

**STATE WATER RESOURCES CONTROL BOARD**



**Clearwater Mutual Water Company  
Upper Tank Replacement Project**

**Technical Assistance Work Plan # 6030-A**

**SCH#**

**Draft Initial Study and  
Mitigated Negative Declaration**

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**NORTHGATE ENVIRONMENTAL MANAGEMENT, INC.**

**STATE WATER RESOURCES CONTROL BOARD**

# **CLEARWATER MUTUAL WATER COMPANY UPPER TANK REPLACEMENT PROJECT**

## **Initial Study and Mitigated Negative Declaration**

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**State Water Resources Control Board**  
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**April 2020**

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## TABLE OF CONTENTS

<b>1.0</b>	<b>INTRODUCTION .....</b>	<b>1</b>
1.1	Intent and Scope of this Document .....	1
1.2	Public Involvement Process .....	1
1.3	Organization of this Document.....	2
<b>2.0</b>	<b>PROJECT DESCRIPTION .....</b>	<b>3</b>
2.1	Background and Need for the Project .....	3
2.2	Project Purpose and Objectives .....	4
2.3	Project Location and Setting .....	4
2.4	Proposed Project Characteristics .....	4
<b>3.0</b>	<b>ENVIRONMENTAL CHECKLIST .....</b>	<b>15</b>
3.1	Summary of Project Information.....	15
3.2	Environmental Factors Potentially Affected.....	16
3.3	Determination.....	16
3.4	Evaluation of Environmental Impacts .....	17
3.4.1	Aesthetics .....	18
3.4.2	Agriculture and Forest Resources.....	21
3.4.3	Air Quality .....	24
3.4.4	Biological Resources .....	29
3.4.5	Cultural Resources .....	37
3.4.6	Energy .....	40
3.4.7	Geology and Soils.....	41
3.4.8	Greenhouse Gas Emissions .....	45
3.4.9	Hazards and Hazardous Materials .....	47
3.4.10	Hydrology and Water Quality .....	50
3.4.11	Land Use and Planning.....	53
3.4.12	Mineral Resources .....	54
3.4.13	Noise .....	55
3.4.14	Population and Housing.....	60
3.4.15	Public Services .....	61
3.4.16	Recreation .....	62
3.4.17	Transportation.....	63
3.4.18	Tribal Cultural Resources.....	65
3.4.19	Utilities and Service Systems.....	68
3.4.20	Wildfire.....	71
3.4.21	Mandatory Findings of Significance.....	73

<b>4.0</b>	<b>REPORT PREPARERS.....</b>	<b>75</b>
<b>5.0</b>	<b>REFERENCES .....</b>	<b>76</b>

## **TABLES**

1.	Best Management Practices to be Implemented for the Proposed Project .....	9
AQ-1.	Local Ambient Air Quality Monitoring Data Summary .....	25
AQ-2.	Project Emissions and Comparison with EPA <i>De Minimis</i> Thresholds.....	27
NOI-1.	Modeled Project Construction Noise Levels .....	58

## **FIGURES**

1.	Regional Location Map.....	5
2.	Project Site Location .....	6
3.	Project Site Plan.....	7
4.	View of Existing Redwood Tank from End of Osceola Avenue .....	19
5.	View East towards Clear Lake of Site from Project Site.....	19
6.	View of Three Temporary Water Tanks from end of Osceola Avenue .....	20
7.	Sensitive Species Distribution .....	32

## **APPENDICES**

- A Special-Status Species List
- B Mitigation Monitoring and Reporting Program (to be included in Final IS)

## **1.0 INTRODUCTION**

The State Water Resources Control Board (State Water Board) has prepared this Initial Study/Mitigated Negative Declaration (IS/MND) to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of construction and operation of the proposed Clearwater Mutual Water Company, Upper Tank Replacement Project (Project). The proposed Project and its location are described in depth in Chapter 2. This document was prepared in accordance with the requirements of the California Environmental Quality Act (CEQA) of 1970 (as amended) and the CEQA Guidelines (14 California Code of Regulations [CCR] § 15000 et seq.).

### **1.1 Intent and Scope of this Document**

This IS/MND has been prepared in accordance with CEQA, under which the Project is evaluated at a project level (CEQA Guidelines § 15378). The State Water Board as the Lead Agency under CEQA, will consider the Project's potential environmental impacts when considering whether to approve the Project. This IS/MND is an informational document to be used in the planning and decision-making process for the Project and does not recommend approval or denial of the Project. The site plans for the Project included in this IS/MND are conceptual. The State Water Board anticipates that the final design for the Project would include some modifications to these conceptual plans, and the environmental analysis has been developed with conservative assumptions to accommodate some level of modification. This IS/MND describes the Project; its environmental setting, including existing conditions and regulatory setting, as necessary; and the potential environmental impacts of the Project on or with regard to the topics on the CEQA Initial Study checklist, in Chapter 3.

### **1.2 Public Involvement Process**

Public disclosure and dialogue are priorities under CEQA. CEQA Guidelines §15073 and §15105(b) require that the lead agency designate a period during the IS/MND process when the public and other agencies can provide comments on the potential impacts of the Project. Accordingly, the State Water Board is circulating this document for a 30-day public and agency review period.

All comments received before 5:00 p.m. from the date identified for closure of the public comment period in the Notice of Intent will be considered by the State Water Board during

its deliberations on whether to approve the Project. To provide input on this Project, please send comments to the following contact:

Gabriel Edwards  
SWRCB, Division of Financial Assistance  
Environmental Review Unit  
1001 I Street, 16th Floor  
Sacramento, CA, 95814  
Gabriel.Edwards@Waterboards.ca.gov

### 1.3 Organization of this Document

This IS/MND contains the following components:

- **Chapter 1, Introduction**, provides a brief description of the intent and scope of this IS/MND, the public involvement process under CEQA, and the organization of and terminology used in this IS/MND.
- **Chapter 2, Project Description**, describes the Project, including its objectives, the project site where the Project would be constructed, the construction approach and activities, operation-related activities, and related permits and approvals.
- **Chapter 3, Environmental Checklist**, presents the environmental checklist used to assess the Project's potential environmental effects, which is based on the model provided in Appendix G of the CEQA Guidelines. This chapter also includes a brief environmental setting description for each resource topic and identifies the Project's anticipated environmental impacts, as well as any mitigation measures that would be required to reduce potentially significant impacts to a less than-significant level.
- **Chapter 4, Report Preparers**, includes a list of who was involved in drafting this IS/MND.
- **Chapter 5, References**, provides a bibliography of printed references, websites, and personal communications used in preparing this IS/MND.
- **Appendices**
  - Appendix A. Special-status Species List
  - Appendix B. Mitigation Monitoring and Reporting Program



## **2.0 PROJECT DESCRIPTION**

### **2.1 Background and Need for the Project**

Clearwater Mutual Water Company serves Konocti Bay Estates, a small community located on the southwest shore of Clear Lake near Kelseyville, California. The existing water system consists of a raw water intake, a lake pump station, a surface water treatment plant, a 35,000-gallon redwood storage tank, and a single pressure zone distribution system. The Clearwater Mutual Water Company's only water supply is from Clear Lake via riparian water rights. The raw water intake is approximately 300 feet offshore at a typical depth of approximately 15 feet. Two intake pumps with an approximate flow of 45-50 gallons per minute (GPM) and 55-60 GPM respectively, provide raw water to the current system. The capacity of the current system is designated at 54,720 gallons per day (GPD).

The existing 35,000-gallon redwood water storage tank was constructed in 1969 and has reached its useful service life. The tank has significant leaks and is losing 30,000 gallons per month (gpm) or more. It is continuing to develop new leaks due to woodpeckers and carpenter bees, as well as deterioration of the redwood staves. The most prominent leak is located on the east side of the tank where the supply main enters the tank. The screen that is placed around the top of the tank was extended down further to cover holes and metal patches that were placed over holes. The wood the tank is made with appears warped and not structurally sound.

In addition, the ground surrounding this portion of the tank is completely saturated, with pooling water continuously flowing down the hill. The geotechnical investigation noted that this saturation on the downhill side of the tank is potentially dangerous and could lead to differential settlement of the tank foundation. Differential settlement could lead to a failure of the tank structure and is a risk to nearby residents of the community.

Section 64554.a.1, Chapter 16 California Waterworks Standards, Title 22 of the California Code of Regulations states that "for systems with less than 1,000 service connections, the system shall have storage capacity equal to or greater than the Maximum Daily Demand (MDD), unless the system can demonstrate that it has an additional source of supply or has an emergency source connection that can meet the MDD requirements." The existing clear well is devoted to meeting the required disinfection contact time and cannot be considered available storage except under emergency conditions. The

Engineering Report recommendation based on emergency response storage capacity needs, future growth and current historic MDD, is to increase the tank volume to 122,000 gallons.

## **2.2 Project Purpose and Objectives**

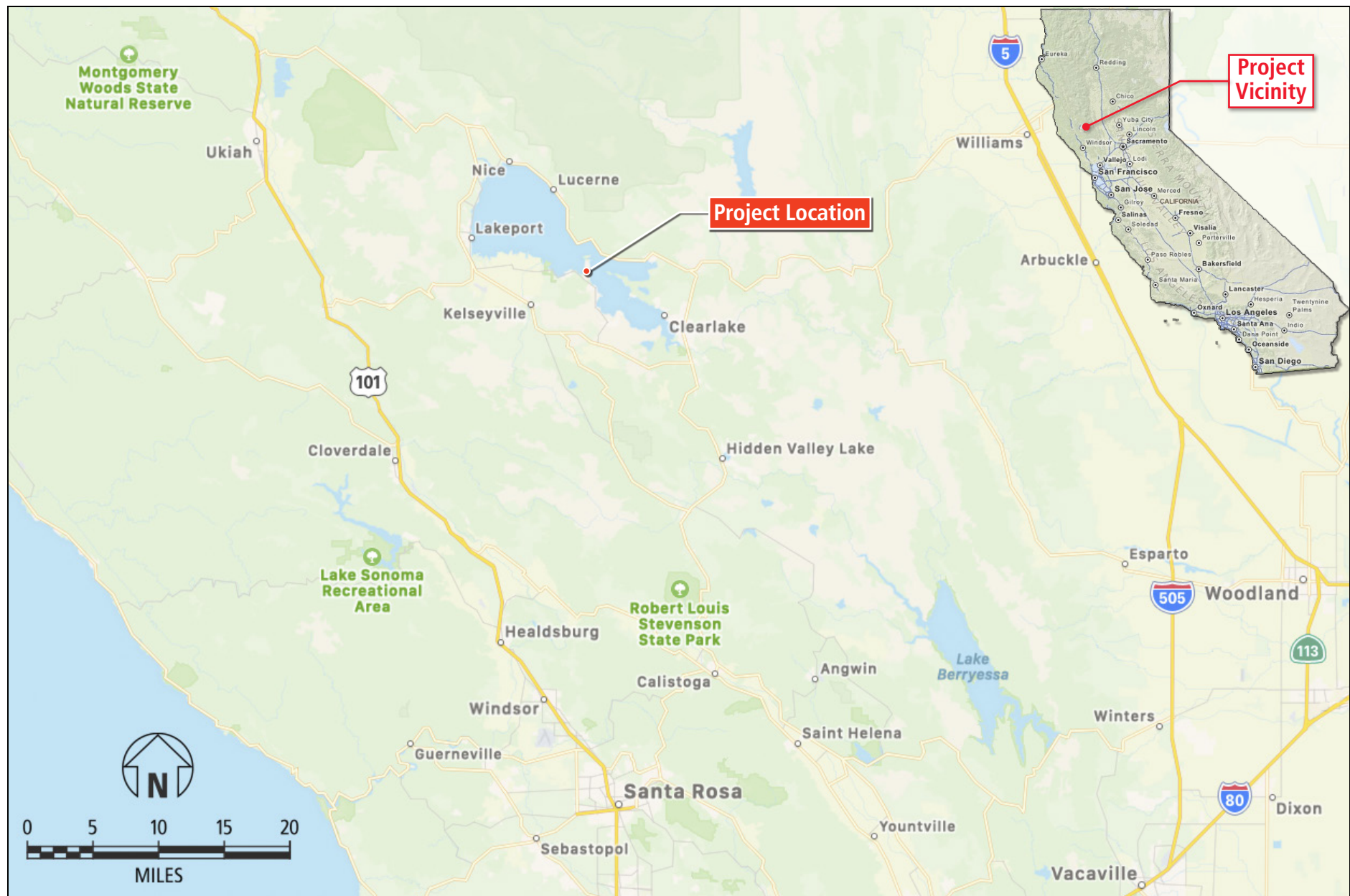
The goal of the Project is to provide a more stable water storage and treatment system with an increased capacity to meet current use and fire storage needs, and extend the life of service. The recommended water storage tank capacity of 122,000 gallons will meet MDD of 51,100 gallons and 60,000 gallons for fire flow storage plus 10% for future growth. The completed water system would conform to Chapter 16, California Waterworks Standards, Code of Regulations, Title 22 storage and supply requirements.

