road shoulder, for this biological assessment, the Project Area was expanded to encompass the entire road section plus a 10-foot buffer on each side of the road. This Project Area is 1.5 acres in size and is the Action Area for federal USFWS consultation.

1.2. PURPOSE AND SCOPE OF ASSESSMENT

In support of the environmental review process for compliance with the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), and the state and federal Endangered Species Acts, Natural Investigations has prepared this assessment to provide information on biological resources within the Project Area. This assessment identifies the biological resources within the Project Area, the regulatory environment affecting such resources, any potential Project-related impacts upon these resources, and identifies mitigation measures to reduce these impacts. The specific scope of services performed for this Biological Resources Assessment consisted of the following tasks:

- Compile all readily-available biological resource information about the Project Area;
- Spatially query state and federal databases for any reported occurrences of special-status species or habitats within the Project Area and vicinity;
- Perform a reconnaissance-level field survey of the Project Area, including photographic documentation;
- Inventory all flora and fauna observed during the field survey;
- Characterize and map the habitat types present within the Project Area, including any potentially-jurisdictional water resources;
- Evaluate the likelihood for the occurrence of any special-status species;
- Assess the potential for the Project to adversely impact any sensitive biological resources;
- Recommend mitigation measures designed to avoid or minimize Project-related impacts; and
- Prepare and submit a report summarizing all of the above tasks.

To comply with SWRCB requirements to assure the implementation of applicable federal environmental authorities listed in the Appendix A (federal cross-cutters) of the Drinking Water SRF Program Guidelines, this assessment also addressed the following statutes:

- Magnuson-Stevens Fishery Conservation and Management Act
- Migratory Bird Treaty Act
- Clean Water Act (Protection of Wetlands)
- Rivers and Harbors Act (Section 10)
- Wild and Scenic Rivers Act
- Wildlife Resources; Endangered Species Act:
- Fish and Wildlife Coordination Act

The scope of services does not include other services that are not described in this Section, such as protocol-level surveys for special-status species.

1.3. REGULATORY SETTING

The following section summarizes applicable regulations of biological resources on real property in California.

1.3.1. Special-status Species Regulations

The United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) implement the Federal Endangered Species Act of 1973 (FESA) (16 USC §1531 et seq.). Threatened and endangered species on the federal list (50 CFR §17.11, 17.12) are protected from "take" (direct or indirect harm), unless a FESA Section 10 Permit is granted or a FESA Section 7 Biological Opinion with incidental take provisions is rendered. Pursuant to the requirements of FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally listed species may be present in the project area and determine whether the proposed project will have a potentially significant impact upon such species. Under FESA, habitat loss is considered to be an impact to the species. In addition, the agency is required to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC §1536[3], [4]). Therefore, project-related impacts to these species or their habitats would be considered significant and would require mitigation. Species that are candidates for listing are not protected under FESA; however, USFWS advises that a candidate species could be elevated to listed status at any time, and therefore, applicants should regard these species with special consideration.

Another federal law, the Magnuson-Stevens Fishery Conservation and Management Act of 1976, was established to conserve and manage fishery resources found off the coast, as well as anadromous species and Continental Shelf fishery resources of the United States, by exercising (A) sovereign rights for the purposes of exploring, exploiting, conserving, and managing all fish within the exclusive economic zone established by Presidential Proclamation 5030, dated March 10, 1983, and (B) exclusive fishery management authority beyond the exclusive economic zone over such anadromous species, Continental Shelf fishery resources, and fishery resources in special areas.

The California Endangered Species Act of 1970 (CESA) (California Fish and Game Code [CFG] §2050 *et seq*., and CCR Title 14, §670.2, 670.51) prohibits "take" (defined as hunt, pursue, catch, capture, or kill) of species listed under CESA. A CESA permit must be obtained if a project will result in take of listed species, either during construction or over the life of the project. Section 2081 establishes an incidental take permit program for state-listed species. Under CESA, California Department of Fish and Wildlife (CDFW) has the responsibility for maintaining a list of threatened and endangered species designated under state law (CFG Code 2070). CDFW also maintains lists of species of special concern, which serve as "watch lists." Pursuant to requirements of CESA, an agency reviewing proposed projects within its jurisdiction must determine whether any state-listed species may be present in the Project Area and determine whether the proposed project will have a potentially significant impact upon such species. Project-related impacts to species on the CESA list would be considered significant and would require mitigation.

CFG Code Sections 4700, 5050, and 5515 designates certain mammal, amphibian, and reptile species "fully protected", making it unlawful to take, possess, or destroy these species except under issuance of a specific permit. The California Native Plant Protection Act of 1977 (CFG Code §1900 *et seq*.) requires CDFW to establish criteria for determining if a species or variety of native plant is endangered or rare. Section 19131 of the code requires that landowners notify CDFW at least 10 days prior to initiating activities that will destroy a listed plant to allow the salvage of plant material.

Many bird species, especially those that are breeding, migratory, or of limited distribution, are protected under federal and state regulations. Under the Migratory Bird Treaty Act of 1918 (16 USC §703-711), migratory bird species and their nests and eggs that are on the federal list (50 CFR §10.13) are protected from injury

or death, and project-related disturbances must be reduced or eliminated during the nesting cycle. CFG Code (§3503, 3503.5, and 3800) prohibits the possession, incidental take, or needless destruction of any bird nests or eggs. CFG Code §3511 designates certain bird species "fully protected", making it unlawful to take, possess, or destroy these species except under issuance of a specific permit. The Bald and Golden Eagle Protection Act (16 USC §668) specifically protects bald and golden eagles from harm or from the trade of their parts.

CEQA (Public Resources Code §15380) defines "rare" in a broader sense than the definitions of threatened, endangered, or fully protected. Under the CEQA definition, CDFW can request additional consideration of species not otherwise protected. CEQA requires that the impacts of a project upon environmental resources must be analyzed and assessed using criteria determined by the lead agency. Sensitive species that would qualify for listing but are not currently listed may be afforded protection under CEQA. The CEQA Guidelines (§15065) require that a substantial reduction in numbers of a rare or endangered species be considered a significant effect. CEQA Guidelines (§15380) provide for assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. Plant species on the California Native Plant Society (CNPS) Lists 1A, 1B, or 2 are typically considered rare under CEQA. California "Species of Special Concern" is a category conferred by CDFW on those species that are indicators of regional habitat changes or are considered potential future protected species. While they do not have statutory protection, Species of Special Concern are typically considered rare under CEQA and thereby warrant specific protection measures.

1.3.2. Jurisdictional Water Resources

Real property that contains water resources are subject to various federal and state regulations and activities occurring in these water resources may require permits, licenses, variances, or similar authorization from federal, state and local agencies, as described next.

The Federal Water Pollution Control Act Amendments of 1972 (as amended), commonly known as the Clean Water Act (CWA), established the basic structure for regulating discharges of pollutants into "waters of the United States". Waters of the US includes essentially all surface waters, all interstate waters and their tributaries, all impoundments of these waters, and all wetlands adjacent to these waters. CWA Section 404 requires approval prior to dredging or discharging fill material into any waters of the US, especially wetlands. The permitting program is designed to minimize impacts to waters of the US, and when impacts cannot be avoided, requires compensatory mitigation. The US Army Corps of Engineers (USACE) is responsible for administering Section 404 regulations. Substantial impacts to jurisdictional wetlands may require an Individual Permit. Small-scale projects may require only a Nationwide Permit, which typically has an expedited process compared to the Individual Permit process. Mitigation of wetland impacts is required as a condition of the CWA Section 404 Permit and may include on-site preservation, restoration, or enhancement and/or off-site restoration or enhancement. The characteristics of the restored or enhanced wetlands must be equal to or better than those of the affected wetlands to achieve no net loss of wetlands.

Under CWA Section 401, every applicant for a federal permit or license for any activity which may result in a discharge to a water body must obtain Water Quality Certification that the proposed activity will comply with State water quality standards. The SWRCB is responsible for administering CWA Section 401 regulations. Any construction project that disturbs at least one acre of land requires enrollment in the State's general permitting program under the National Pollutant Discharge Elimination System and implementation of a storm water pollution prevention plan (SWPPP).

Section 10 of the Rivers and Harbors Act of 1899 requires approval from USACE prior to the commencement of any work in or over navigable Waters of the US, or which affects the course, location, condition or capacity of such waters. Navigable waters of the United States are defined as waters that have been used in the past, are now used, or are susceptible to use as a means to transport interstate or foreign commerce up to the head of navigation. Rivers and Harbors Act Section 10 permits are required for construction activities in these waters.

California Fish and Game Code (§1601 - 1607) protects fishery resources by regulating "*any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake*." CDFW requires notification prior to commencement, and issuance of a Lake or Streambed Alteration Agreement, if a proposed project will result in the alteration or degradation of ''waters of the State". The limit of CDFW jurisdiction is subject to the judgment of the Department; currently, this jurisdiction is interpreted to be the "stream zone", defined as "*that portion of the stream channel that restricts lateral movement of water*" and delineated at "*the top of the bank or the outer edge of any riparian vegetation, whichever is more landward*". CDFW reviews the proposed actions and, if necessary, submits to the applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by the CDFW and the applicant is the Streambed Alteration Agreement. Projects that require a Streambed Alteration Agreement may also require a CWA 404 Section Permit and/or CWA Section 401 Water Quality Certification.

1.3.3. Local Ordinances, Regulations, and Statutes

Under the City of Clearlake Native Tree Protection and Removal Permits provisions, native oak trees and trees designated by the City Council as "Heritage Tree" trees are protected. The City of Clearlake Article 18-5.14 "Native Tree Protection and Removal Permits" provides for compensatory mitigation and protection measures for protected trees. A Native Tree Removal Permit shall be approved or approved with conditions by the Director of Community Development if, based upon information provided by the applicant, all of the findings of 18-5.1403 or 18-4.1406 are made. (Ord. #2010-146, S2).