## **2.3 Project Location and Setting**

The Project is located near the south shore of Clear Lake, in Lake County, about 3.5 miles northeast of the town of Kelseyville. The proposed tank site is located in the “Clear Lake Riviera” area, west of Soda Bay Road, at the north end of Osceola Avenue. The Project location is shown on Figures 1 and 2. Land uses in the area are a mix of suburban and rural residential, agriculture (orchards), lake-oriented recreation, and open space. The Project site is surrounded by open wildlands and orchards to the north and west, and by a single-family residential neighborhood to the east and south. It is located on a single-family lot, and currently houses the old wooden tank and three large temporary plastic water tanks.

## **2.4 Proposed Project Characteristics**

The Project includes the replacement of the existing 35,000-gallon redwood tank and the three 10,000-gallon temporary plastic tanks with a single 122,000-gallon welded steel tank. This tank would meet the capacity needs, mitigate the potential emergency situation of the current tank, and has the lowest operation and maintenance costs of the alternatives considered. The current tank is about 20 feet in diameter and 22 feet tall. The new storage tank would be approximately 32 feet in diameter, 26.5 feet tall and have a capacity of approximately 122,000 gallons (Figure 3). The new tank would be approximately 5 feet taller and 12 feet wider than the existing tank. The new tank would be trucked in and welded in place. The foundation of the new storage tank would be a



**Figure 1**  
Project Location

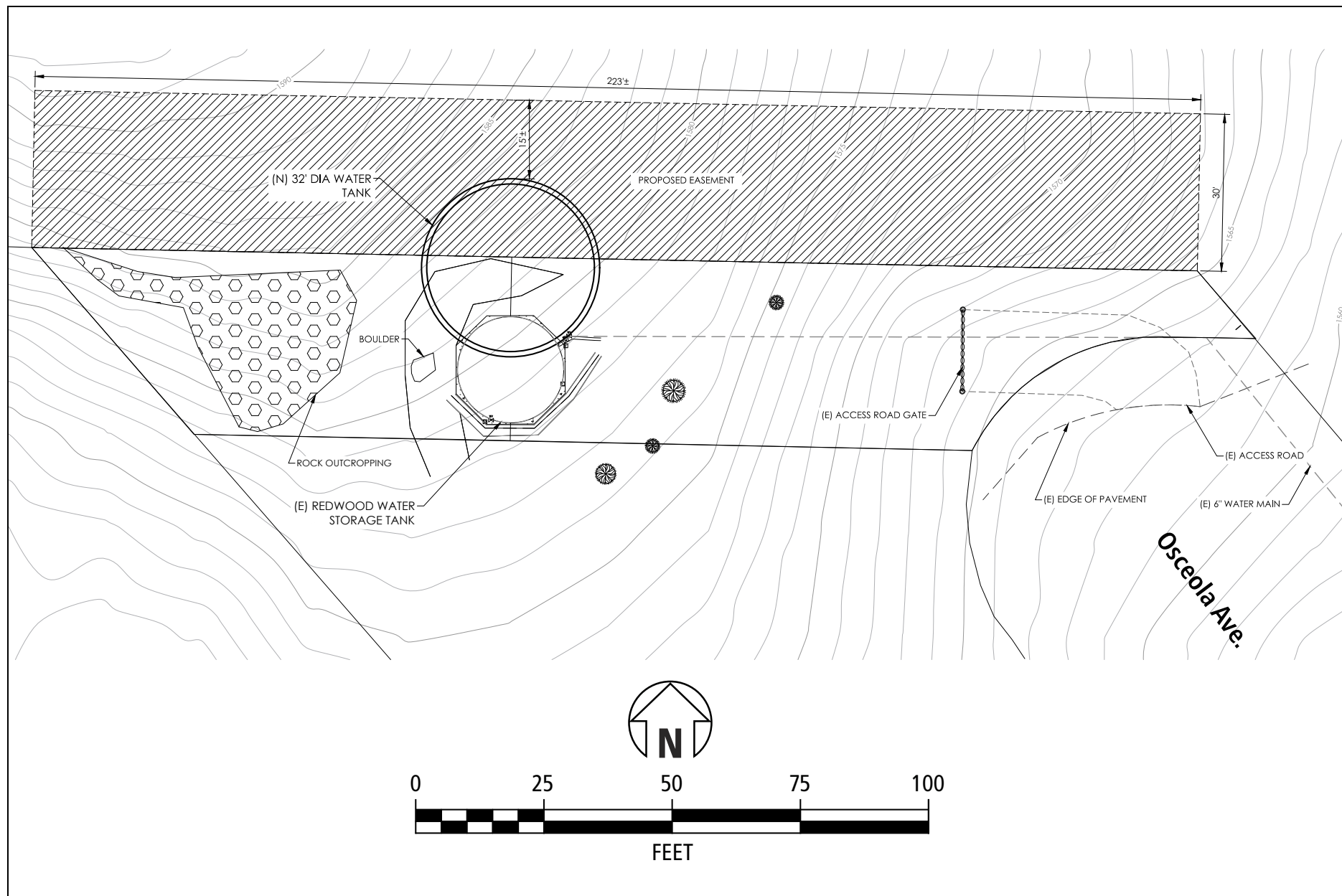
Source: TomTom Maps





**Figure 2**  
Project Site

Source: Rubicon Environmental Consulting



**Figure 3**  
Project Site Plan

perimeter-reinforced concrete-ring foundation. The foundation would be supported by subgrade soil prepared as recommended by the geotechnical investigation (Kleinfelder 2017). Two mature pine trees would be removed for Project construction. All construction lay-down and storage would occur on the site. The new tank would be accessed by a new paved driveway, and a paved apron would surround the new tank.

### ***Construction Equipment and Workers***

The main pieces of equipment that may be used are as follows:

- flat-bed delivery truck
- concrete truck (2 days per well)
- backhoe (30 days)
- compactor (2 days)
- front-end loader (10 days)
- water truck (5 days)
- paver (1 day)
- Compaction Roller (1 day)

Up to eight construction workers could be utilized at any given time during construction.

### ***Construction Schedule***

Construction of the Project would take place over one-year period in 2021 (assuming funding availability). Construction activities would occur Monday through Friday between 7:00 a.m. and 6:00 p.m.

### ***Other Required Permits***

Regional Water Quality Control Board	Compliance with State Construction General Stormwater Permit
County of Lake	Encroachment Permit, Building Permit, Grading Permit, Compliance with Lake County Stormwater Ordinance

## **Best Management Practices**

Project construction would include a range of environmental commitments, otherwise known as best management practices (BMPs), to avoid adverse effects on people and the environment. BMPs are developed to address anticipated effects from various construction activities and would be implemented pre-construction, during construction, and post-construction, as specified in Table 1.

**TABLE 1**  
**Best Management Practices (BMPs) to be Implemented for the Project**

<b>Number</b>	<b>Title</b>	<b>BMP Description</b>
BMP-1	Best Management Practices for Construction Emissions, Including Fugitive Dust Emissions	<p>A. The contractor shall use construction equipment that minimizes air emissions to the extent feasible. Acceptable options for reducing emissions include the use of late-model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.</p> <p>B. Implementation of construction BMPs to limit construction emissions, particularly fugitive dust emissions, shall include the following:</p> <ul style="list-style-type: none"><li>• All exposed areas of bare soil shall be watered twice per day during active work days to minimize fugitive dust emissions.</li><li>• All haul trucks transporting soil, sand, or other loose material off-site shall be covered or maintain at least two feet of free board space. Any haul trucks traveling along freeways or major roadways shall be covered.</li></ul>

Number	Title	BMP Description
		<ul style="list-style-type: none"> <li>• All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power-vacuum street sweepers or other means at least once per day. The use of dry power sweeping shall be prohibited.</li> <li>• All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).</li> <li>• Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13 CCR § 2485). Clear signage regarding this requirement shall be provided for construction workers at all access points.</li> <li>• All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator and determined to be running in proper condition before it is operated.</li> </ul> <p>The proposed Project shall implement these measures as required.</p>
BMP-2	Best Management Practices for Sediment Control	<p>Site specific BMPs to control sediments shall be implemented during construction activities, which may include but not be limited to:</p> <ul style="list-style-type: none"> <li>• Install, implement, and maintain BMPs consistent with the California Storm Water Quality Association Best Management Practice Handbook (California Storm Water Quality Association [CASQA] 2015) or equivalent to minimize the discharge of pollutants.</li> </ul>



Number	Title	BMP Description
		<ul style="list-style-type: none"> <li>• Implement practices to reduce erosion of exposed soil, including stabilization of soil stockpiles, watering for dust control, establishment of perimeter silt fences, and/or placement of fiber rolls.</li> <li>• Minimize soil disturbance area.</li> <li>• Implement other practices to maintain water quality, including use of silt fences, stabilized construction entrances, and storm-drain inlet protection.</li> <li>• Where feasible, limit construction to dry periods.</li> <li>• Possibly revegetate disturbed areas (depending on fire considerations).</li> </ul> <p>BMPs shall be regularly monitored for effectiveness using appropriate methods (visual observation, sampling) at appropriate intervals (e.g., daily or weekly) and corrected immediately if determined to not be effective.</p>
BMP-3	Best Management Practices for Hazardous Materials	<p>Site-specific hazardous materials BMPs during construction activities shall be implemented, which may include but not be limited to:</p> <ul style="list-style-type: none"> <li>• Develop (before initiation of construction activities) and implement (during construction and operational activities) a spill prevention and emergency response plan to handle potential spills of fuel or other pollutants.</li> <li>• Install, implement, and maintain BMPs consistent with the California Storm Water Quality Association Best Management Practice Handbook (CASQA 2015) or equivalent to</li> </ul>

Number	Title	BMP Description
		<p>minimize the discharge of pollutants to the MS4s, consistent with the requirements of the construction site stormwater and hazardous materials control requirements of the County of Lake.</p> <ul style="list-style-type: none"> <li>• Implement practices to minimize the contact of construction materials, equipment, and maintenance supplies with stormwater.</li> <li>• Limit fueling and other activities involving hazardous materials to designated areas only; provide drip pans under equipment and conduct daily checks of vehicle condition.</li> <li>• Require the proper disposal of trash and any other construction-related waste.</li> <li>• Ensure, through the enforcement of contractual obligations, that all contractors transport, store, handle, and dispose of construction-related hazardous materials consistent with relevant regulations and guidelines, including those recommended and enforced by the RWQCB; the applicable county department; and the applicable local fire department. Recommendations may include minimizing the amount of hazardous materials/waste stored on-site at any one time, transporting, and storing materials in appropriate and approved containers, maintaining required clearances, and handling materials using the applicable federal, state, and/or local regulatory agency protocols.</li> <li>• BMPs shall be regularly monitored for effectiveness using appropriate methods (visual observation, sampling) at appropriate intervals</li> </ul>

Number	Title	BMP Description
		(e.g., daily or weekly) and corrected immediately if determined to not be effective.
BMP-4	Best Management Practices for Noise	<p>The following BMPs shall be incorporated into the Project construction documents:</p> <ul style="list-style-type: none"> <li>• Provide enclosures and noise mufflers for stationary equipment.</li> <li>• Use quietest type of construction equipment whenever possible, particularly air compressors.</li> <li>• Provide sound-control devices on equipment no less effective than those provided by the manufacturer.</li> <li>• Locate stationary equipment, material stockpiles, and vehicle staging areas as far as practicable from sensitive receptors.</li> <li>• Prohibit unnecessary idling of internal combustion engines.</li> <li>• Require applicable construction-related vehicles and equipment to use designated truck routes when entering/leaving the site.</li> <li>• Designate a noise (and vibration) disturbance coordinator at the Clearwater Mutual Water Company who shall be responsible for responding to complaints about noise (and vibration) during construction. The telephone number of the noise disturbance coordinator shall be conspicuously posted at the construction site.</li> <li>• Prohibit Project construction activity between the hours of seven pm and seven a.m. on weekdays; no noise-generating work shall be permitted on weekends and national holidays, as required by</li> </ul>

Number	Title	BMP Description
		the County Noise Ordinance, except in cases of emergency.

### **3.0 ENVIRONMENTAL CHECKLIST**

#### **3.1 Summary of Project Information**

1. Project title: Clearwater Mutual Water Company, Upper Tank Replacement Project
2. Lead agency name and address:  
State Water Resources Control Board  
Division of Financial Assistance  
1001 I Street, 16th Floor  
Sacramento, CA 95814
3. Contact Person, Email, and Phone Number:  
Gabriel Edwards  
SWRCB, Division of Financial Assistance  
Environmental Review Unit  
Gabriel.Edwards@Waterboards.ca.gov  
(916) 449-5990
4. Project Location:  
Parcel # 046-024-01.  
North end of Osceola Avenue in Lake County, California.
5. Project sponsor's name and address:  
Clearwater Mutual Water Company  
4151 Osceola Ave.  
Kelseyville, CA 95451
6. General Plan designation: Low-density Residential (LDR)
7. Zoning: Single-family Residential (R-1)
8. Description of Project: See Chapter 2, Project Description
9. Surrounding land uses and setting: See Chapter 2, Project Description

### 3.2 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," as indicated by the checklist on the following pages.

<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture / Forest Resources	<input type="checkbox"/> Air Quality
<input checked="" type="checkbox"/> Biological Resources	<input checked="" type="checkbox"/> Cultural Resources	<input type="checkbox"/> Energy
<input type="checkbox"/> Geology / Soils	<input type="checkbox"/> Greenhouse Gas Emissions	<input type="checkbox"/> Hazards & Hazardous Materials
<input type="checkbox"/> Hydrology / Water Quality	<input type="checkbox"/> Land Use / Planning	<input type="checkbox"/> Mineral Resources
<input type="checkbox"/> Noise	<input type="checkbox"/> Population / Housing	<input type="checkbox"/> Public Services
<input type="checkbox"/> Recreation	<input type="checkbox"/> Transportation	<input checked="" type="checkbox"/> Tribal Cultural Resources
<input type="checkbox"/> Utilities / Service Systems	<input type="checkbox"/> Wildfire	<input checked="" type="checkbox"/> Mandatory Findings of Significance

### 3.3 Determination

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 would be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there would 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 would 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 although 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.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Bridget Binning

\_\_\_\_\_  
Printed name

\_\_\_\_\_  
Date

### 3.4 Evaluation of Environmental Impacts

The following checklist is formatted consistent with CEQA Guidelines, Appendix G. A “**No Impact**” response indicates that the project would not result in an environmental impact in a particular area of interest, either because the resource is not present, or the project does not have the potential to cause an effect on the resource.

A “**Less Than Significant Impact**” response indicates that, while there may be potential for an environmental impact, the significance of the impact would not exceed established thresholds and/or that there are standard procedures or regulations in place that would apply to the project and hence no mitigation is required.

Responses that indicated that the impact of the project would be “**Less Than Significant with Mitigation Incorporated**” mean that, although there is the potential for a significant impact, feasible mitigation measures would become conditions of approval for the project if it receives approval.

A “**Potentially Significant Impact**” response indicates that the impact would exceed established thresholds and that the impact could not be avoided by utilizing standard operating procedures and regulations, program requirements, or design features incorporated into the project or that additional analysis is required in an EIR.

Public comments on this Initial Study should focus on the accuracy and completeness of the analysis contained herein.

### 3.4.1 Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### **Background**

The Project area is located on the northwestern edge of the single-family community of Konocti Bay Estates in Lake County, CA. The Project site consists of a cleared area that contains an existing redwood water storage tank. The site is surrounded by naturally vegetated wildlands to the north and west, and by single-family residential uses to the south and east. The overall aesthetics of the nearby landscape have been altered as a result of a recent CAL FIRE vegetation clearing project, which has limited the nearby vegetation to the west to low grasses and shrubs. The residential neighborhood to the south and east provide the main source of lighting near the Project site.

The site is located at the end of a cul-de-sac with no through-traffic. Views of the site are shown on Figures 4-6.





Figure 4: View of Existing Redwood Tank from End of Osceola Avenue



Figure 5. View East towards Clear Lake of Site from Project Site



Figure 6. View of Three Temporary Water Tanks from end of Osceola Avenue

The existing tank is about 26.5 feet high, and is visible from two adjacent residences. In addition, three temporary plastic tanks have been constructed adjacent to the Project site, and are visible from the end of Osceola Avenue. The existing redwood tank on the Project site is set back from the roadway and is buffered from street views by intervening trees.

There are no designated state scenic highways within Lake County (Caltrans, 2018).

## **Discussion**

**a. Scenic Vista** – The Project would not substantially alter views from scenic vistas around Konocti Bay Estates. While the new tank would be approximately 5 feet taller and 12 feet wider than the existing tank, and would be constructed of painted steel instead of redwood, it would still be set back from the roadway and at the end of a cul-de-sac (end of Osceola Avenue) on a small, dead-end street frequented primarily by residents and guests at adjacent houses. In addition, the three visually prominent plastic tanks would be removed, improving views in the vicinity. The new tank would be painted manzanita

green or a similar tone to blend in with the surrounding environment. There are no scenic vistas in the Project vicinity. Therefore the Proposed Project would not have the potential to affect any scenic vistas, and **no impact** would occur.

**b. Scenic Highway – No Impact**

The Project would not damage scenic resources including trees, rock outcroppings, or historic buildings within a state scenic highway. There are no designated state scenic highways within Lake County (Caltrans, 2018). Two trees would be removed as part of the Project; these are not in a scenic highway corridor. **No impact** would occur.

**c. Visual Quality – Less than Significant**

The Project would not have an impact on the existing visual character or quality of public views of the Project area. The currently cleared Project site is set back from the roadway and contains the existing redwood tank, which is not substantially visible from the street with tree coverage. The site is located at the end of a cul-de-sac with no through-traffic. The new welded steel tank would be located overlapping the site of the existing redwood tank, and would be painted an earth tone to conform visually with the adjacent open space lands. In addition, the three visually prominent plastic tanks would be removed, improving views in the vicinity. Two mature pine trees would be removed (one 24-inch diameter and one 14-inch diameter). There are numerous other similar trees nearby, so this removal would not result in a significant change to the site's overall aesthetic quality. Construction activities would result in temporary visual impacts to the area, and would be partially visible from the residences near the end of the cul-de-sac. This impact would be **less than significant**.

**d. Light and Glare – Less than Significant**

The tank would be painted in a flat, neutral paint color (i.e. manzanita green) to minimize any potential glare. There is no lighting at the current tank. The new tank would have security lighting with a motion sensor. The lighting would be shielded to avoid spillover off-site. Temporary lighting may be utilized during construction activities and could be visible from the roadway and nearby adjacent lots. However construction hours would be limited to between 7am and 7pm, so construction lighting needs would be minimal. This impact would be **less than significant**.

### 3.4.2 Agriculture and Forest 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 Dept. 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	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## **Background**

Although there are orchard areas adjacent to the site, the Project would be located on a cleared residentially zoned lot in an existing residential subdivision. The lot currently houses the existing water tank and associated facilities. There is no agricultural land on or immediately adjacent to Project site.

## **Discussion**

### **a, b. Farmland, Williamson Act – *No Impact***

The Project would not 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. The Project is located in an area identified as Urban and Built Up Land adjacent to Other Use land on the State Farmland Map. The Project site is not under Williamson Act contract. Therefore it would have no potential to affect any agricultural lands, including any under Williamson Act contracts. **No impact** would occur.

### **c, d. Forest Lands – *No Impact***

As discussed above, the Project would consist of construction of a new water tank at the site of an existing water tank on a residentially zoned lot. Additionally, there are no forested lands adjacent to the property. Therefore the Project would not result in the loss of forest land or conversion of forest land to non-forest use. **No impact** would occur.

### **e. Conversion of Farmland – *No Impact***

As discussed above, the Project would consist of a new water tank at the site of an existing tank on a residential lot. Therefore it would have no potential to convert any farmlands to non-farm uses. **No impact** would occur.

### 3.4.3 Air Quality

Where available, the significance criteria established by the applicable air quality management district 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	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### **Background**

The US Environmental Protection Agency (EPA) and California Air Resources Board (CARB) have established national ambient air quality standards and California ambient air quality standards, respectively. The most important pollutants so regulated are: ozone, carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), and particulate matter (PM) (i.e., in two size classes - PM less than 10 microns in diameter [PM<sub>10</sub>] and PM less than 2.5 microns in diameter [PM<sub>2.5</sub>]). The pollutants of greatest concern in California (and locally) are ozone and PM<sub>2.5</sub>. The CARB has retained regulatory authority over mobile pollutant sources in the state, but has delegated much of the responsibility for control over stationary pollutant sources to local agencies, which in Lake County is the Lake County Air Quality Management District (LCAQMD). As specified above in the Project Description, the Clearwater Mutual Water Company intends to replace an existing water storage tank servicing the unincorporated Konocti Bay Estates community; both tank and community are located entirely in Lake County.

The CARB and the state's local Air Districts maintain numerous air quality monitoring stations located throughout the state that continually measure the ambient concentrations

of major air pollutants. The coverage afforded by such stations in the northern rural regions of the state is rather sparse. However, there are such stations in Lake County, the closest to the Project site being in Lakeport about 10 miles west of the Project site. Ozone and PM are monitored in Lakeport with a few violations of the federal PM<sub>10</sub> and PM<sub>2.5</sub> standards recorded in recent years, as shown in Table AQ-1.

**Table AQ-1: Local Ambient Air Quality Monitoring Data Summary**

POLLUTANT	AMBIENT STANDARD	MAXIMUM CONCENTRATIONS MEASURED/DAYS STANDARDS EXCEEDED		
		2016	2017	2018
Ozone – Lakeport (2617 S. Main Street)				
Maximum 8-hour concentration (ppm)	0.070	na	0.068	0.063
# Days federal standard exceeded		na	0	0
PM <sub>10</sub> – Lakeport (2617 S. Main Street)				
Maximum 24-hour concentration (µg/m <sup>3</sup> )	150	na	120.0	180.1
# Days federal standard exceeded		na	0	1
PM <sub>2.5</sub> – Lakeport (2617 S. Main Street)				
Maximum 24-hour concentration (µg/m <sup>3</sup> )	35	na	85.3	157.9
# Days federal standard exceeded		na	2	3
Notes:  ppm = parts per million. µg/m <sup>3</sup> = micrograms per cubic meter na = data not available  Source: CARB, iADAM: Air Quality Data Statistics <a href="https://www.arb.ca.gov/adam/">https://www.arb.ca.gov/adam/</a>				

Many counties in northern California (including Lake County) are unclassified with respect to whether they attain the federal or state standards, although several counties in the southern Sacramento Valley Air Basin just east of Lake County are nonattainment areas for ozone and PM<sub>2.5</sub> (EPA, Nonattainment Areas for Criteria Pollutants).

The larger California Air Districts have established their own analytical methodologies and significance thresholds for CEQA air quality analysis within their jurisdictions. But there are no CEQA methodological guidelines or significance thresholds from the LCAQMD for projects in Lake County. Thus, emissions of fugitive dust during Project construction are recommended to be minimized by implementing standard dust control BMPs as specified

below. Project impacts from construction equipment exhaust emissions were evaluated based on comparison with EPA de minimis emission thresholds and all were found to be well below such thresholds.

## **Discussion**

### **a and b. Air Quality Planning, Standards, Non-Attainment – *Less than Significant***

The Project's replacement of a water storage tank is meant primarily to serve the existing residents of the Konocti Bay Estates community. Thus, the Project would not have the potential to increase Lake County's regional housing, employment, population or traffic levels, which are the bases of California's State Implementation Plan (SIP) for attainment of federal air quality standards. The Project would not significantly impede attainment of the air quality goals in Lake County or in the state's other air basins. Thus, the Project would not conflict with or obstruct implementation of applicable air quality plans.