2. ENVIRONMENTAL SETTING

The Project Area is located within the Inner North Coast Ranges geographic subregion, which is contained within the Northwestern California geographic subdivision of the larger California Floristic Province (Baldwin et al. 2012). This region has a Mediterranean-type climate, characterized by distinct seasons of hot, dry summers and wet, moderately cold winters. The Project Area and vicinity is in climate Zone 7, California's Gray Pine Belt, with hot summers and mild but pronounced winters without severe winter cold or high humidity (Brenzel, 2012). The topography of the Project Area is relatively flat with occasional elevation changes along the roadway. The elevation ranges from approximately 1,340 feet to 1,395 feet above mean sea level. Cache Creek flows just south of the Project Area. Drainage from the entire Project Area flows into roadside ditches or infiltrates into soils in the road right-of-way. On a larger scale, drainage from the project vicinity flows south to Cache Creek, a tributary of the Sacramento River.

3. METHODOLOGY

3.1. PRELIMINARY DATA GATHERING AND RESEARCH

Prior to conducting the field survey the following information sources were reviewed:

- Any readily-available previous biological resource studies pertaining to the Project Area or vicinity
- United States Geologic Service (USGS) 7.5 degree-minute topographic quadrangles of the Project Area and vicinity
- Aerial photography of the Project Area
- California Natural Diversity Database (CNDDB), electronically updated monthly by subscription to CDFW
- USFWS species list (IPaC Trust Resources Report)(provided as Appendix 1).

3.2. FIELD SURVEY

Consulting biologists Timothy Nosal, M.S. and Camilo Sanchez conducted a reconnaissance-level field survey on January 13, 2020. A complete coverage, pedestrian survey was performed, modified to account for differences in terrain, vegetation density, and visibility. All visible fauna and flora observed were recorded in a field notebook, and identified to the lowest possible taxon. Survey efforts emphasized the search for any

special-status species that had documented occurrences in the CNDDB within the vicinity of the Project Area. Landowner permission to visit neighboring parcels was not obtained, so surveys of lands adjacent to the Project Area were limited to binocular surveys from public places such as road rights-of-way.

When a specimen could not be identified in the field, a photograph or voucher specimen (depending upon permit requirements) was taken and identified in the laboratory using a dissecting scope where necessary. Plant specimens difficult to identify were sent to botanist Margriet Wetherwax (U.C. Berkeley Jepson Herbarium). Tim Nosal holds CDFW Plant Voucher Specimen Permit 2081(a)-16-102-V. Taxonomic determinations were facilitated by referencing museum specimens or by various texts, including the following: Powell and Hogue (1979); Pavlik (1991); (1993); Brenzel (2012); Stuart and Sawyer (2001); Lanner (2002); Sibley (2003); Baldwin et al. (2012); Calflora (2017); CDFW (2017b,c); NatureServe 2017; and University of California at Berkeley (2017a,b).

The locations of any special-status species sighted were marked on aerial photographs and/or georeferenced with a geographic positioning system (GPS) receiver. Habitat types occurring in the Project Area were mapped on aerial photographs, and information on habitat conditions and the suitability of the habitats to support special-status species was also recorded. The Project Area was also informally assessed for the presence of potentially-jurisdictional water features, including riparian zones, isolated wetlands and vernal pools, and other biologically-sensitive aquatic habitats.

3.3. MAPPING AND OTHER ANALYSES

Locations of species' occurrences and habitat boundaries within the Project Area were recorded on color aerial photographs, and then digitized to produce the final habitat maps. The boundaries of potentially jurisdictional water resources within the Project Area were identified and measured in the field, and similarly digitized to calculate acreage and to produce informal delineation maps. Geographic analyses were performed using geographical information system software (ArcGIS 10, ESRI, Inc.). Vegetation communities (assemblages of plant species growing in an area of similar biological and environmental factors), were classified by Vegetation Series (distinctive associations of plants, described by dominant species and particular environmental setting) using the CNPS Vegetation Classification system (Sawyer and Keeler-Wolf, 1995). Wetlands and other aquatic habitats were classified using USFWS National Wetlands Inventory Classification System for Wetland and Deepwater Habitats, or "Cowardin class" (Cowardin et al., 1979; USFWS 2007). Informal wetland delineation methods consisted of an abbreviated, visual assessment of the three requisite wetland parameters (hydrophytic vegetation, hydric soils, hydrologic regime) defined in the US Army Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory, 1987). Wildlife habitats were classified according to the CDFW's California Wildlife Habitat Relationships System (CDFW, 2007c). Species' habitat requirements and life histories were identified using the following sources: Baldwin et al. (2012); CNPS (2017), Calflora (2009); CDFW (2017a,b,c); and University of California at Berkeley (2017a,b).

4. RESULTS

4.1. INVENTORY OF FLORA AND FAUNA FROM FIELD SURVEY

All plants sighted during the reconnaissance-level field survey of the Project Area are listed in Appendix 2. Note that the dates of field survey(s) may not coincide with every blooming period of regionally-occurring special-status plant species. The following animals were detected within the Project Area during the field survey: cat (*Felis cattus*); dog (*Canis lupis familiaris*); fox squirrel (*Sciurus niger*); acorn woodpecker (*Melanerpes formicivorus*); American goldfinch (*Spinus tristis*); California quail (*Callipepla californica*); California scrub jay (*Aphelocoma californica*); California towhee (*Melozone crissalis*); common raven (*Corvus corax*); mourning dove (*Zenaida macroura*); northern flicker (*Colaptes auratus*); Nuttall's woodpecker (*Picoides nuttallii*); sparrow (Emberizidae); turkey vulture (*Cathartes aura*); white-breasted nuthatch (*Sitta carolinensis*); and other common songbirds.

No state or federally-listed species were detected. One special-status species was detected near the western end of the Project Area—Hall's bush mallow (*Malacothamnus hallii*) (see Exhibits). The identification of this plant was based upon late-season vegetative plant material and should be considered as tentative. The nearest confirmed populations of this species is approximately 75 miles south of the project site, in Contra Costa County. Identification of this specimen could be confirmed by examination of flowering material during the blooming period.

4.2. VEGETATION COMMUNITIES AND WILDLIFE HABITATS AND CORRIDORS

4.2.1. Terrestrial Vegetation Communities

The Project Area contains 2 terrestrial vegetation communities: ruderal/developed and oak woodland. These vegetation communities are discussed here and are delineated in the Exhibits. Aquatic vegetation communities are discussed in the section on jurisdictional waters.

Ruderal/Developed: These areas consist of disturbed or converted natural habitat that is now either in ruderal state, graded, or urbanized with paved roads, or structure and utility placement. Most of the area mapped as urbanized is found along the southern half of the alignment. Vegetation within this habitat type consists primarily of nonnative annual grasses, weedy or invasive species or ornamental plants lacking a consistent community structure.

Mixed oak/conifer woodland. The northern half of the project alignment is dominated by a well-developed canopy of native trees. The mixed oak/pine woodland consists of a moderate to dense cover of interior live oak (*Quercus wislizeni*), gray pine (*Pinus sabiniana*), and valley oak (*Quercus lobata*) with an understory of common manzanita (*Arctostaphylos manzanita ssp. manzanita*), poison oak (*Toxicodendron diversilobum*), lemonade berry (*Rhus trilobata*), annual grasses (*Bromus* spp., *Avena*, et al) and herbs. The mixed oak/pine woodland is found throughout the Project Area. This vegetation can be classified as "Quercus wislizeni woodland alliance (Sawyer et al, 2009)" or as the Holland Type "Interior live oak woodland".

4.2.2. Wildlife Habitat Types

This habitat is classified as "Urban" and "Blue Oak Woodland" wildlife habitat types by CDFW's Wildlife Habitat Relationship System (WHR).

4.2.3. Critical Habitat and Special-status Habitat

No critical habitat for any federally-listed species occurs within the Project Area. No special-status habitats were detected within the Project Area. The CNDDB reported no special-status habitats within the Project Area. The CNDDB reported the following special-status habitats within a 10-mile radius outside of the Project Area: Clear Lake Drainage Resident Trout Stream; Clear Lake Drainage Cyprinid/Catostomid Stream; Northern Basalt Flow Vernal Pool; Northern Volcanic Ash Vernal Pool; Coastal and Valley Freshwater Marsh; Great Valley Mixed Riparian Forest and Northern Interior Cypress Forest.

Oak trees are protected under the City of Clearlake "Native Tree Protection and Removal Permits" (City of Clearlake Code Article 18-5.14, sections 18-5.1401 through 18-5.1408). An arborist survey was performed for this project:

- Natural Investigations Co. 2020. Arborist Survey for the Cache Creek Mobile Home Park Water Service Connection Project, Clearlake, CA. 14 pp.

The survey assessed trees that met the jurisdictional criteria of the City Code. 47 trees were inventoried, consisting of 42 native oak trees and 5 non-native oak and non-oak trees.

4.2.4. Habitat Plans and Wildlife Corridors

Wildlife movement corridors link remaining areas of functional wildlife habitat that are separated primarily by human disturbance, but natural barriers such as rugged terrain and abrupt changes in vegetation cover are also possible. Wilderness and open lands have been fragmented by urbanization, which can disrupt migratory species and separate interbreeding populations. Corridors allow migratory movements and act as links between these separated populations. The Project Area does not function as a wildlife corridor because it is a roadway; roadways are barriers to animal movement and vehicle collisions are a mortality factor for many wildlife species. Stream corridors in the vicinity (Cache Creek and tributaries) may function as wildlife corridors. Cache Creek, which flows just south of the Project Area, is a significant fishery resource. The Project Area is not located in a federally-designated Essential Fish Habitat. The Project Area is not in the watershed of a river federally-designated under the Wild and Scenic Rivers Act. The Project Area is not located within any adopted Habitat Conservation Plan or Natural Community Conservation Plan.