The Project would comply with the federal Clean Air Act by not causing or contributing to violations of federal ambient air quality standards. As indicators of compliance with these standards, the EPA's General Conformity Rule (EPA General Conformity) specifies de minimis emission thresholds (EPA, General Conformity De Minimis Tables) for ozone and its precursors (i.e., volatile organic compounds [VOC] and nitrogen oxides [NOx]) and the other major air pollutants. As shown in Table AQ-2, Project construction and operational emissions are less than the *de minimis* thresholds for all major criteria pollutants. Thus, the Project would be in conformity with California's SIP for attainment of federal air quality standards and would not make cumulatively considerable contributions to Lake County's ambient ozone or particulate matter levels.

After Project construction is complete, the operational air pollutant emissions associated with the rebuilt water distribution system would be similar to those of the old system. Thus, the Project's operational air pollutant emissions would be **less than significant**.

### **c. Sensitive Receptors – *Less than Significant***

Demolition of the existing water tank, site preparation, and construction of the new water tank are expected to occur during a three-month period in 2021. Construction activities would generate temporary potentially significant emissions of fugitive dust from equipment and material movement, and PM<sub>10</sub> / PM<sub>2.5</sub> in engine exhaust. To limit the generation of fugitive dust, which together with particulate emissions from construction



equipment exhaust could expose nearby residences (local sensitive receptors) to elevated PM<sub>10</sub> / PM<sub>2.5</sub> levels during Project construction, construction best management practices would be implemented as specified in the Best Management Practices listed in Table 1 in the Project Description. This impact would be **less than significant**.

**Table AQ-2: Project Emissions and Comparisons with EPA *De Minimis* Thresholds (tons/year)**

Pollutant	Lake County Federal Attainment Status <sup>a</sup>	Lake County De Minimis Threshold <sup>b</sup>	Project Construction Emissions <sup>c</sup>	Net Project Operational Emissions
Ozone (O <sub>3</sub> ) <sup>d</sup>	Attainment/Unclassified	100	0.17	< 0.01
Oxides of Nitrogen (NO <sub>x</sub> )	Attainment/Unclassified	100	0.15	< 0.01
Reactive Organic Gases (ROG)	----	50	0.01	< 0.01
Volatile Organics (VOCs)	----	50	0.02	< 0.01
Particulate Matter (PM <sub>2.5</sub> )	Attainment/Unclassified	100	0.01	< 0.01
Particulate Matter (PM <sub>10</sub> )	Unclassified	100	0.01	< 0.01
Carbon Monoxide (CO)	Attainment/Unclassified	100	0.08	< 0.01
Sulfur Dioxide (SO <sub>2</sub> )	Attainment/Unclassified	100	< 0.01	< 0.01
Lead (Pb)	Attainment/Unclassified	25	0	0
Emission estimates assume project construction equipment with California-average emitting engines during the year 2021 construction phases.				
<sup>a</sup> Source: CARB, Area Designation Maps <a href="https://ww3.arb.ca.gov/desig/adm/adm.htm">https://ww3.arb.ca.gov/desig/adm/adm.htm</a>				
<sup>b</sup> Source: EPA, General Conformity De Minimis Tables <a href="https://www.epa.gov/general-conformity/de-minimis-tables">https://www.epa.gov/general-conformity/de-minimis-tables</a>				
<sup>c</sup> Emissions from construction equipment were calculated using the CalEEMod Model, Version 2016.3.2.				
<sup>d</sup> Ozone is not directly emitted but is formed from its precursors, NO <sub>x</sub> and VOC. Thus, ozone emissions were taken to be the sum of the two precursors.				

**d. Other emissions – *Less than Significant***

The Project construction fleet would be made up of a small number of equipment types (i.e., an excavator, a front-end loader, a grader and a crane) operating as required to demolish the old water tank, prepare the foundation of and erect the new tank, all over a total duration of not more than 3 months. Thus, any perceptible odor impacts from construction equipment exhaust to the local residents would be transitory as the locus of construction activity moves around the Project site as needed by phase. Therefore, odor impacts associated with Project construction would be **less than significant**.

### 3.4.4 Biological Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### **Background**

A biological resources inventory and habitat evaluation was conducted for the Project (Rubicon Environmental Consulting, August 2017). The evaluation included a detailed review of the Project area and evaluation of the potential occurrence of special-status and

sensitive species represented within a 1-mile buffer surrounding the Project site. Survey methods included literature review, database search, and pedestrian survey.

Existing literature was reviewed and data requests were sent to resource agencies for the purpose of identifying potential biological resources and special status species that have the potential to occur. The following data collection activities were conducted for characterizing potential habitat for special status species:

1. Requested a threatened and endangered species list from the United States Fish and Wildlife Service (USFWS) in 2017 and utilized the Information, Planning and Conservation System to perform a search for a site-specific list of federally endangered, threatened, or candidate species that have the potential to occur in 2017;
2. Reviewed the RareFind Database for endangered, threatened, candidate, or at-risk plant species within or near the Project Area from the California Native Plant Society (CNPS);
3. Queried the California Natural Diversity Database (CNDDDB) for information, including special status species information;
4. Reviewed the USFWS' National Wetland Inventory Maps to determine if any mapped riparian or wetlands are present in the Project Area; and
5. Reviewed and evaluated additional sources of information including aerial photographs, USGS topographic NRCS soils data, vegetation community mapping, and species accounts.

On June 10, 2017, Rubicon biologists conducted a reconnaissance-level field survey. The survey included walking the Project site and adjacent areas. The biological resources within the Project site and greater action area were characterized and the potential occurrence of federally listed species was evaluated based on the suitability of habitat, known range and life history requirements. Notes were recorded on general habitat conditions, including vegetation composition and condition, and dominant plant taxa were identified. The survey included vegetation mapping and species inventory, special-status plant habitat evaluation, a migratory bird survey, and a noxious weed survey.

## Biological Resources in the Site and Vicinity

### **Special-Status Species and Habitats**

The results of the site-specific requests and database queries for special status species known to occur or potentially occur within the Project area from USFWS, CNPS, and CNDDB are summarized below and detailed in Appendix A.

#### *United States Fish and Wildlife Service*

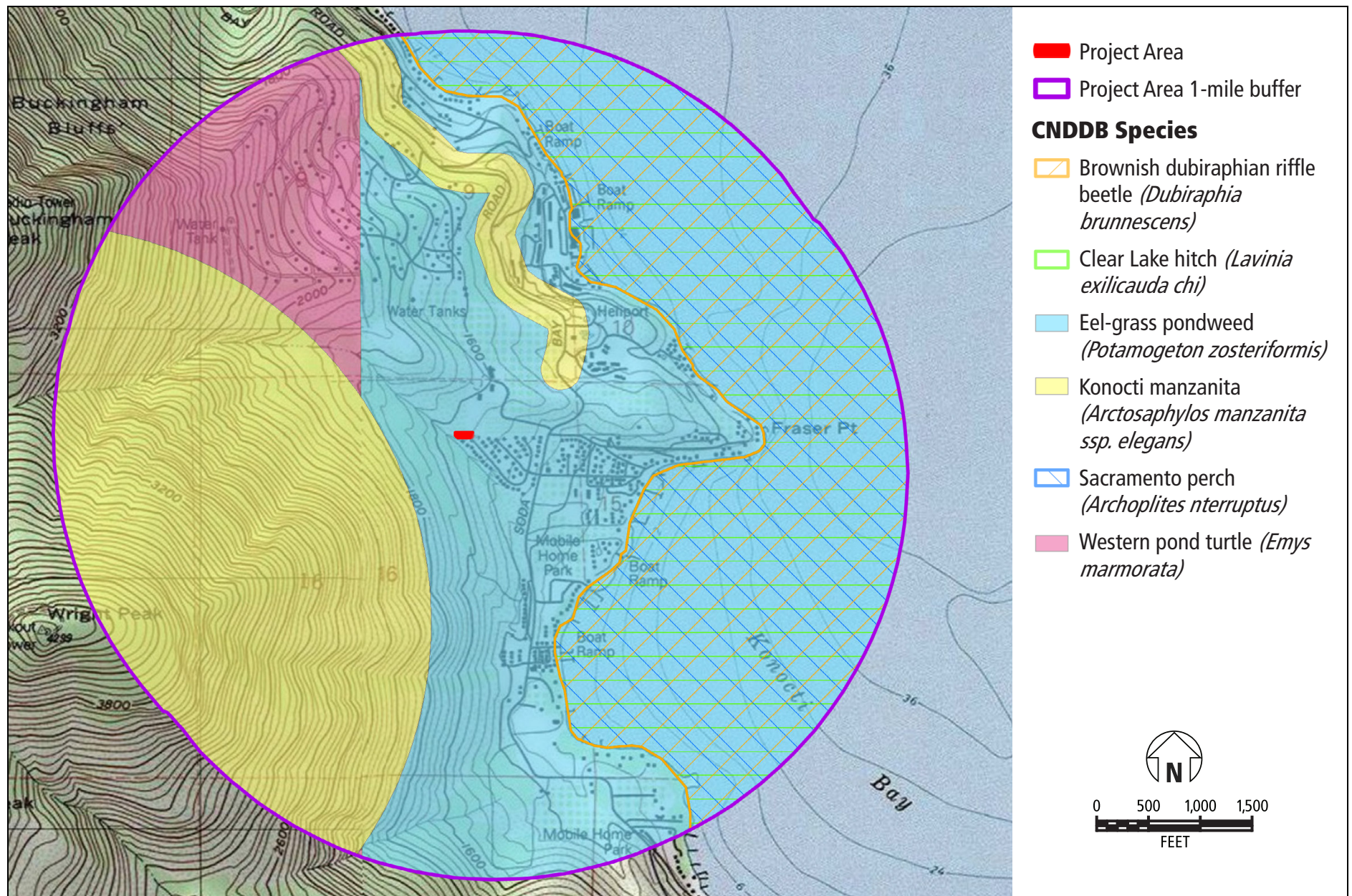
The USFWS determined that 11 federally threatened, endangered, or candidate species may have the potential to occur within the Project area or vicinity as follows:

- California red-legged frog (*Rana draytonii*)
- Northern Spotted Owl (*Strix occidentalis*)
- Western Yellow-Billed Cuckoo (*Coccyzus americanus*)
- Delta smelt (*Hypomesus transpacificus*)
- Steelhead (*Oncohyinchus mykiss*)
- Burke's goldfields (*Lasthenia burkei*)
- Few-flowered navarretia (*Navarretia leucocephala* spp. *pauciflora*)
- Lake County stonecrop (*Parvisedum leiocarpum*)
- Loch Lomond Coyote thistle (*Eryngium constancei*)
- Many-flowered navarretia (*Navarretia leucocephala* ssp. *plieantha*)
- Slender Orcutt grass (*Orcuttia tenuis*)

No suitable habitat for these species was found on the Project site or nearby. No designated Critical Habitat for any species is present within the Project area or vicinity.

#### *California Native Plant Society*

The CNPS' RareFind database was queried for the USGS topographic quadrangles in which the Project area is located and the adjoining quadrangles. The results indicate which special status plant species have been documented or have habitat range within the subject area. Based on the results of this query, 28 plants with varying levels of sensitivity or status were reported. Of the 28 species, 7 are listed as Endangered or Threatened in California of which 5 are also Federally Endangered. Species distributions are shown on Figure 7. No potential for any of these species to occur on the site was found.



**Figure 7**  
Special Staus Species near the Project Site

Source: CNDDDB and Rubicon Environmental Consulting



### *California Natural Diversity Database*

The California Department of Fish and Wildlife maintains a database of sensitive, special-status, and rare species. The database was queried for the Project area and a 1-mile radius area. This review identified 6 plant and animal species of which 4 are aquatic species. Only eel-grass pondweed was reported to occur within the Project area, which is a scale error from the reporting system as no aquatic habitat is present onsite. No potential for any of these species to occur on the site was found.

### *Vegetation Community Mapping and Species Inventory*

The Project is located within California Floristic Province, Northwestern California Region, Inner North Coast Ranges Subregion. The majority of the Project area is developed with existing infrastructure, paved areas, and ornamental vegetation associated with surrounding residential development. The parcel with the existing tank did not exhibit any intact natural habitats. There were three ornamental pine trees adjacent to the existing tank and tank access road. The adjacent proposed easement area had recently been mechanically cleared for wildfire fuel reduction. A few larger shrubs and immature oak trees were left in place, but the understory had been completely cleared with some small forb and grass species starting to reestablish.