4.3. LISTED SPECIES AND OTHER SPECIAL-STATUS SPECIES

For the purposes of this assessment, "special status" is defined to be species that are of management concern to state or federal natural resource agencies, and include those species that are:

- Listed as endangered, threatened, proposed, or candidate for listing under FESA;
- Listed as endangered, threatened, rare, or proposed for listing, under CESA of 1970;
- Designated as endangered or rare, pursuant to CFG Code (§1901);
- Designated as fully protected, pursuant to CFG Code (§3511, §4700, or §5050);
- Designated as a species of special concern by CDFW; or
- Plants listed as rare under the California Native Plant Protection Act.

4.3.1. Listed Species / Special-status Species Observed During Field Survey

During the field survey on January 13, 2020, one special-status species was observed within the Project Area: Hall's bush mallow (*Malacothmanus hallii*). This is not a listed species, but a species of concern. The California Native Plant Society ranks it as 1B.2 (rare, threatened, or endangered in CA and elsewhere). One bush mallow plant was observed near the western end of the alignment, along the right-of-way on the south side of the road.

4.3.1. Reported Occurrences of Listed Species / Special-status Species

A list of special-status plant and animal species that are reported to occur within the Project Area and vicinity was compiled based upon the following:

- Any previous and readily-available biological resource studies pertaining to the Project Area;
- Informal consultation with USFWS by generating an electronic Species List (Information for Planning and Conservation website at https://ecos.fws.gov/ipac/);
- A spatial query of the CNDDB.

The CNDDB was queried and any reported occurrences of special-status species were plotted in relation to the Project Area boundary using GIS software (see Exhibits). The CNDDB reported two special-status species occurrences within the Project Area: few-flowered navarretia (*Navarretia leucocephala* ssp. *pauciflora*) and Hall's harmonia (*Harmonia hallii*). These occurrences appear to be an artifact of the mapping process. Suitable habitat for these species (vernal pools and serpentine soil) is not present within the Project Area. Within a 10-mile buffer of the Project Area boundary, the CNDDB reported the occurrence of 71 different special-status species.

A USFWS species list was generated online using the USFWS' IPaC Trust Resource Report System (see Appendix 1). The following listed species should be considered in the impact assessment:

- Birds

  - Northern Spotted Owl (*Strix occidentalis caurina*) Threatened

- Amphibians
  - California Red-legged Frog (*Rana draytonii*) Threatened

- Fishes
  - Delta Smelt (*Hypomesus transpacificus*) Threatened

- Flowering Plants
  - Burke's Goldfields (*Lasthenia burkei*) Endangered
  - Few-flowered Navarretia (*Navarretia leucocephala ssp. pauciflora)* Endangered
  - Slender Orcutt Grass (*Orcuttia tenuis*) Threatened
- Migratory Birds

Table 1. Special-status Species Reported by CNDDB in the Vicinity of the Project Area

Common Name Scientific Name	**Status***	**General Habitat**	**Microhabitat**
Red-bellied newt *Taricha rivularis*	CSSC	Found in coastal woodlands and redwood forests along the coast of Northern California	A stream or river dweller. Larvae retreat into vegetation and under stones during the day.
California giant salamander *Dicamptodon ensatus*	CSSC	Mendocino and Lake Counties south to Santa Cruz and Santa Clara Counties.	Wet coastal forests in or near clear, cold permanent and semi-permanent streams and seepages.
Foothill yellow-legged frog *Rana boylii*	CCT/ CSSC	Partly-shaded, shallow streams & riffles with a rocky substrate in a variety of habitats.	Need at least some cobble-sized substrate for egg-laying. Need at least 15 weeks to attain metamorphosis.
Osprey *Pandion haliaetus*	CWL	Ocean shore, bays, fresh-water lakes, and larger streams.	Large nests built in tree-tops within 15 miles of a good fish-producing body of water.
Golden eagle *Aquila chrysaetos*	FP; WL	Rolling foothills, mountain areas, sage-juniper flats, & desert.	Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.
Prairie falcon *Falco mexicanus*	CWL	Inhabits dry, open terrain, either level or hilly.	Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.
Western yellow-billed cuckoo *Coccyzus americanus occidentalis*	FT/CE	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems.	Nests in riparian jungles of willow, often mixed with cottonwoods, w/ lower story of blackberry, nettles, or wild grape.
Purple martin *Progne subis*	CSSC	Inhabits woodlands, low elevation coniferous forest of Douglas-fir, ponderosa pine, & Monterey pine.	Nests in old woodpecker cavities mostly, also in human-made structures. Nest often located in tall, isolated tree/snag.
Clear Lake hitch *Lavinia exilicauda chi*	CT	Found only in clear lake, lake co, and associated ponds. Spawns in streams flowing into clear lake.	Adults found in the limnetic zone. Juveniles found in the nearshore shallow-water habitat hiding in the vegetation.
Sacramento perch *Archoplites interruptus*	CSSC	Historically found in the sloughs, slow-moving rivers, and lakes of the central valley.	Prefers warm water. Aquatic vegetation is essential for young. Tolerates wide range of physio-chemical water conditions.
Long-eared myotis *Myotis evotis*	CSSC	Found in all brush, woodland & forest habitats from sea level to about 9000 ft. Prefers coniferous woodlands & forests.	Nursery colonies in buildings, crevices, spaces under bark, & snags. Caves used primarily as night roosts.
Fringed myotis *Myotis thysanodes*	CSSC	In a wide variety of habitats, optimal habitats are pinyon-juniper, valley foothill hardwood & hardwood-conifer.	Uses caves, mines, buildings or crevices for maternity colonies and roosts.
Hoary bat *Lasiurus cinereus*	CSSC	Prefers open habitats or habitat mosaics, with access to trees for cover & open areas or habitat edges for feeding.	Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.
Western red bat *Lasiurus blossevillii*	CSSC	Roosts primarily in trees, 2-40 ft above ground, from sea level up through mixed conifer forests.	Prefers habitat edges & mosaics with trees that are protected from above & open below with open areas for foraging.
Townsend's big-eared bat *Corynorhinus townsendii*	CSSC	Throughout California in a wide variety of habitats. Most common in mesic sites.	Roosts in the open, hanging from walls & ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.
Pallid bat *Antrozous pallidus*	CSSC	Deserts, grasslands, shrublands, woodlands & forests. Most	Roosts must protect bats from high temperatures. Very

Common Name Scientific Name	**Status***	**General Habitat**	**Microhabitat**
		common in open, dry habitats with rocky areas for roosting.	sensitive to disturbance of roosting sites.
North American porcupine *Erethizon dorsatum*	CSSC	Coast ranges, Klamath Mountains, southern Cascades, Modoc Plateau, Sierra Nevada and Transverse Ranges.	Montane conifer and wet meadow habitats.
Western pond turtle *Emys marmorata*	CSSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams & irrigation ditches, usually with aquatic vegetation, be	Need basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying
Brownish dubiraphian riffle beetle *Dubiraphia brunnescens*	CSSC	Aquatic; known only from the ne shore of Clear Lake, Lake County.	Inhabits exposed, wave-washed willow roots.
Ricksecker's water scavenger beetle *Hydrochara rickseckeri*	CSSC	Aquatic.	
Wilbur Springs shorebug *Saldula usingeri*	CSSC	Requires springs/creeks with high concentrations of Na, Cl, & Li.	Found only on wet substrate of spring outflows.
Western bumble bee *Bombus occidentalis*	CSSC	Once common & widespread, species has declined precipitously from Central Ca to southern B.C., perhaps from disease.	
Obscure bumble bee *Bombus caliginosus*	CSSC	Open grassy coastal prairies and Coast Range meadows. Nesting occurs underground as well as above ground in abandoned bird nests.	Food plants include Ceanothus, Cirsium, Clarkia, Keckiella, Lathyrus, Lotus, Lupinus, Rhododendron, Rubus, Trifolium, and Vaccinium.
Borax Lake cuckoo wasp *Hedychridium milleri*	CSSC	Endemic to central California. Only collection is from the type locality.	External parasite of wasp and bee larva.
Clear Lake pyrg *Pyrgulopsis ventricosa*	CSSC	Restricted to Seigler Creek drainage in the south end of the Clear Lake Basin.	Freshwater.
Toren's grimmia *Grimmia torenii*	1B.3	Cismontane woodland, lower montane coniferous forest, chaparral.	Openings, rocky, boulder and rock walls, carbonate, volcanic. 325-1160 m.
Loch Lomond button-celery *Eryngium constancei*	FE/CE/1B.1	Vernal pools.	Volcanic ash flow vernal pools. 460-855 m.
Greene's narrow-leaved daisy *Erigeron greenei*	1B.2	Chaparral.	Serpentine and volcanic substrates, generally in shrubby vegetation. 80-1005 m.
Congested-headed hayfield tarplant *Hemizonia congesta ssp. congesta*	1B.2	Valley and foothill grassland.	Grassy valleys and hills, often in fallow fields; sometimes along roadsides. 20-560 m.
Pappose tarplant *Centromadia parryi ssp. parryi*	1B.2	Coastal prairie, meadows and seeps, coastal salt marsh, valley and foothill grassland.	Vernally mesic, often alkaline sites. 2-420m.
Burke's goldfields *Lasthenia burkei*	FE/CE/1B.1	Vernal pools, meadows and seeps.	Most often in vernal pools and swales. 15-600 m.
Colusa layia *Layia septentrionalis*	1B.2	Chaparral, cismontane woodland, valley and foothill grassland.	Scattered colonies in fields and grassy slopes in sandy or serpentine soil. 145-1095m.
Hall's harmonia *Harmonia hallii*	1B.2	Chaparral.	Serpentine hills and ridges. Open, rocky areas within chaparral. 500-900 m.
Bent-flowered fiddleneck *Amsinckia lunaris*	1B.2	Cismontane woodland, valley and foothill grassland.	50-500m.
Serpentine cryptantha *Cryptantha dissita*	1B.2	Chaparral.	Serpentine outcrops. 330-730m.
Freed's jewelflower *Streptanthus brachiatus ssp. hoffmanii*	1B.2	Chaparral, cismontane woodland.	Serpentine rock outcrops, primarily in geothermal

Common Name Scientific Name	**Status***	**General Habitat**	**Microhabitat**
			development areas. 490-1220 m.
Green jewelflower *Streptanthus hesperidis*	1B.2	Chaparral, cismontane woodland.	Openings in chaparral or woodland; serpentine, rocky sites. 130-760m.
Watershield *Brasenia schreberi*	2B.3	Freshwater marshes and swamps.	Aquatic from water bodies both natural and artificial in California.
Cascade downingia *Downingia willamettensis*	2B.2	Cismontane woodland, valley and foothill grasslands.	Lake margins and vernal pools.
Legenere *Legenere limosa*	1B.1	Vernal pools.	In beds of vernal pools. 1-880 m.
Oval-leaved viburnum *Viburnum ellipticum*	2B.3	Chaparral, cismontane woodland, lower montane coniferous forest.	215-1400 m.
Lake County stonecrop *Sedella leiocarpa*	FE/CE/1B.1	Valley and foothill grassland, vernal pools, cismontane woodland.	Level areas that are seasonally wet and dry out in late spring; substrate usually of volcanic origin. 365-790 m.
Raiche's manzanita *Arctostaphylos stanfordiana ssp. raichei*	1B.1	Chaparral, lower montane coniferous forest.	Rocky, serpentine sites. Slopes and ridges. 450-1000 m.
Konocti manzanita *Arctostaphylos manzanita ssp. elegans*	1B.3	Chaparral, cismontane woodland, lower montane coniferous forest.	Volcanic soils. 395-1615 m.
Jepson's milk-vetch *Astragalus rattanii var. jepsonianus*	1B.2	Cismontane woodland, valley and foothill grassland, chaparral.	Commonly on serpentine in grassland or openings in chaparral. 180-1000 m.
Cobb Mountain lupine *Lupinus sericatus*	1B.2	Chaparral, cismontane woodland, lower montane coniferous forest, broadleafed upland forest.	In stands of knobcone pine-oak woodland, on open wooded slopes in gravelly soils; sometimes on serpentine. 275-1525 m.
Woolly meadowfoam *Limnanthes floccosa ssp. floccosa*	4.2	Chaparral, cismontane woodland, valley and foothill grassland, vernal pools.	Vernally wet areas, ditches, and ponds. 60-1335 m.
Glandular western flax *Hesperolinon adenophyllum*	1B.2	Chaparral, cismontane woodland, valley and foothill grassland.	Serpentine soils; generally found in serpentine chaparral. 150-1315 m.
Two-carpellate western flax *Hesperolinon bicarpellatum*	1B.2	Serpentine chaparral.	Serpentine barrens at edge of chaparral. 60-1005 m.
Lake County western flax *Hesperolinon didymocarpum*	CE/1B.2	Chaparral, cismontane woodland, valley and foothill grassland.	Serpentine soil in open grassland and near chaparral. 330-365m.
Drymaria-like western flax *Hesperolinon drymarioides*	1B.2	Closed-cone coniferous forest, chaparral, cismontane woodland, valley and foothill grassland.	Serpentine soils, mostly within chaparral. 390-1000m.
Sharsmith's western flax *Hesperolinon sharsmithiae*	1B.2	Chaparral.	Serpentine substrates. 270-300 m.
Marsh checkerbloom *Sidalcea oregana ssp. hydrophila*	1B.2	Meadows and seeps, riparian forest.	Wet soil of streambanks, meadows. 1100-2300 m.
Snow Mountain buckwheat *Eriogonum nervulosum*	1B.2	Chaparral.	Dry serpentine outcrops, balds, and barrens. 300-2100 m.
Brandegee's eriastrum *Eriastrum brandegeeae*	1B.1	Chaparral, cismontane woodland.	On barren volcanic soils; often in open areas. 425-840 m.
Baker's navarretia *Navarretia leucocephala ssp. bakeri*	1B.1	Cismontane woodland, meadows and seeps, vernal pools, valley and foothill grassland, lower montane coniferous forest.	Vernal pools and swales; adobe or alkaline soils. 5-1740 m.
Few-flowered navarretia *Navarretia leucocephala ssp. pauciflora*	FE/CT/1B.1	Vernal pools.	Volcanic ash flow, and volcanic substrate vernal pools. 400-855 m.
Many-flowered navarretia *Navarretia leucocephala ssp. plieantha*	FE/CE/1B.2	Vernal pools.	Volcanic ash flow vernal pools. 30-950 m.

Common Name Scientific Name	**Status***	**General Habitat**	**Microhabitat**
Porter's navarretia *Navarretia paradoxinota*	1B.3	Meadows and seeps.	Serpentenite, openings, vernally mesic, often drainages.
Rincon Ridge ceanothus *Ceanothus confusus*	1B.1	Closed-cone coniferous forest, chaparral, cismontane woodland.	Known from volcanic or serpentine soils, dry shrubby slopes. 75-1065 m.
Calistoga ceanothus *Ceanothus divergens*	1B.2	Chaparral.	Rocky, serpentine or volcanic sites. 170-950 m.
Bolander's horkelia *Horkelia bolanderi*	1B.2	Lower montane coniferous forest, chaparral, meadows, valley and foothill grassland.	Grassy margins of vernal pools and meadows. 450-1100 m.
Pink creamsacs *Castilleja rubicundula var. rubicundula*	1B.2	Chaparral, meadows and seeps, valley and foothill grassland.	Openings in chaparral or grasslands. On serpentine. 20-900 m.
Boggs Lake hedge-hyssop *Gratiola heterosepala*	CE/1B.2	Marshes and swamps (freshwater), vernal pools.	Clay soils; usually in vernal pools, sometimes on lake margins. 10-2375 m.
Dimorphic snapdragon *Antirrhinum subcordatum*	4.3	Chaparral, lower montane coniferous forest.	Generally found on serpentine or shale in foothill woodland or chaparral on s- and w-facing slopes. 185-800 m.
Northern meadow sedge *Carex praticola*	2B.2	Meadows and seeps.	Moist to wet meadows. 0-3200 m.
Dwarf soaproot *Chlorogalum pomeridianum var. minus*	1B.2	Chaparral, valley and foothill grassland.	Serpentine. 240-970 m.
Adobe-lily *Fritillaria pluriflora*	1B.2	Chaparral, cismontane woodland, foothill grassland.	Usually on clay soils; sometimes serpentine. 60-705 m.
California satintail *Imperata brevifolia*	2B.1	Coastal scrub, chaparral, riparian scrub, Mojavean scrub, meadows and seeps (alkali), riparian scrub.	Mesic sites, alkali seeps, riparian areas. 0-1215 m.
Slender Orcutt grass *Orcuttia tenuis*	FT/CE /1B.1	Vernal pools.	Often in gravelly pools. 35-1760 m.
Eel-grass pondweed *Potamogeton zosteriformis*	2B.2	Marshes and swamps.	Ponds, lakes, streams. 0-1860 m.

*Definitions of Status Codes: FE = Federally listed as endangered; FT = Federally listed as threatened; FPE = Federally proposed for listing as endangered; FPT = Federally proposed for listing as threatened; FC = Candidate for Federal listing; MB = Migratory Bird Act; CE = California State listed as endangered; CT = California State listed as threatened; CR = California rare species; CCE= California candidate for listing as Endangered; CCT= California candidate for listing as Threatened; CSSC = California species of special concern; CWL= California Watch List; CFP = California fully protected species; CBR = Considered but Rejected; CNPS (California Native Plant Society) List 1A = Plants presumed extinct in California by CNPS; CNPS List 1B = CNPS designated rare or endangered plants in California and elsewhere; CNPS List 2 = CNPS designated rare or endangered plants in California, but more common elsewhere; and CNPS List 4 = CNPS Watch List: Plants of limited distribution.

4.3.2. Analyses of Likelihood of Occurrence of Listed Species / Special-status Species

The special-status species identified in database queries were further assessed for their likelihood to occur within the Project Area based upon previously documented occurrences, field surveys, their habitat requirements, and the quality and extent of any suitable habitat within the Project Area. Each species was ranked for its likelihood to occur within the Project Area: a "high" rank was given for species where current field surveys have positively identified the species within the Project Area, where there have been previously documented occurrences within the Project Area, and/or where essential habitat elements exist within the Project Area; a "moderate" rank was given for species that were not detected during current field surveys, but where there have been previously documented occurrences within the Project Area or vicinity, and where preferred habitat elements exist within the Project Area; a "low" rank was given for species with no known observations within the Project Area or vicinity, and where habitat elements exist within the Project Area or vicinity, but the quality of that habitat is degraded or of poor quality, and/or where Project Area conditions and land uses deter its use of the Project Area; and a “unlikely” rank was given for species with no known observations within the Project Area or vicinity, and where no suitable habitat exists within the Project Area.

No regionally-occurring special-status plant species were determined to have a medium or high potential to occur within the Project Area. Special-status species are not expected to thrive in the Project Area because of the preponderance of invasive and non-native plants, and habitat degradation associated with urbanization.

However, one special-status species, Hall’s bush mallow (tentative identification), was observed within the Project Area. One bush mallow plant was observed near the western end of the alignment, in degraded habitat along the edge of the pavement.

4.4. POTENTIALLY-JURISDICTIONAL WATER RESOURCES

An informal assessment for the presence of potentially-jurisdictional water resources within the Project Area was also conducted during the field survey. The USFWS National Wetland Inventory (see Appendix 1) reported no water features within the Project Area. No water features were detected within the Project Area during the field survey (see Exhibits). Surface flows are directed into roadside ditches, which are upland swales.

5. IMPACT ANALYSES AND MITIGATION MEASURES

This section establishes the impact criteria, then analyzes potential Project-related impacts upon the known biological resources within the Project Area, and then suggests mitigation measures to reduce these impacts to a less-than-significant level.