Based on surrounding vegetation and the shrub and tree species left in place, the previous vegetation community in easement portion of the Project area was a Mixed Chaparral community with scrub oak, mazanita, chamise, and toyon as dominant shrub species. To a lesser extent tree species included California black oak and California walnut. Ground-layer species were a mix of native and nonnative annual and perennial species including horehound, sage, Indian rice grass, foxtail barely, mint species, and death camas. No wetland species were detected. In addition, no sensitive or rare habitats or vegetation communities are present.

### *Special-Status Plant Species Habitat Evaluation*

A habitat evaluation was conducted for all of the sensitive plant species that have the potential to occur. Only a few species that are considered to have limited distribution within California according to the CNPS have the potential to occur in the Project area. Based on field observations of the habitat type, conditions, elevation, and soils it was determined that no federal or state-listed species have the potential to occur on the site.

Based on the condition of the limited habitat onsite and proposed Project activities, there is no potential for the Project to impact any sensitive species or sensitive habitat.

#### *Noxious Weed Survey*

During the field assessment, 5 non-native plant species were observed in the Project area. However, no California Department of Food and Agriculture listed noxious weed species were observed. Based on the recent disturbance from wildfire fuel control treatments, there is a higher potential for additional non-native species to establish or spread within the Project area.

#### *Wildlife Survey Results*

A total of 5 bird species, two butterfly species, 1 reptile species, and 1 mammal species were directly observed. Three small mammal burrows were observed built with sticks from recently cleared vegetation and appear to be typical of a woodrat species. The burrows are located outside of the proposed disturbance area. The general wildlife species detected are common throughout the northern California coastal range ecoregion. Due to the urbanization and high level of human activity and disturbance within the Project area, the species diversity is lower than natural environments.

No unique or special wildlife habitat features were noted in the Project area (i.e. cliffs, caves, rock outcrops, wetland areas). One dry drainage was noted west of the Project area and during times of storm water runoff may serve as a water source for local wildlife and a wildlife migratory corridor connecting to other habitat areas in the vicinity.

All of the avian species detected in the Project area and surrounding habitat are listed as migratory bird species by the Migratory Bird Treaty Act with the exception of the California quail. No sensitive or special status bird species were detected or any nesting or breeding activity noted on the site.

The biological resources study concluded that no sensitive or listed species have the potential to occur on or adjacent to the site.



## **Discussion.**

### **a. Effect on Protected Species - *Less than Significant with Mitigation***

As described in the Background section, above, the Project biological survey reviewed the site for special-status species that may have the potential to occur on the Project site or vicinity. The survey concluded that no sensitive or listed species that may be affected by the proposed Project have the potential to occur on or adjacent to the site. BMPs would be implemented as described in Table 1 in the Project Description. The Project may have a significant impact on special status birds should any be nesting in the on-site trees at the time of Project construction. Although no special-status bird nests were noted in the biological survey, the biological resources study recommended that bird surveys be conducted prior to removal of the two mature trees on the site to avoid potential impacts to any nesting birds. This is included in Mitigation measure BIO-1, below. This measure, in combination with the BMPs, would assure that potential Project impact on special-status species would be **less than significant**.

### **b. Riparian or Other Habitats; c. Wetlands – *Less than Significant***

The USFWS wetlands survey identified a riparian ditch located to the west of the Project area. Project activities would be limited to the current parcel footprint; Project construction activities would be limited to demolition of the existing redwood tank and the construction of a steel welded tank in its place. These activities would not extend beyond the current footprint of disturbance on the site, which does not include wetlands or other waterways. Project construction activities also would not have the potential to substantially impact the riparian area during construction activities. In addition, BMPs to minimize the potential for off-site sediment transport and other potential water quality concerns would be implemented as described in Table 1 in the Project Description. These would assure that the Project impact would be **less than significant**.

### **d. Wildlife Corridors – *No Impact***

The Project site is located on a small partially developed lot with minimal habitat value in a residential area, so the likelihood of its use by migrating wildlife is minimal. The proposed Project would replace an existing water tank with a larger one. This would not affect any use of the site by migrating wildlife. **No impact** would occur.

**e. Local Policies/Ordinances – No Impact**

The Project activities would be limited to the replacement of an existing water tank. It would remove two mature pine trees (16- and 24-inches in diameter) but would not otherwise affect any biological resources, or otherwise have the potential to conflict with any Lake County policy or ordinance regarding biological resources. Lake County does not have a tree-protection ordinance except for in designated Waterways and Scenic Corridors, neither of which applies to the Project site. **No impact** would result.

**f. Habitat Conservation Plan/Natural Communities Conservation Plan – No Impact**

The Project site is not subject to any habitat conservation plans (HCP or NCCP). **No impact** would occur.

**Mitigation Measures**

**Mitigation Measure BIO-1:** If Project construction work is to be conducted during the avian breeding season (March 1<sup>st</sup> to August 31<sup>st</sup>), a nesting bird survey shall be conducted by a qualified biologist prior to the removal of the two trees on the Project site, and prior to the start of high-noise-generating work on the site (i.e. grading) that may disturb nesting birds, to comply with the Migratory Bird Treaty Act. The pre-construction survey shall be conducted within two weeks of construction activities, if activities are to occur within nesting/breeding season of native bird species. If active nests are identified in the trees proposed for removal or within 300 feet of construction, and would be exposed to prolonged construction-related noise above normal levels, a buffer shall be implemented around nests during the breeding season, or until a biologist determines the young have fledged. The size of the buffer and the type of allowable construction activity shall be determined by the biologist and will depend on multiple factors including relative change in noise and disturbance during construction activity, amount of vegetative screening between activity and nest, and sensitivity of species.

### 3.4.5 Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### **Background**

According to State CEQA Guidelines Section 15064.5, for the purposes of CEQA, historical resources are:

- A resource listed in, or formally determined eligible...for listing in the California Register of Historical Resources (PRC 5024.1, Title 14 California Code of Regulations [CCR], Section 4850 et seq.).
- A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significance in a historic resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code.
- Any object, building, structure, site, area, place, record, or manuscript that the lead agency determines to be eligible for national, state, or local landmark listing; generally, a resource shall be considered by the lead agency to be historically significant (and therefore a historic resource under CEQA) if the resource meets the criteria for listing on the California Register (as defined in PRC Section 5024.1, Title 14 CCR, Section 4852).

Resources eligible for listing on the California Register of Historical Resources (CRHR) must retain enough of their historic character or appearance to convey the reasons for their significance. According to CEQA, the fact that a resource is not listed in or

determined eligible for listing on the CRHR or is not included in a local register or survey shall not preclude the lead agency from determining that the resource may be an historical resource (PRC Section 5024.1). Pursuant to CEQA, a project with an effect that may cause a substantial adverse change in the significance of a historical resource may have a significant effect on the environment (State CEQA Guidelines, Section 15064.5[b]).

A cultural resources study (SWCA 2017) was conducted for the Project and included a records search of the California Historical Resources Information System (CHRIS), a Sacred Lands File Search by the Native American Heritage Commission (NAHC), and a pedestrian survey of the Project footprint and no historical resources, unique archaeological resources, or tribal cultural resources were found in the Project area. The CHRIS records search, conducted at the NWIC on March 7, 2017, identified one previously-recorded archaeological site within the Project area, the Osceola Dump (P-17-002797 / CA-LAK- 0022177H)—a mid- to late-twentieth century refuse dump site. Neither the site, nor the water tank built in 1969, meet the criteria for listing on the CRHR and are not historical or unique archaeological resources. Therefore, the Project would have no impacts to historical resources.

## **Discussion**

### **a. Historic Resources – *No Impact***

The Project proposes to demolish the water tank and construct a new one in the same location. Neither the water tank nor the mid-twentieth century trash dump are historically significant and are not historical resources pursuant to CEQA, therefore there will be **no impact** to historical resources.

### **b, c. Archaeological Resources and Human Remains – *Less than Significant with Mitigation***

As discussed above, no significant archaeological resources or human remains were found in the Project area, nor are any likely to occur due to the disturbed nature of the site (SCWA 2017) and the geomorphology of the Project area. If, however, new archaeological resources or human remains are encountered during construction, work shall stop immediately in the vicinity of the discovered materials until a qualified professional archaeologist has evaluated the find and provided recommendations. Mitigation measures CUL-1 and CUL-2 would assure that this impact would be reduced to **less than significant**.

## Mitigation Measures

**Mitigation Measure CUL-1:** If new archaeological resources, such as structural features, unusual amounts of bone or shell, artifacts, or human remains be encountered during any construction activities, work shall be suspended within 25 feet of the find and the lead agency and interested Native American parties shall be contacted. A qualified archaeologist meeting the Secretary of the Interior's Professional Qualification Standards in archaeology shall be retained by Clearwater Mutual Water Company and shall perform any necessary investigations to determine the significance of the find. Construction activities may continue in other areas beyond the 25-foot stop work area. If the find is eligible for the CRHR, the lead agency will consider whether the resource can be avoided. If further damage to the resource cannot be avoided, the impacted portion of the site will be subject to data recovery..

**Mitigation Measure CUL-2:** The discovery of human remains is always a possibility during construction; California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to California Public Resources Code Section 5097.98. The Lake County Coroner must be notified of the find immediately, and all work shall cease in the immediate vicinity of the find. If the human remains are determined to be ancient or likely Native American, the coroner will notify the NAHC, which will designate and notify a Native American most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and non-destructive analysis of human remains and items associated with Native American burials. Any such recommendations shall be implemented by the lead agency and Project sponsor.

### 3.4.6 Energy

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Discussion

#### **a. Wasteful, Inefficient, or Unnecessary Consumption – *Less than Significant***

The Project would not result in wasteful, inefficient, or unnecessary consumption of energy, given its purpose to replace a leaking storage tank of an existing small, rural community drinking water system. The installation efforts will be accomplished with a small fleet of construction equipment (i.e., an excavator, a loader, and a crane) over a short time period (i.e., 3 months in 2021).

Further, there would be no net new energy requirements by the renovated water system after Project additions. The Project also would result in operational energy savings by eliminating the 30,000 gallon per day leak from the existing water storage tank. Therefore this impact would be **less than significant**.

#### **b. Conflict State or Local Plans– *Less than Significant***

Any replacement equipment (e.g., meters, pumps, etc.) would be installed in accord with California's CALGreen construction codes, which emphasize energy efficiency as one of the major goals for building and infrastructure improvements to support the State's existing/future population and economy. Therefore this impact would be **less than significant**.

### 3.4.7 Geology and Soils

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

## **Background**

A geotechnical investigation report was prepared for the Project site by Kleinfelder (March 23, 2017). The purpose of Kleinfelder's work was to evaluate the site surface and subsurface conditions, perform engineering analyses, and develop geotechnical recommendations for site grading and foundation design.

The site is located at the base of Mt. Konocti along the east shore of Clear Lake, within the Coast Range Geomorphic Province of Northern California. This province is generally characterized by northwest-trending mountain ranges and intervening valleys. The site is underlain by Holocene age (11,700 to present) alluvial fan deposits consisting of sand, pebbles and boulders. The areas north and south of the site are mapped as underlain by pyroclastic deposits, juxtaposed in fault contact with the alluvial fan deposits. The pyroclastic deposits consist of ash deposits, tuff, lapilli tephra, and lapilli tuff. Localized outcrops north of the site are underlain by dacite bedrock of the Clear Lake Volcanics.

An on-site soil boring found within the upper three feet, slightly porous, near-saturated and soft sandy lean clay with moderate expansion potential. Medium stiff, sandy, lean clay was encountered from approximately 3 to 5 feet deep, and loose clayey sand with gravel was encountered from approximately 5 to 7 feet deep. From approximately 7 to 22 feet deep, medium dense to very dense silty and clayey sand with gravel was encountered. From a depth of approximately 22 feet to the bottom of the boring at about 29.5 feet, very dense clayey gravel with sand was encountered.

Perched groundwater was observed at a depth of approximately 27 feet during drilling. Saturation of the near-surface soil should be anticipated, particularly during and after periods of heavy rainfall.