5.1. IMPACT SIGNIFICANCE CRITERIA

The significance of impacts to biological resources depends upon the proximity and quality of vegetation communities and wildlife habitats, the presence or absence of special-status species, and the effectiveness of measures implemented to protect these resources from Project-related impacts. As defined by CEQA Guidelines, Appendix G, IV (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387), the Project would be considered to have a significant adverse impact on biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS
- Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

5.2. IMPACT ANALYSIS

The Project's architectural design was overlaid upon the mapped habitats to assist in the analysis of Project-related impacts (see Exhibits). The following discussion evaluates the potential for Project-related activities to adversely affect biological resources according to the criteria set for in the previous section.

The Project's architectural design was not yet complete at the time of this assessment. Therefore, the defined segment of Dam Road, and a 10-foot right-of-way on either side of the road segment were used as the project footprint, and was assumed to be possibly impacted by trenching or equipment staging.

5.2.1. Potential Direct / Indirect Adverse Effects Upon Special-status Species

- Will the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS?

During the field survey, no listed species or special-status species were observed within the Project Area. State and federal databases do not report any listed species or special-status species. An elderberry shrub was detected, which may serve as the habitat for Valley Elderberry Longhorn Beetle. However, according to USFWS, Valley Elderberry Longhorn Beetle is not found, or known to be found, in Lake County. One special status plant, Hall's bush mallow (tentative identification), was observed within the Project Area. Implementation of the project will not require disturbance of the habitat for Hall's bush mallow nor will it destroy the elderberry shrub. No additional special-status plant species are likely to occur within the Project Area, and no adverse impacts to listed species or special-status species are expected.

Special-status bird species were reported in databases (CNDDB and USFWS) in the vicinity of the Project Area. The Project Area, and adjacent trees and utility poles, contain suitable nesting habitat for various bird species. However, no occupied nests were observed during the field survey. If construction activities are conducted during the nesting season, nesting birds could be directly impacted by tree removal and indirectly impacted by noise, vibration, and other construction-related disturbance. Therefore, Project construction is considered a potentially significant adverse impact to nesting birds.

Recommended Mitigation Measures

Because special-status species that occur in the vicinity could migrate onto the Project Area between the time that the field survey was completed and the start of construction, a pre-construction survey for special-status species should be performed by a qualified biologist to ensure that special-status species are not present. If any listed species are detected, construction should be delayed, and the appropriate wildlife agency (CDFW and/or USFWS) should be consulted and project impacts and mitigation reassessed. With the implementation of this mitigation measure, adverse impacts upon special-status species would be reduced to a less-than-significant level.

If construction activities would occur during the nesting season (usually March to September), a pre-construction survey for the presence of special-status bird species or any nesting bird species should be conducted by a qualified biologist within 500 feet of proposed construction areas. If active nests are identified in these areas, CDFW and/or USFWS should be consulted to develop measures to avoid "take" of active nests prior to the initiation of any construction activities. Avoidance measures may include establishment of

a buffer zone using construction fencing or the postponement of vegetation removal until after the nesting season, or until after a qualified biologist has determined the young have fledged and are independent of the nest site. With the implementation of this mitigation measure, adverse impacts upon special-status bird species and nesting birds would be reduced to a less-than-significant level.

5.2.2. Potential Direct / Indirect Adverse Effects Upon Special-status Habitats or Natural Communities

- Will the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS?

The Project Area is not within any designated listed species' critical habitat. The project area does not contain riparian habitat or any other sensitive habitats. One special status plant, Hall's bush mallow (tentative identification), was observed within the Project Area. Implementation of the project will not require disturbance of the habitat for Hall's bush mallow nor will it destroy the elderberry shrub. Implementation of the Project would result in the loss of only ruderal/developed habitat, and this is not a significant impact upon sensitive habitats or sensitive natural communities or the movement of wildlife species. Project implementation will not impact any special-status habitats.

Recommended Mitigation Measures

No mitigation is necessary.

5.2.3. Potential Direct / Indirect Effects On Water Resources

- Will the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

The entire Project Area has upland features and contains no water features and no waters of the US or waters of the State. Project construction would not directly impact any surface water bodies. Therefore, no Clean Water Act permits (or state permits) are necessary.

However, during construction of the proposed project, surface water quality has the potential to be degraded from storm water transport of sediment from disturbed soils or by accidental release of hazardous materials or petroleum products from sources such as heavy equipment servicing or refueling. This is a potentially significant impact. For projects that disturb 1 acre of more of land, the project proponent must enroll under the SWRCB's General Permit for Discharges of Storm Water Associated with Construction Activity prior to the initiation of construction. In conjunction with enrollment under this Permit, a SWPPP, and a Hazardous Materials Management/Spill Response Plan must be created and implemented during construction to avoid or minimize the potential for erosion, sedimentation, or accidental release of hazardous materials. Implementation of these measures mandated by law would reduce potential construction-related impacts to water quality to a less-than-significant level.

Recommended Mitigation Measures

No mitigation is necessary.

5.2.4. Potential Impacts to Wildlife Movement, Corridors, etc.

- Will the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No wildlife corridors exist within the Project Area. The nearest wildlife corridor is Cache Creek. Cache Creek is also a fishery resource. The proposed project will not create any barriers or other impediments to wildlife

movement. Implementation of the project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Recommended Mitigation Measures

No mitigation is necessary.

5.2.5. Potential Conflicts With Ordinances, Habitat Conservation Plans, etc.

- Will the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- Will the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Tree resources are present in the Project Area. 47 trees were inventoried, consisting of 42 native oak trees and 5 non-native oak and non-oak trees (Natural Investigations Co. 2020). A specific development plan was not available at the time of the preparation of this report. For installation of the water pipeline, no tree impacts are expected because the pipe will be installed under the road. Small areas needed for construction material and equipment staging may impact trees. This is a potentially significant impact before mitigation.

The project does not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or another approved governmental habitat conservation plan. The Project Area is not within the coverage area of any adopted Habitat Conservation Plan or Natural Community Conservation Plan.

Recommended Mitigation Measures

Under the City of Clearlake Native Tree Protection and Removal Permits provisions, native oak trees and trees designated by the City Council as “Heritage Tree” trees are protected. The City of Clearlake Article 18-5.14 “Native Tree Protection and Removal Permits” provides for compensatory mitigation and protection measures for protected trees. A Native Tree Removal Permit shall be approved or approved with conditions by the Director of Community Development if, based upon information provided by the applicant, all of the findings of 18-5.1403 or 18-4.1406 are made. (Ord. #2010-146, S2).

5.2.6. Federal Environmental Statutes and Authorities

The project applicant must also ensure that the project is compliant with applicable federal environmental statues and authorities listed in the Appendix A (“federal cross-cutters”) of the Drinking Water SRF Program Guidelines. The following analysis addresses project compliance with these statutes and authorities.

Magnuson-Stevens Fishery Conservation and Management Act

- *Does the project involve any direct or indirect effects from construction activities or changes in quality/quantity that may affect Essential Fish Habitat?*

The Project Area is not within, or near, an Essential Fish Habitat. The nearest Essential Fish Habitat is the Cache Creek, which is 60 to 100 feet to the south of the Project Area.

Migratory Bird Treaty Act

- *Will the project affect protected migratory birds that are known or have a potential to occur on the project site, or the surrounding area?*

Special-status bird species were reported in databases (CNDDB and USFWS) in the vicinity of the Project Area. However, no nests were observed during the field survey. If construction activities are conducted

during the nesting season, nesting birds could be directly impacted by ground disturbance and indirectly impacted by noise, vibration, and other construction-related effects.

Mitigation measures consist of the following:

If construction activities would occur during the nesting season (usually March to September), a pre-construction survey for the presence of special-status bird species or any nesting bird species should be conducted by a qualified biologist within 500 feet of proposed construction areas. If active nests are identified in these areas, CDFW and/or USFWS should be consulted to develop measures to avoid "take" of active nests prior to the initiation of any construction activities. Avoidance measures may include establishment of a buffer zone using construction fencing or the postponement of vegetation removal until after the nesting season, or until after a qualified biologist has determined the young have fledged and are independent of the nest site. With the implementation of this mitigation measure, adverse impacts upon special-status bird species and nesting birds would be reduced to a less-than-significant level.

Protection of Wetlands

- *Is any portion of the project located in a wetland or waters of the U.S. that will require a permit from USACE?*

A formal assessment of the Project Area determined that there are no wetlands or other waters of the U.S. within the Project Area. There will be no impact to waters of the U.S. (channels or wetlands), and no aquatic permits will be required.

Rivers and Harbors Act (Section 10)

- *Will this project include placement of dredged or fill material into waters of the United States? Will the project include construction of structures in, under, or over navigable waters of the United States?*

A formal assessment of the Project Area determined that there are no wetlands or other waters of the U.S. within the Project Area. The project does not require dredge or fill activities. The project will not construct structures in any waters of the U.S.

Wild and Scenic Rivers Act

- *Will any portion of the project affect a wild and scenic river?*

The Project Area is not within, or near, the watershed of a wild and scenic river. The nearest wild and scenic river is the Eel Wild and Scenic River 42 miles north of the Project Area.

Wildlife Resources / Endangered Species Act

- *Does the project involve any direct or indirect effects from construction activities that may affect federally listed threatened or endangered species or their critical habitat that are known, or have a potential, to occur on-site, in the surrounding area, or in the service area?*

No federally-listed species occur in, or near, the Project Area. The Project Area is not located in, or near, a critical habitat. Because project implementation involves only the replacement of existing infrastructure on land that was previously disturbed, the Project will have No Effect upon federally-listed species or their critical habitat.

Fish and Wildlife Coordination Act

- *Will the project impact the waters of a stream or other water body by impounding, diverting, deepening a channel, or otherwise controlling or modifying flow for any purpose (including navigation and drainage) as a result of this project and require compliance with the FWCA?*

A formal assessment of the Project Area determined that there are no wetlands or other waters of the U.S. within the Project Area. The project will not impact any stream or waterbody, nor will it impair wildlife movement.

Federal ESA Effects Determination

The Project will have No Effect upon federally-listed species or designated critical habitat.

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7. QUALIFICATIONS OF AUTHORS

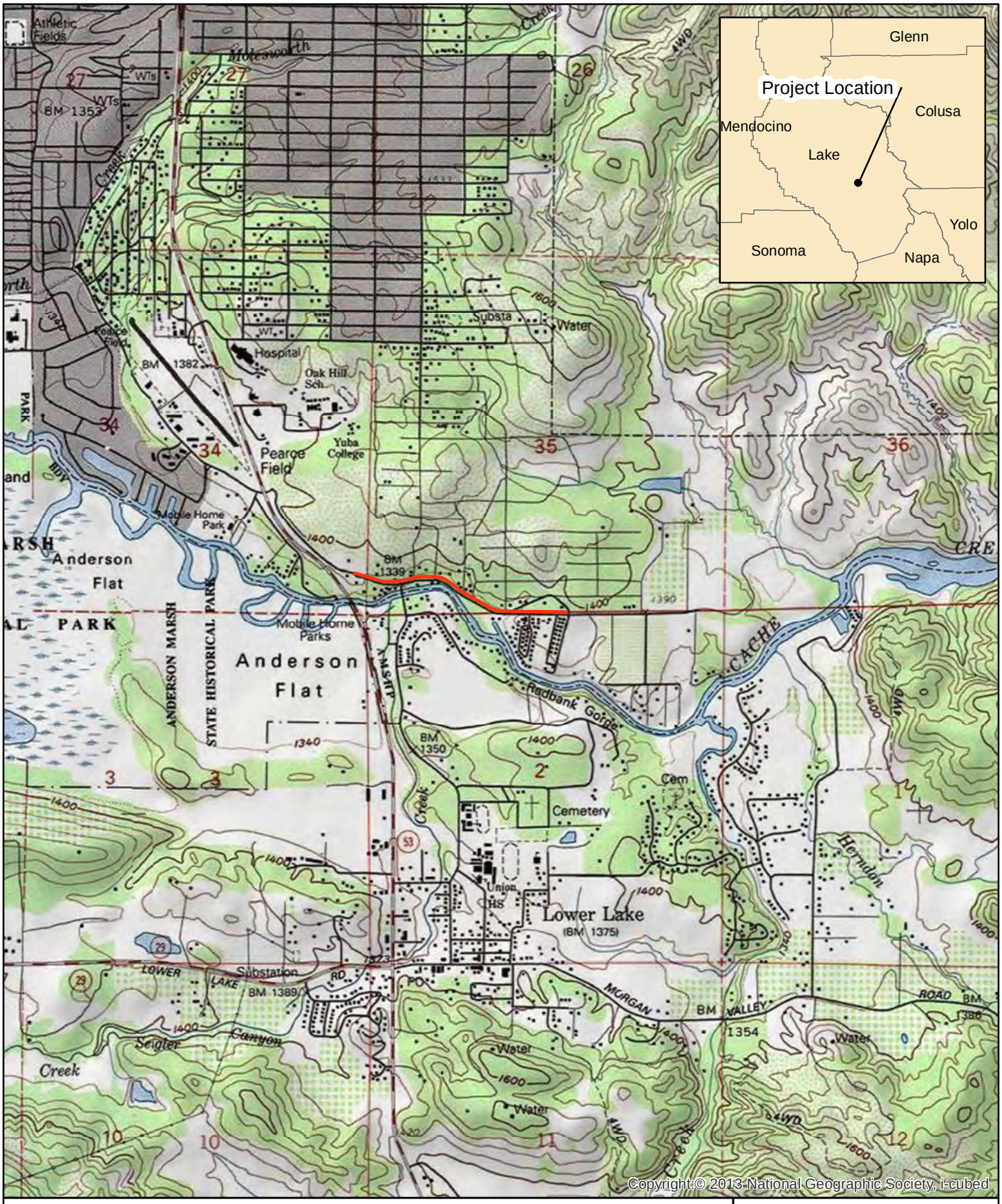
Dr. G.O. Graening

G. O. Graening holds a PhD in Biological Sciences and a Master of Science in Biological and Agricultural Engineering. Dr. Graening is an adjunct Professor at California State University at Sacramento, and is an active researcher in the area of conservation biology and groundwater ecology. Dr. Graening is also a Certified Arborist (ISA # WE-6725A). Dr. Graening has 16 years of experience in environmental assessment, including independent contractual work as well as previous employment with *The Nature Conservancy*, Tetra Tech Inc., and CH2M Hill, Inc.

Timothy R. Nosal, M.S.

Timothy R. Nosal holds a B.S. and M.S. in Biological Sciences. Mr. Nosal has statewide experience performing sensitive plant and animal surveys in addition to terrestrial vegetation investigations. Mr. Nosal has over 25 years of experience in environmental assessment and teaching with employers that include California Department of Fish and Wildlife, State Water Resources Control Board, American River College, MTI College and Pacific Municipal Consultants.