The Project is located in a seismically active area. According to the Geotechnical Investigation Report, the site is not located within a State-designated, Alquist-Priolo Earthquake Fault Zone, where site-specific studies addressing the potential for surface fault rupture are required. No mapped active faults traverse the site. Several fault traces have been mapped in the vicinity of the site, including the trace of the Konocti Bay Fault, which runs approximately 300 feet southwest of the site. The other fault traces in the



Project vicinity are not considered active by the CGS, or recognized by the USGS as sources of seismic shaking. However, earthquakes with maximum Richter magnitudes ranging from 6.7 (Collayomi Fault, 4.8 miles from the site) to 7.1-7.4 ((Bartlett Springs, Huntington Creek- Berryessa, Macama-Garberville, and Hayward- Rogers Creek [8.9, 13.4, 15.8, 28.1 miles from the site, respectively] to 8.05 (northern portion of San Andreas fault) are possible on faults in the region. The site is not mapped as being in a liquefaction hazard zone (<https://maps.conservation.ca.gov/cgs/EQZApp/app/>).

## **Discussion**

### **a. Seismic Hazards – *Less than Significant***

**i. Fault Rupture** – As discussed above, the site is not located within a State-designated, Alquist-Priolo Earthquake Fault Zone is not subject to potential fault rupture. The tank would be designed in accordance with seismic design considerations as described in the geotechnical Investigation Report (Kleinfelder 2017) to resist failure from shaking in a major earthquake in the region. Therefore the impact would be **less than significant**.

**ii. Ground Shaking** – The Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving seismic ground shaking. The nearest mapped, active fault that is by the CGS is the Konocti Bay fault, which is located approximately 300 - 650 feet southwest of the site. However, the Konocti Bay fault is not recognized as a source of seismic shaking by the USGS. Additionally, the Project tank would be designed to meet current codes to resist seismic shaking damage or failure in the event of a major earthquake in the region. Therefore the impact would be **less than significant**.

**iii. Ground Failure** – The Project site is not mapped as in a ground failure hazard zone. (<https://maps.conservation.ca.gov/cgs/EQZApp/app/>). Based on the soil and groundwater conditions encountered in our explorations, Kleinfelder considered the site to have low liquefaction potential (Kleinfelder 2017). Minor settlement may occur on the site; this would be addressed in the design of the proposed tank foundation, as detailed in the Project Geotechnical Investigation Report (Kleinfelder 2017). Therefore the impact would be **less than significant**.

**iv. Landslides** – The topography in the Project area is relatively flat and does not pose a risk for landslides. Therefore **a less than significant** impact would occur to or from the proposed facilities associated with landslides.

**b. Soil Erosion – *Less than Significant***

Excavation and ground clearing would be required for the installation of the tank, as well as associated pipes and connections. Small amounts of earth would be subject to erosion during storage during the construction period. Erosion hazards after Project construction is complete would be minimal. BMPs identified in Table 1 in the Project Description would reduce erosion hazards to a **less than significant** level.

**c. Unstable Soil – *Less than Significant***

See discussion in Items a and b, above. This impact would be **less than significant**.

**d. Expansive Soil – *Less than Significant***

There are no mapped highly expansive soils in the Project vicinity. In addition, the Project foundation would be designed in accordance with specifications detailed in the Geotechnical Investigation Report (Kleinfelder 2017) to minimize any hazards associated with any expansive soils found at the site. Therefore this impact would be **less than significant**.

**e. Inadequate Soils for Disposal – *No Impact***

No septic systems are proposed as part of the Project, therefore it would have **no impact** on adequacy of soils for any such systems.

**f. Paleontological Features – *Less than Significant***

The Project tank's foundation would be constructed a few feet below the surface in relatively recent colluvium that has experienced previous disturbance associated with the construction of the previous tank and associated facilities at the site. Therefore the Project would have **no impact** to paleontological resources.

### 3.4.8 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### **Background**

Gases that trap heat in the atmosphere are referred to as greenhouse gases (GHGs) because they capture heat radiated from the sun as it is reflected back into the atmosphere, much like a greenhouse does. The accumulation of GHGs has been implicated as the driving force for global climate change. The primary GHGs are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O), ozone, and water vapor.

While the presence of the primary GHGs in the atmosphere are naturally occurring, CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O are also emitted from human activities, accelerating the rate at which these compounds occur within earth's atmosphere. Emissions of CO<sub>2</sub> are largely by-products of fossil fuel combustion, whereas methane results from off-gassing associated with agricultural practices and landfills. Other GHGs include hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, and are generated in certain industrial processes. Greenhouse gases are typically reported in units of "carbon dioxide-equivalents" (CO<sub>2</sub>e).

There is international scientific consensus that human-caused increases in GHGs have and would continue to contribute to global warming. Potential global warming impacts in California may include, but are not limited to, loss in snowpack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years. Secondary effects are likely to include a global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity.

Assembly Bill 32, the California Global Warming Solutions Act of 2006, required the CARB to lower GHG emissions to 1990 levels by 2020 - a 25 percent reduction statewide, with mandatory caps for significant emissions sources. AB 32 directed CARB to develop discrete early actions to reduce GHG while also preparing a scoping plan (i.e., the Climate Change Scoping Plan) in order to identify how best to reach the 2020 limit.

Statewide strategies to reduce GHG emissions include the Low Carbon Fuel Standard (LCFS), the California Appliance Energy Efficiency regulations, the California Renewable Energy Portfolio standard, changes in the motor vehicle corporate average fuel economy (CAFE) standards, and other early-action measures that would ensure the state is on target to achieve the GHG emissions reduction goals of AB 32.

### **Discussion**

#### **a. Generate Greenhouse Gas Emissions – *Less than Significant***

Construction of the Project would generate about 25.1 metric tons total of GHG during the three months of work removing the old water tank, preparing the site for and installing the new tank. After construction, the direct and indirect GHG emissions associated with any other sources in the County and State would be unchanged by the Project – with the exception of a slight decrease in GHG emissions caused by the elimination of the 30,000-gallons-per-month leak associated with the existing water tank. No longer having to pump/purify that water would save energy and eliminate the GHG emissions associated with its production. Because Project construction emissions would be relatively small and would cease upon completion, GHG from Project construction activities would not substantially contribute to the global GHG emissions burden and their impact would be **less than significant**.

#### **b. Conflict with an Applicable Plan – *Less than Significant***

The Project would introduce a new water storage tank to replace an existing water storage tank. After completion, the Project would not affect the operational GHG emissions of any other source locally or elsewhere in the State (except by saving energy and the GHG emissions associated with the current 30,000 gallons per month water leak that the Project would eliminate), nor would it conflict with any local or State plan, policy or regulation to reduce GHG emissions, and so its impact in this regard would be **less than significant**.

### 3.4.9 Hazards and Hazardous Materials

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### **Background**

The Project would be located in a residential neighborhood adjacent to partially cleared open space. No schools are located within one-quarter mile of the Project area. The

Project is not located within an airport land use plan. The nearest airport is Lampson Field, near Lakeport, about 10 miles west of the Project site.

A review of the Cortese List database shown no listed contaminated sites on or near the Project site. The nearest listed sites are about four miles west of the site ([https://www.envirostor.dtsc.ca.gov/public/map/?global\\_id=CAD000633289](https://www.envirostor.dtsc.ca.gov/public/map/?global_id=CAD000633289), accessed December 24, 2019).

## **Discussion**

### **a. Hazardous Materials Transport - *No Impact***

The proposed water tank Project would not involve transportation of any hazardous materials. Therefore, **no impact** would occur as a result of transportation of any such materials.

### **b. Hazardous Materials Accidental Release – *Less than Significant***

There would be no post-construction use of hazardous materials associated with the Project. Project construction may involve the use of equipment, fuels, solvents, drill lubricants, welding equipment, and other sources of potentially hazardous materials. BMP-3 in the Project Description, which is incorporated into the Project, includes measures to minimize the risk of release of hazardous materials, and contamination of soil or groundwater by any such releases. This BMP would ensure that the potential impact of release of construction-related hazardous materials would be **less than significant**.

### **c. Hazardous Materials Emissions – *No Impact***

Please see discussion of hazardous materials proposed for use on the site under Item b, above. The nearest public school to the Project site is the Riviera Elementary School, about three miles south of the Project site. Because the Project would not have any substantive emissions of hazardous materials and is distant from this school, it would have no potential to pose a hazard to this school, and **no impact** would result.

### **d. Hazardous Site List – *No Impact***

As described under the Background section above, the Project is not on or near any State-listed hazardous materials or wastes sites. Therefore, **no impact** would occur.

**e. Public Airport Hazards – *No Impact***

There are no airports within two miles of the Project area. The Project is not located within an airport land use plan. The nearest airport is Lampson Field, near Lakeport, about 10 miles west of the Project site. Therefore, **no impact** would occur.

**f. Emergency Response Plan – *No Impact***

The Project would be located at the end of a *cul de sac* and would improve fire-fighting response. The Project would have no potential to adversely affect emergency response or access. Therefore, **no impact** would occur.

**g. Wildland Fires – *No Impact***

The Project area is in a Very High Fire Hazard Severity Zone (VHFHSZ)<sup>4</sup>. Project construction activities would be limited to existing developed and cleared areas; in addition, CalFire has recently cleared the adjacent wildlands, a narrow strip of which is now mapped as a non-VHFHSZ. The Project would increase local fire-fighting water supply compared to existing conditions. Therefore, **no impact** would occur.

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<sup>4</sup> [https://osfm.fire.ca.gov/media/6695/fhszl\\_map17.pdf](https://osfm.fire.ca.gov/media/6695/fhszl_map17.pdf)

### 3.4.10 Hydrology and Water Quality

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 a substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



## **Background**

The Project area is on a gentle slope that drains directly into Clear Lake. It is partially developed with impervious surfaces associated with the existing water tank and associated facilities. It is not located in a tsunami runup area or in a FEMA mapped 100-year flood plain, as it is distant from any streams or the ocean (The Project area is located in “Area of Minimal Flood Hazard (Zone X) according to the FEMA flood map<sup>5</sup>). The site also is over 1500 feet from the shore of Clear Lake, and elevated above the lake such that any seiche in the lake would not affect it.

Perched groundwater in the Project area was observed at 27 feet below ground surface (Kleinfelder 2017).

## **Discussion**

### **a, c.i. Water Quality Standards – *Less than Significant***

Project construction could result in some sediments being washed into Clear Lake from soil stockpiles and temporarily bared areas. The Project site is relatively level and the Project would include BMPs that would assure that erosion and subsequent sedimentation and water quality degradation in the local drainages would not occur during construction (BMP-2). Once operational, the Project would not have the potential to adversely affect water quality as disturbed areas would be re-vegetated or paved, and soil stockpiles removed. Impacts with respect to water quality standards would **be less than significant**.

### **b. Groundwater Supplies – *Less than Significant***

The Project would minimally reduce permeability due to the larger tank footprint. Groundwater recharge also may be slightly reduced due to elimination of the leaks from the existing tanks. These effects would be negligible in the context of the vast areas of open space in the surrounding watersheds. The Project would not increase use of groundwater for the local community’s water supply. Water supply for the tank is drawn

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<sup>5</sup><http://gispublic.co.lake.ca.us/portal/apps/webappviewer/index.html?id=87dfc0c535b2478bb67df69d6d319eca>

from Clear Lake, and not groundwater. Therefore the Project would have a **less than significant impact** on groundwater supplies.

**c.ii, iii, iv. Drainage and Runoff – No Impact**

As described above, the Project would minimally increase impervious surfaces and, therefore, runoff from the site. The Project is not located in or near a stream or flood zone, so there would be no potential to affect local drainage patterns or flows. **No impact** would occur.

**d. Flooding, Tsunami or Seiche – No Impact**

As discussed in the Background section above, the Project would be located far inland and upslope of any seiche runup area. It is not in a mapped 100-year flood zone, so would not have the potential to affect, or be affected by, flooding. **No impact** would occur.

**e. Water Quality or Groundwater Management Plan – No Impact**

As discussed in items a and b, above, the Project would have minimal impact to water quality and groundwater. Therefore it would not have the potential to conflict with any applicable water quality or groundwater management plans. **No impact** would result.

### 3.4.11 Land Use and Planning

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### **Background**

The Project would be located on an existing water tank and associated facilities site, in a residential subdivision. Project facilities would be subject to Lake County land use plans and policies. The Project area is not subject to any habitat conservation plan or natural community conservation plan.