EXHIBITS



Project Area

0 0.5 1 Kilometers

0 0.5 1 Miles

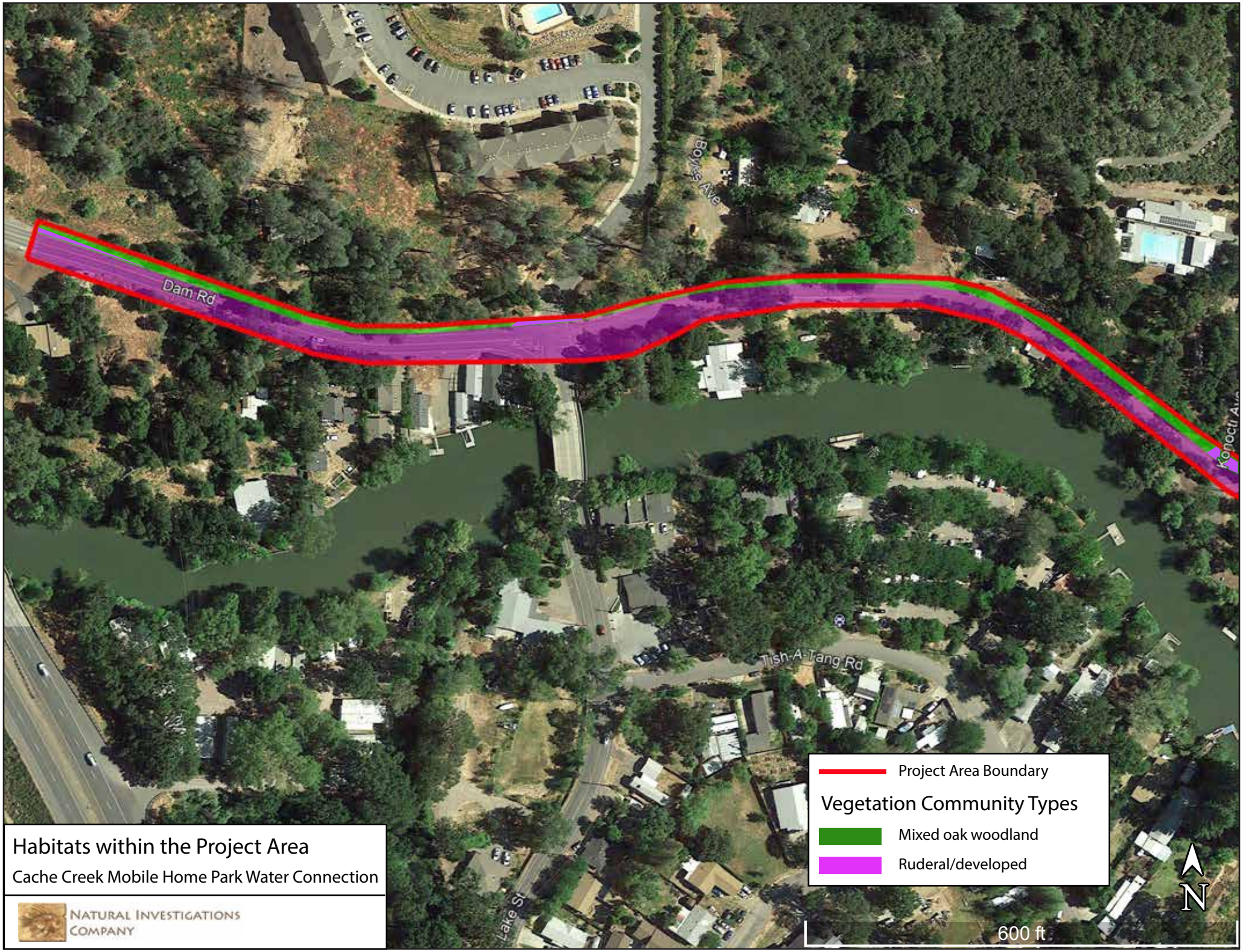
1:24,000

Cache Creek MHP Project Location Map

Natural Investigations Company

Map Date 12/4/2019

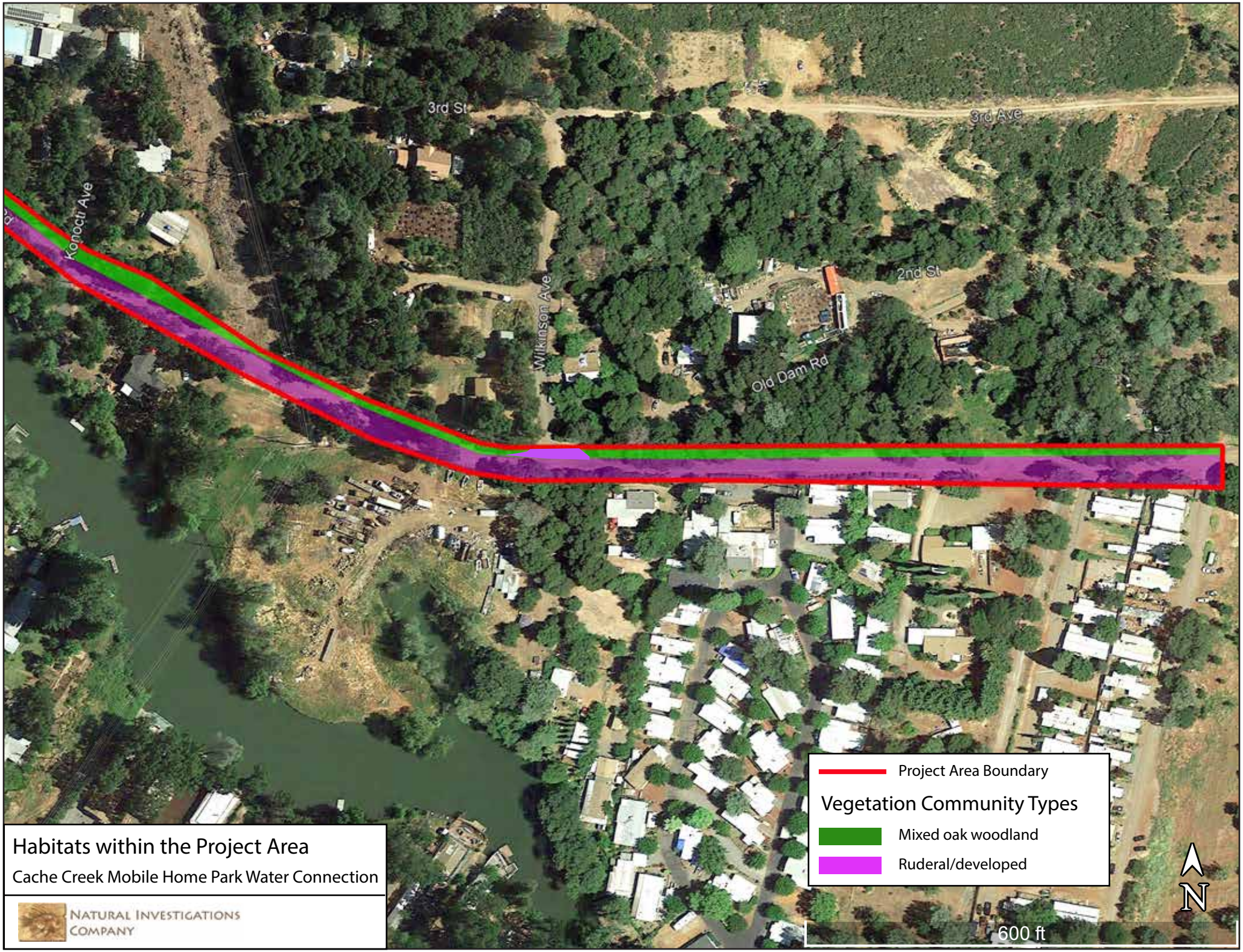
Lower Lake 1993 Quadrangle:Township 13N, Range 7W, Section 34, 35, Township 12N, Range 7W, Section 2



Habitats within the Project Area

Cache Creek Mobile Home Park Water Connection

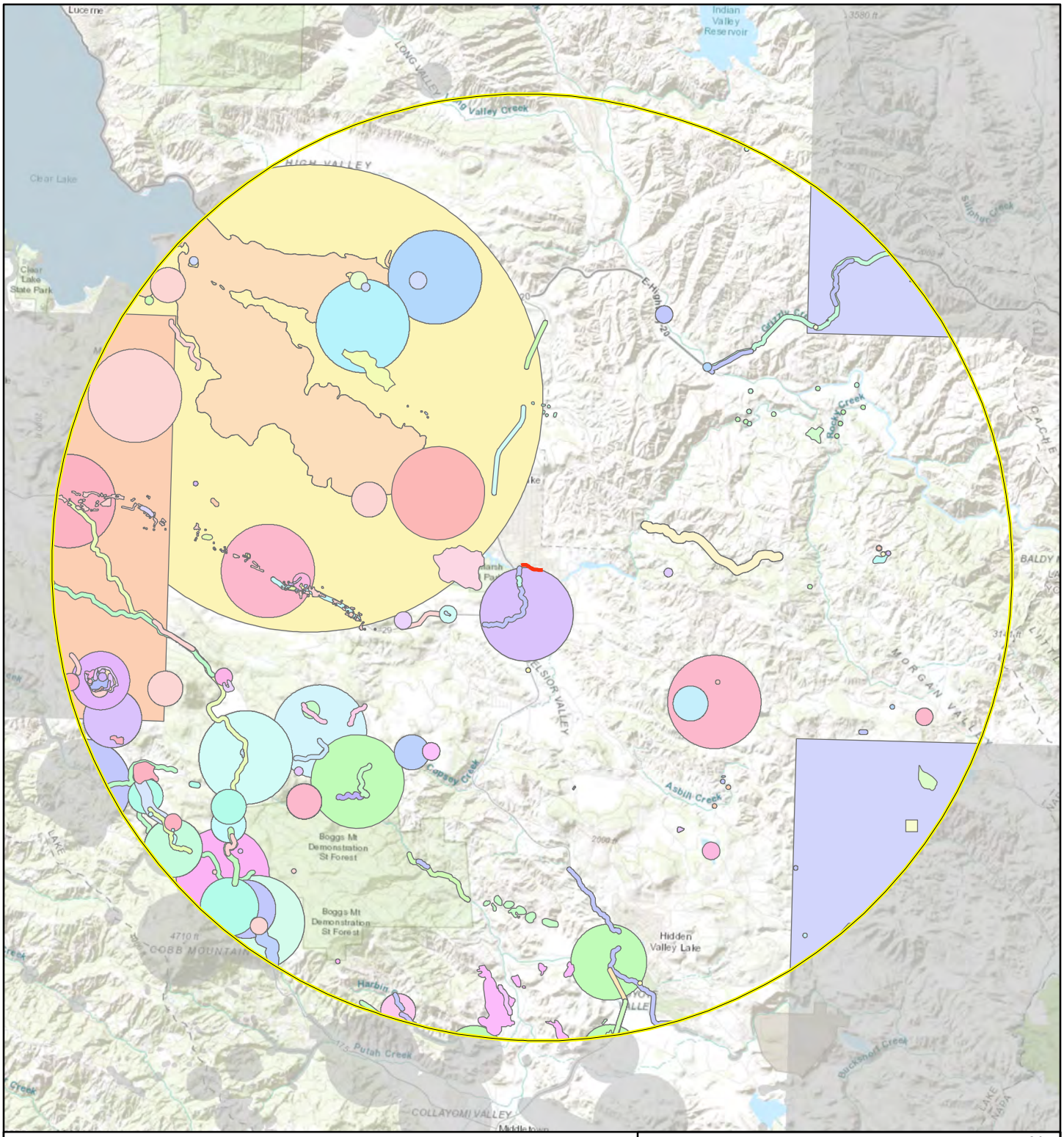
Natural Investigations Company



Habitats within the Project Area

Cache Creek Mobile Home Park Water Connection

Natural Investigations Company



Project Location 10 Mile Buffer

1:190,000 1 inch = 3 miles

0 3 6 Miles

N

Notes:
1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist inshowing features discussed in an attached document. Natural Investigations Company can not guarantee the accuracy and content of electronic files.The master file is stored by Natural Investigations Company and will serve as the official record of this communication.
3. It is unlawful to copy or reproduce all or any part thereof, whether for personal use or resale, without permission.Data Sources: California Department of Fish and Wildlife. 2019. RareFind 5.x, California Natural Diversity Data Base. Biogeographic Data Branch, Sacramento, California.
(updated monthly by subscription service)

Special-Status Species Occurrences Map

Cache Creek MHP

Lower Lake 1993 Quadrangle:Township 13N, Range 7W, Section 35

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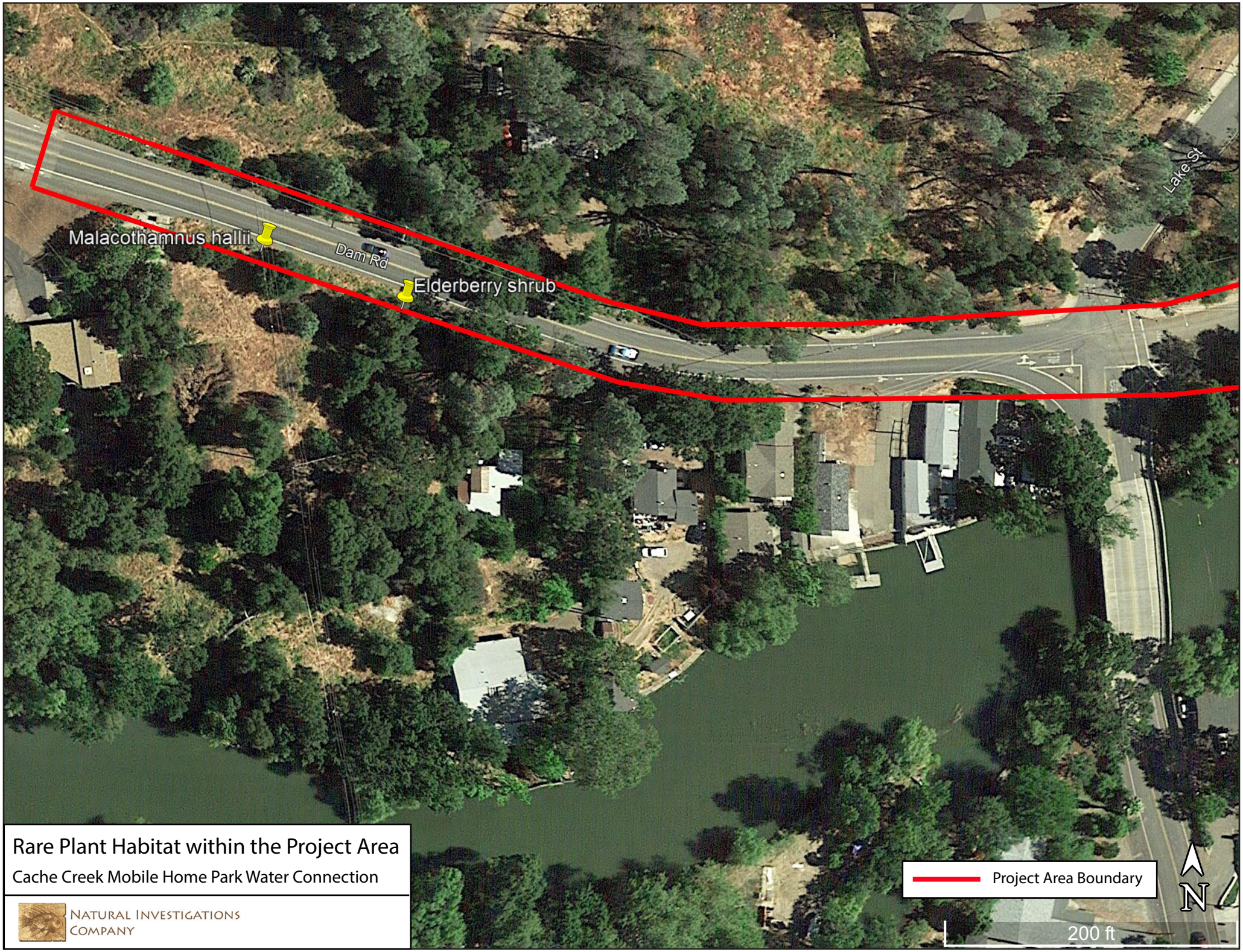
WWW.NATURALINVESTIGATIONS.COM



Rare Plant Habitat within the Project Area

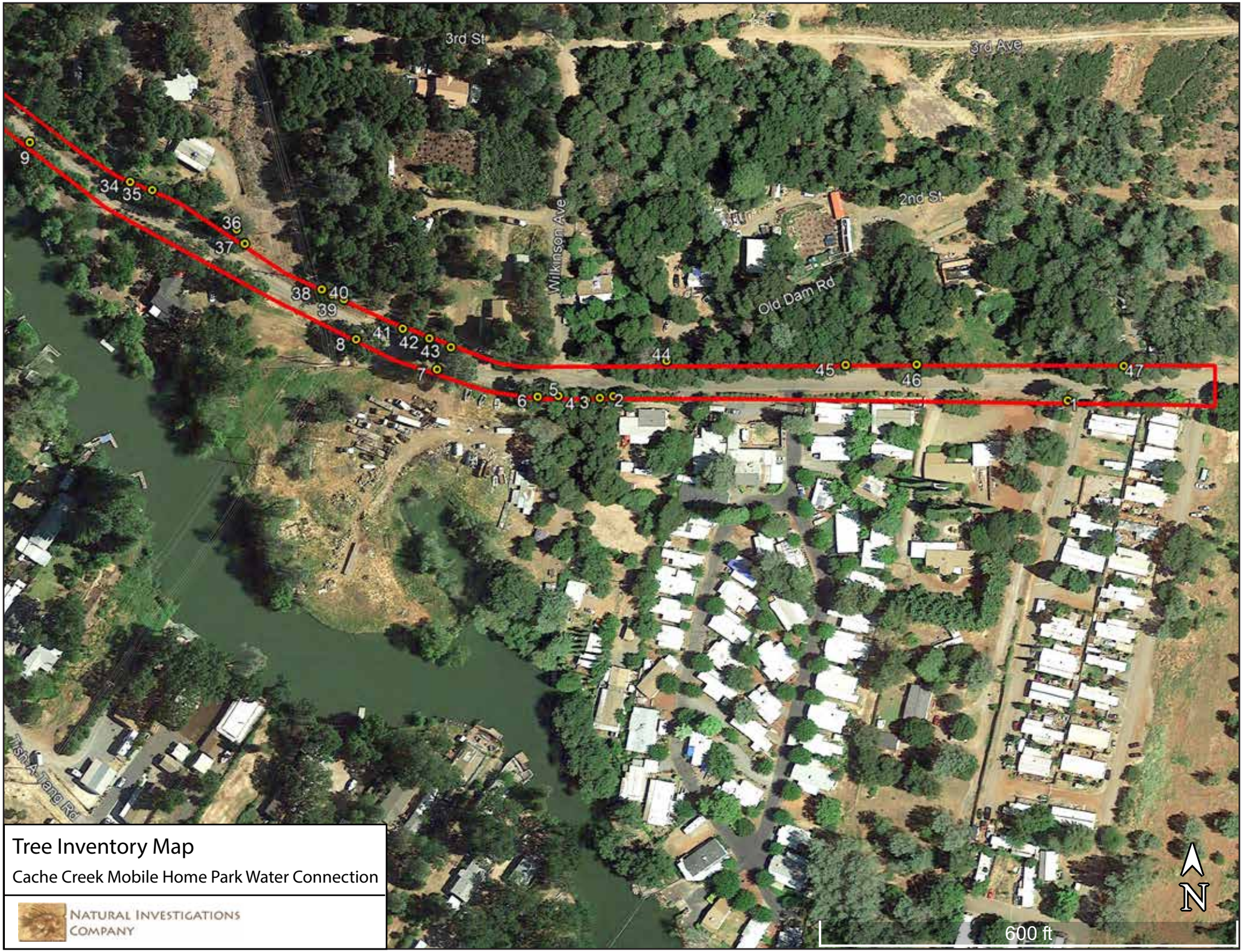
Cache Creek Mobile Home Park Water Connection

Natural Investigations Company

Tree Inventory Map

Cache Creek Mobile Home Park Water Connection

Natural Investigations Company



Tree Inventory Map

Cache Creek Mobile Home Park Water Connection

Natural Investigations Company

Project Alignment

Wetlands and Channels

0 200 400 Meters

0 750 1,500 Feet

1:7,500

Cache Creek MHP
National Wetlands Inventory
Features Map

Natural Investigations Company

Map Date 12/4/2019 Lower Lake 1993 Quadrangle:Township 13N, Range 7W, Section 34, 35, Township 12N, Range 7W, Section 2

APPENDIX 1: USFWS SPECIES LIST

United States Department of the Interior

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

In Reply Refer To: November 01, 2019
Consultation Code: 08ESMF00-2020-SLI-0266
Event Code: 08ESMF00-2020-E-00751
Project Name: Cache Creek MHP

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

To Whom It May Concern:

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

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

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

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

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

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

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

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

Attachment(s):

- Official Species List

Official Species List

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

This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

Project Summary

Consultation Code: 08ESMF00-2020-SLI-0266

Event Code: 08ESMF00-2020-E-00751

Project Name: Cache Creek MHP

Project Type: WATER SUPPLY / DELIVERY

Project Description: Bio Assessment

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/38.92549952796414N122.60830653582042W

Counties: Lake, CA

Endangered Species Act Species

There is a total of 6 threatened, endangered, or candidate species on this species list.

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

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

Birds

NAME	STATUS
Northern Spotted Owl *Strix occidentalis caurina*	Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/1123

Amphibians

NAME	STATUS
California Red-legged Frog *Rana draytonii*	Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/2891
Species survey guidelines:
https://ecos.fws.gov/ipac/guideline/survey/population/205/office/11420.pdf

Fishes

NAME	STATUS
Delta Smelt *Hypomesus transpacificus*	Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/321

Flowering Plants

NAME	STATUS
Burke's Goldfields *Lasthenia burkei* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4338	Endangered
Few-flowered Navarretia *Navarretia leucocephala ssp. pauciflora (=N. pauciflora)* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8242	Endangered
Slender Orcutt Grass *Orcuttia tenuis* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1063	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

APPENDIX 2: CHECKLIST OF PLANTS DETECTED IN THE PROJECT AREA

Appendix 2:

Plants Observed at 5805 Highland Springs Road, Lakeport, December 17, 2019

Common Name	Scientific Name
Chamise	*Adenostoma fasciculatum*
Tree of heaven	*Ailanthus altissima*
Common manzanita	*Arctostaphylos manzanita ssp. manzanita*
Slender wild oat	*Avena barbata*
Coyote brush	*Baccharis pilularis*
Ripgut brome	*Bromus diandrus*
Italian thistle	*Carduus pycnocephalus*
Yellow starthistle	*Centaurea solstitialis*
Birchleaf mountain mahogany	*Cercocarpus betuloides*
Miner's lettuce	*Claytonia perfoliata*
Blue wildrye	*Elymus glaucus*
Tall willowherb	*Epilobium brachycarpum*
Canada horseweed	*Erigeron canadensis*
Yerba santa	*Eriodictyon californicum*
Red-stemmed filaree	*Erodium cicutarium*
California coffeeberry	*Frangula californica*
Oregon ash	*Fraxinus latifolia*
Bedstraw	*Galium sp.*
Ashy silk-tassel	*Garrya flavescens*
Cut-leaved geranium	*Geranium dissectum*
Toyon	*Heteromeles arbutifolia*
Shortpod mustard	*Hirschfeldia incana*
Wall barley	*Hordeum murinum*
Lemmon's keckiella	*Keckiella lemmonii*
Prickly lettuce	*Lactuca serriola*
Henbit	*Lamium sp.*
Chaparral honeysuckle	*Lonicera interrupta*
Lupine	*Lupinus sp.*
Hall's bush mallow	*Malacothamnus hallii* (CNPS list 1B.2)
Wild cucumber	*Marah sp.*
Horehound	*Marrubium vulgare*
California burclover	*Medicago polymorpha*
Gray pine	*Pinus sabiniana*
English plantain	*Plantago lanceolata*
Bulbous bluegrass	*Poa bulbosa*
Blue oak	*Quercus douglasii*
California black oak	*Quercus kelloggii*
Valley oak	*Quercus lobata*
Interior live oak	*Quercus wislizeni*
Hollyleaf redberry	*Rhamnus ilicifolia*
Lemonade berry	*Rhus trilobata*
Himalayan blackberry	*Rubus armeniacus*
Curly dock	*Rumex crispus*
Blue elderberry	*Sambucus nigra ssp. caerulea*
Tall sock-destroyer	*Torilis arvensis*
Poison-oak	*Toxicodendron diversilobum*
Common mullein	*Verbascum thapsus*
Spring vetch	*Vicia sativa*
Winter vetch	*Vicia villosa*
Periwinkle	*Vinca major*

APPENDIX 3: SITE PHOTOS