#### **Discussion**

##### **a. Division of Community – No Impact**

The Project would consist of replacing an existing water tank with a larger tank on substantially the same site. It would not disrupt any neighborhoods or install any barriers that would have a potential to divide a community. Therefore, **no impact** would occur.

##### **b. Plan Conflict – No Impact**

The Project would upgrade an existing water supply system that serves an existing developed residential neighborhood. It would be located on a lot already in water supply use, and would not change or intensify any land uses. Therefore, it would have no potential to conflict with any plans or policies. **No impact** would occur.

### 3.4.12 Mineral Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Background

The proposed new tank would be all located on an existing residentially zoned lot currently housing an existing water tank. The Project area is zoned residential and is not designated for mineral activities (Kelseyville Area Plan).

### Discussion

#### **a. and b. Mineral Resources – No Impact**

Project activities do not include known mineral resources and activities do not include additional disturbance, locating on additional parcels, or drilling, mining or digging. Therefore, no potentially significant loss of availability of a known mineral resource of locally important mineral resource recovery (extraction) site delineated on a local general plan, specific plan or other land use plan would occur as a result of proposed future development. **No impact** to mineral resources would occur.

### 3.4.13 Noise

Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or 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 expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### **Background**

Sound is created when vibrating objects produce pressure variations that move rapidly outward into the surrounding air. The more powerful the pressure variations, the louder the sound perceived by a listener. The decibel (dB) is the standard measure of loudness relative to the human threshold of perception. Noise is a sound or series of sounds that are intrusive, objectionable or disruptive to daily life. Many factors influence how a sound is perceived and whether it is considered disturbing to a listener; these include the physical characteristics of sound (e.g., loudness, pitch, duration, etc.) and other factors relating to the situation of the listener (e.g., the time of day when it occurs, the acuity of a listener's hearing, the activity of the listener during exposure, etc.). Environmental noise has many documented undesirable effects on human health and welfare, either psychological (e.g., annoyance and speech interference) or physiological (e.g., hearing impairment and sleep disturbance).

Just as vibrating objects radiate sound through the air, if they are in contact with the ground, they also radiate acoustical energy through the ground. If such an object is

massive enough and/or close enough to an observer, the ground vibrations can be perceptible and, if the vibrations are strong enough, they can cause annoyance to the observer and, if still stronger, damage to buildings. Annoyance and structural damage correlate strongly with the velocity produced by the vibration source at receptor locations. The vibration metric most commonly used to correlate vibration levels with human annoyance and structural damage is the vibration decibel (VdB).

## **Regulatory Setting**

### ***Lake County General Plan (2008)***

Chapter 8 *Noise* of the General Plan defines the following noise-related policies:

- **Policy N-1.1 Noise Compatibility Guidelines.** *“The County shall consider the compatibility of proposed land uses, utilizing the standards in Table 8-1 [of the General Plan], with the noise environment when preparing or revising community area plans and when reviewing development proposals. Where proposed land uses are likely to produce noise levels exceeding the “normally acceptable” criteria (e.g. “conditionally acceptable”, “normally unacceptable”), the County shall require an acoustical analysis prior to development approval to ensure noise mitigation measures are included. Land uses should be prohibited from locating in areas with a noise environment within the “unacceptable” range.”*

The General Plan noise standards use the CNEL metric<sup>6</sup> and define the following standards for residential uses, the predominant noise-sensitive land uses proximate to the Project site):

- **Normally Acceptable:** “Specified land use is satisfactory ... without any special noise insulation requirements.”
  - Residential (Low-Density Single Family, Duplex, Mobile Homes) – less than or equal to 55 dB CNEL
- **Policy N-1.7 Noise Controls During Construction.** *“The County shall require contractors to implement noise-reducing mitigation measures during construction*

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<sup>6</sup> CNEL, the Community Equivalent Noise Level, is a 24-hour average sound level with a 5 – decibel “penalty” added to sound levels occurring in the evening between 7:00 p.m. and 10:00 p. m., and a 10–decibel “penalty” added to sound levels occurring at night between 10:00 p.m. and 7:00 a.m.

*when residential uses or other sensitive receptors are located within 500 feet.”*

## **Lake County Zoning Ordinance**

### Section 21-41-11 Performance Standards (Noise):

- *“Exemptions: Local noise standards set forth in this Section do not apply to the following situations and sources of noise provided standard, reasonable practices are being followed:*
  - *“Construction site sounds between 7:00 am and 7:00 pm.”*

## **Discussion**

### **a. Temporary/Permanent Noise Increase – *Less than Significant***

Potentially disturbing noise increments associated with development can occur temporarily during project construction and/or permanently after construction if the project would introduce new, substantial noise sources to the site or in its vicinity.

The Lake County General Plan (Chapter 8 Noise, page 8.1) notes:

*“Certain areas of the County can experience noise levels that can be a concern to local residents and visitors. Potential noise areas include those adjacent to highways and roadways that experience high traffic volumes, near large mining or industrial facilities, in proximity to certain agricultural uses, and near local airport facilities.” [Chapter 8 Noise, page 8.1]” and that “Figures 8-1 through 8-9 [of the General Plan] present noise contour information for major roadways in the County, and Figure 8-10 presents noise contour information for Lampson Field [the County airport].”*

According to the General Plan noise contour data, receptors located more than a few hundred feet from a major County road (i.e., State Routes 20, 29, 53, 175, which have the County’s highest traffic volumes) or more than a mile from Lampson Field would have an ambient noise level less than 55 dB CNEL. This would apply to the Project site and adjacent lands, being more than a few hundred feet from the nearest high-volume roadway and about 10 miles east of Lampson Field.

The Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) was used to estimate the noise levels at various distances from the locus of

construction work produced by a typical working group of Project construction equipment (i.e., a dump truck, a loader, and a crane) likely to be used for the Project, as shown in Table NOI-1.

Construction noise levels at the closest noise-sensitive receptors (i.e., the residences fronting Osceola Avenue south of the Project site, the closest being about 25 feet south of the existing tank) would likely at times exceed what are now the existing average/peak ambient background levels, resulting in a potentially significant temporary disturbance to nearby residents. To protect residents from substantial Project construction noise intrusions, Noise BMPs listed in Table 1 in the Project Description shall be implemented. Project incremental temporary construction noise impacts would be **less than significant**.

**TABLE NOI-1. Modeled Project Construction Noise Levels**

Distance from Area of Construction Activity (feet)	Average Construction Daytime Noise Level L <sub>eq</sub> (dBA)	Maximum Construction Daytime Noise Level L <sub>max</sub> (dBA)
25	84	87
50	78	81
100	72	75
200	66	69

Source: Federal Highway Administration, Roadway Construction Noise Model (RCNM).

After Project construction is complete, no permanent noise level increase would occur from water tank sources.

#### **b. Vibration – *Less than Significant***

The Lake County General Plan has no policies or quantitative standards for avoiding/reducing structural damage or annoyance from vibration impacts. However, it is most common for government agencies to rely on assessment methodologies, impact standards and vibration-reduction strategies developed by the Federal Transit Administration (FTA). According to the FTA, limiting vibration levels to 94 vibration decibels (VdB, a measure of vibration intensity similar to the dB for noise) or less would avoid structural damage to wood and masonry buildings (which are typical of most



residential structures), while limiting vibration levels to 80 VdB or less at residential locations would avoid significant annoyance to the occupants.

The most vibration-intensive piece of construction equipment is a pile driver, but no pile driving will be required for the Project. Other types of construction equipment are far less vibration-intensive. Next in intensity are heavily loaded trucks or large tracked earth-moving equipment, which could pose a damage or annoyance threat if they regularly and often come within 25 feet of a vibration-sensitive receptor during construction. Delivery trucks would occasionally access the site from the existing driveway, a location more than 50 feet from the nearest existing residence. In addition, Project construction equipment would include only a backhoe and loader, operating more than 25 feet from the nearest residence almost all the time. Thus, the potential for vibration annoyance/damage is **less than significant**.

#### **c. Exposure to Aircraft Noise – *Less than Significant***

The nearest public airport is Lampson Field, near Lakeport, about 10 miles west of the Project site. According to the General Plan (Figure 8-10, Lampson Field Noise Impact Area), the Project site is far outside Lampson Field's 55 dB CNEL contour. Thus, the potential for aircraft noise impact is **less than significant**.

### 3.4.14 Population and Housing

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### **Background**

The population of Lake County in 2016 was 64,116. The Clearwater Mutual Water Company provides water to approximately 100 households in Konocti Bay Estates, in unincorporated Lake County area near Kelseyville.

### **Discussion**

#### **a. Population Growth – No Impact**

The Project is limited to the replacement and upgrade of existing domestic water storage tanks, and does not include housing or activities that would result in a significant population growth. Existing homes would benefit from the increased dependability of the water system capacity and from the emergency fire storage capacity in the event of a neighborhood or regional fire. It would not extend water service to currently unserved areas. Therefore, it would not affect population growth. **No impact** would occur.

#### **b. Displace Housing or People – No Impact**

The Project would not displace any housing or people because it would replace existing water-supply tanks on the lot currently housing the existing tanks. No removal of housing would occur. **No impact** would occur.

### 3.4.15 Public Services

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	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:				
1) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion

#### **a.1-5 – No Impact**

The Project would involve replacing an existing water supply tank with a new, larger tank to eliminate water loss from leakage and improve domestic and fire-fighting supplies. Therefore, it would not have an adverse impact on police services, and would have a beneficial effect of improving the water system for its service area. The Project would not induce development in the area, and therefore would have no potential to adversely affect schools, parks, or other public facilities. **No impact** would occur.

### 3.4.16 Recreation

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Would the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion

#### **a. Increase Park Usage - *No Impact***

The Project would not increase the use of existing neighborhood and regional parks or other recreational facilities because it would not increase the local population or remove or diminish the utility of any existing recreation areas. Construction would be limited to an existing residential lot housing the existing water tank and associated facilities. **No impact** would occur from Project implementation.

#### **b. Impact of Project Recreational Facilities – *No Impact***

The Project does not propose the expansion or construction of additional recreational facilities. **No impact** would occur.

### 3.4.17 Transportation

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### **Background**

The Project would require construction access regionally via SR 29 and Soda Bay Road, and locally on a small segment of Montezuma Way and one block of Osceola Avenue. No other roadways would be crossed or affected.

### **Discussion**

#### **a. Conflict with Circulation System Plan or Program - *Less than Significant***

No additional traffic would be generated during Project operations, however, the Project would generate a small incremental increase in traffic on Soda Bay Road during construction. This increase would be minimal and temporary; and therefore, would be considered less than significant. The Project would not conflict with either the goals and/or policies of the Regional Transportation Plan (RTP) or with monitoring the delivery of state and federally funded projects outlined in the RTP. The Project site is on the far side of a neighborhood adjacent to Soda Bay Road, part of a fixed transportation Route 4A for bus service to Konocti Vista Casino. The Clearwater Mutual Water Company service area and access road is not specifically included in the 2017 Regional Transportation Plan.

No bike lanes or pedestrian facilities would be affected. Therefore, this impact would be **less than significant**.

**b. Conflict with or Inconsistent with CEQA Guidelines 15064.3 – *Less than Significant***

This section of the CEQA Guidelines addresses vehicle miles traveled (VMT). The Project would result in a minimal, temporary increase in VMT during construction, and no long-term increase in VMT. Therefore, its impact would be **less than significant**.

**c. Hazards –*No Impact***

Project construction would be limited to an existing residential lot, thereby avoiding any impact to roadway safety conditions. There would be no changes to roadway geometry. Post-construction, there would be no changes to roadways. Therefore, there would be **no impact** to traffic hazards from the Project.

**d. Emergency Access – *No Impact***

As discussed above, the Proposed Project would not affect any roadways. Therefore, there would be **no impact** to emergency services.

### 3.4.18 Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant with Mitigation	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 §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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### **Background**

Tribal cultural resources are defined as one of the following:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
  - Included or determined to be eligible for inclusion in the California Register of Historical Resources.
  - Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

- 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Section 1 (a)(9) of AB 52 establishes that “a substantial adverse change to a tribal cultural resource has a significant effect on the environment.” Effects on tribal cultural resources should be considered under CEQA. Section 6 of AB 52 adds Section 21080.3.2 to the PRC, which states that parties may propose mitigation measures “capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to a tribal cultural resource.” Further, if a California Native American tribe requests consultation regarding project alternatives, mitigation measures, or significant effects to tribal cultural resources, the consultation shall include those topics (PRC Section 21080.3.2[a]). The environmental document and the mitigation monitoring and reporting program (where applicable) shall include any mitigation measures that are adopted (PRC Section 21082.3[a]).

On November 19, 2018, Project notification letters with invitations to consult on the Project were sent by certified mail to Middletown Rancheria of Pomo Indians of California, the one tribe on the State Water Board’s Assembly Bill (AB) 52 list for Lake County. The Middletown Rancheria did not request consultation.

Additionally, a sacred-lands file (SLF) search was requested for the Project area from the NAHC. The NAHC responded in a letter dated March 21, 2017, stating that the SLF was completed for the Project Area with negative results. Letters seeking consultation and the identification of cultural and religious sites of significance to California Indian tribes were sent to the two tribes on the NACH list for the Project area, the Big Valley Band of Pomo Indians and the Elem Indian Colony Pomo Tribe. No responses have been received.

## **Discussion**

### **A (i) and (ii). Substantial Adverse Change in the Significance of a Tribal Cultural Resource – *Less than Significant with Mitigation***

Ground-disturbing activities have the potential to result in the discovery of, or damage to, archaeological sites and human remains, and this possibility cannot be eliminated. Consequently, there is a potential for significant impacts on TCRs. Implementation of



monitoring and the stop work and treatment procedures to avoid and minimize potential impacts as described in Mitigation Measures CUL-1, and CUL-2 would reduce the potential impacts to **less than significant**.

### 3.4.19 Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a determination by the waste water 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### **Background**

The site includes a leaking water supply storage tank and three temporary storage tanks. Electrical power and water pipelines also exist at the site.

### **Discussion**

**a. Relocation or Construction of New or Expanded Water, Wastewater Treatment or Storm Water Drainage, Electric Power, Natural Gas, or Telecommunications Facilities - *Less than Significant***

The Project would remove and replace an existing water storage tank (and three temporary storage tanks) with a new, larger tank on the same parcel. Impacts of that expanded tank on the environment are addressed in this document. It would not expand the service area or ultimate number of hook-ups. No other utility alternations would occur as part of the Project. The impact would be **less than significant**.

**b. Water Supplies – No Impact**

The Project would replace and improve existing water supply storage facilities for improved reliability of supply; it would not alter existing water supplies or demand. It would result in an increased capacity to supply water within the service area. However, this water is intended to be used in an emergency and would be held in the water tank until such need exists. This fire storage capacity would improve the safety and protection of the local community against the threat of wildfire. It would use small amounts of water during construction for dust control and concrete work. No increase in water use would be required during the operational phase of the Project, and water demand would be decreased due to elimination of the existing tank's water loss via leaks. Impacts to water supplies would be beneficial. **No impact** would occur.

**c. Wastewater Service – No Impact**

The Project would replace and improve existing water supply facilities; it would not alter or otherwise affect wastewater facilities or capacity. It would not expand water service areas and therefore not result in an increase in wastewater due to additional users. **No impact** would occur.

**d. Solid Waste Generation – Less than Significant**

Project construction would generate small amounts of solid wastes. Excavated material would be reused if it meets specification for native backfill, otherwise it would be trucked off site for disposal elsewhere. The existing redwood tank material has been promised to an adjacent landowner as part of the land exchange with Clear Water Mutual Water Company. The resulting waste would not constitute a significant quantity for disposal. The Project would not generate solid waste after construction is completed. The impact to solid waste facilities would be **less than significant**.

**e. Solid Waste Statutes and Regulations – *No Impact***

The Project would comply with all federal, state, and local statutes and regulations related to solid waste disposal. **No impact** would occur.

### 3.4.20 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	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### **Background**

The Project area is in a Very High Fire Hazard Severity Zone (VHFHSZ)<sup>7</sup>. CalFire has recently cleared the adjacent wildlands, a narrow strip of which is now mapped as a non-VHFHSZ.

### **Discussion**

#### **a-d. – No Impact**

Project construction activities would be limited to existing developed and mostly cleared areas. The Project would increase local fire-fighting water supply compared to existing conditions. Project access roadways would not be affected during construction, as all

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<sup>7</sup> [https://osfm.fire.ca.gov/media/6695/fhszl\\_map17.pdf](https://osfm.fire.ca.gov/media/6695/fhszl_map17.pdf)

construction materials and equipment would be stored on the site. Therefore, the Project would improve fire-fighting capabilities, and **no impact** would occur.

### 3.4.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant with Mitigation	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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Discussion

#### **a) Mandatory Findings of Significance for Biological and Cultural Resources – *Less than Significant with Mitigation***

As discussed in the Biological Resources section of this document, with the incorporation of mitigation measures, the Project would not have the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal. Similarly, the Project's potential impacts to unknown cultural resources would

be mitigated to a less-than-significant level by measures included in this document. Project impacts to these resources would be **less than significant with mitigation**.

**b) Cumulative Impacts – *No Impact***

A review of Lake County current construction and planning projects list (Lake Area Planning Council website: <https://www.lakeapc.org/projects/construction-projects/> and <https://www.lakeapc.org/projects/transportation-planning-projects/>) indicates that there is no cumulative development proposed at or near the Project site. **No cumulative impact** would occur.

**c) Substantial Effects on Humans – *Less than Significant*.**

As discussed in Section VIII. Hazards and Hazardous Materials, the Project would follow all laws and regulations involving the use and transport of hazardous materials and would not cause potential health risks to the public. The Project's improvement in fire suppression flows would reduce existing health risks to the served population. Noise and air quality effects on humans would be mitigated to a less-than-significant level by measures incorporated in this Initial Study. It would have a **less than significant** impact on human health.



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## **APPENDIX A**

### **SPECIAL-STATUS SPECIES LIST**



### 3.2 Sensitive Species Habitat Evaluation

Based on the results of the agency data review and species lists and assessment of the environmental setting of the Project Area, a list of the potential for sensitive species to occur was developed. This list was used to guide the field assessment verify whether the habitat in the Project Area was suitable to support the species. Table 2 is a summary of this habitat evaluation.

**Table 2: Sensitive Species Habitat Evaluation and Potential to Occur**

Common Name	Scientific Name	Federal Status	State Status	CDFG/CNPS Status*	Habitat Description	Potential to Occur
<b>Animals</b>						
Sacramento Perch	<i>Archoplites interruptus</i>	None	None	SSC	Prefer sloughs and slow-flowing streams ½ to 6 feet of water in wind-protected areas such as the back ends of coves. They will often be over sand or gravel bottoms where these are available.	According to the CNDDDB, 11 fish were documented in Clear Lake in 1937. Based on lack of more recent occurrence data, status of possibly extirpated, and lack of suitable habitat, there is <b>no potential</b> for this species to occur in the Project Area.
Western Yellow-Billed Cuckoo	<i>Coccyzus americanus</i>	Threatened	Endangered	None	Require large blocks of riparian habitat (larger than 25 acres) for nesting with cottonwood and willow trees.	The CNDDDB reported a possible occurrence of one bird in 1973. Based on the age of this report and lack of good riparian habitat within or adjacent to the Project Area, there is <b>no potential</b> for this species to occur.
Clear Lake Hitch	<i>Lavinia exilicauda chi</i>	None	Threatened	None	Migrates between nonbreeding (lake) and breeding (stream) habitats. Adults are usually in the limnetic zone of Clear Lake and juveniles occupy near-shore shallow waters with protective aquatic cover.	The Project Area does not support any fish or aquatic habitat. This species has <b>no potential</b> to occur in the Project Area.

Common Name	Scientific Name	Federal Status	State Status	CDFG/CNPS Status*	Habitat Description	Potential to Occur
Steelhead	<i>Oncorhynchus mykiss</i>	Threatened	None	None	Born in freshwater, then migrate to the Pacific Ocean via drainages.	Clear Lake no longer has spawning habitat for this species. The Project Area does not have any habitat for this species. This species has <b>no potential</b> to occur in the Project Area.
California red-legged frog	<i>Rana draytonii</i>	Threatened	None	SSC	Sheltered backwaters of ponds, marshes, springs, streams, and reservoirs. Deep pools with dense stands of overhanging willows and an intermixed fringe of cattails are considered optimal habitat.	No suitable habitat for this species is present in the Project Area; therefore, there is <b>no potential</b> for this species to occur.
Northern Spotted Owl	<i>Strix occidentalis</i>	Threatened	Threatened	SSC	Live in forests characterized by dense canopy closure of mature and old-growth trees, abundant logs, standing snags, and live trees with broken tops.	No suitable habitat for this species is present in the Project Area; therefore, there is <b>no potential</b> for this species to occur.
Delta smelt	<i>Hypomesus transpacificus</i>	Threatened	Threatened	SSC	Estuarine areas.	This species does not have a current range in Clear Lake and no habitat exists in the Project Area. There is <b>no potential</b> for this species to occur.
Western pond turtle	<i>Emys marmorata</i>	None	None	SSC	Habitat includes permanent and intermittent waters of rivers, creeks, small lakes and ponds	The occurrence of this species was reported in a vernal pool within a forested area northwest of the Project Area. There is no habitat to support this species onsite or in the immediate vicinity of the site; therefore, there is <b>no potential</b> for this species to occur.
Brownish dubiraphian riffle beetle	<i>Dubiraphia brunnescens</i>	None	None	None	Occurs among submerged roots on rocky lake shores.	There is no lake shore habitat present in the Project Area or vicinity. There is <b>no potential</b> for this species to occur.

Common Name	Scientific Name	Federal Status	State Status	CDFG/CNPS Status*	Habitat Description	Potential to Occur
<b>Plants</b>						
Twig-like snapdragon	<i>Antirrhinum virga</i>	None	None	4.3	Occurs in chaparral and lower montane coniferous forest communities.	No occurrence of this species was reported in the Project Area. Due to the disturbed and developed nature of the Project Area, there is a <b>low potential</b> for this species to occur. This species is not considered sensitive.
Konocti manzanita	<i>Arctostaphylos manzanita</i> spp. <i>elegans</i>	None	None	1B.3	Generally occurs in xeric conditions on rocky slopes, canyons, and barren ridges. In the North Coast Ranges, is associated with chamise and chaparral communities.	No occurrence of this species was reported in the Project Area, but was reported to occur in the higher elevations west of the Project Area. Due to the disturbed and developed nature of the Project Area and lack of suitable habitat, there is a <b>low potential</b> for this species to occur.
Raiche's manzanita	<i>Arctostaphylos stanfordiana</i> spp. <i>raichei</i>	None	None	1B.1	Habitat for this species is chaparral dominated by mostly evergreen shrubs with thick, leathery leaves and stiff branches, and openings in lower montane coniferous forests dominated by open to dense stands of conifers and broadleaved trees in the understory. Prefers rocky serpentine soils.	No occurrence of this species was reported in the Project Area or vicinity. Due to the disturbed nature of the Project Area and lack of suitable soil habitat, there is <b>no potential</b> for this species to occur.
Pink star tulip	<i>Calochortus uniflorus</i>	None	None	4.2	Habitat for this species is meadows and seeps within North Coast coniferous forest.	No habitat is present for this species in the Project Area, therefore, there is <b>no potential</b> for this species to occur.



Common Name	Scientific Name	Federal Status	State Status	CDFG/CNPS Status*	Habitat Description	Potential to Occur
Four-petaled pussypaws	<i>Calyptridium quadripelatum</i>	None	None	4.3	Habitat for this species is chaparral and lower montane coniferous forests.	No occurrence of this species was reported in the Project Area. Due to the disturbed and developed nature of the Project Area, there is a <b>low potential</b> for this species to occur. This species is not considered sensitive, it just has limited distribution in California.
Serpentine bird's beak	<i>Cordylanthus tenuis ssp. brunneus</i>	None	None	4.3	Habitat for this species is closed-coned coniferous forests, chaparral, and cismontane woodlands with serpentine soils.	No habitat is present for this species in the Project Area, therefore, there is <b>no potential</b> for this species to occur.
Brandegee's eriastrum	<i>Eriastrum brandegeae</i>	None	None	1B.1	Chaparral, cismontane woodland; volcanic.	No occurrence of this species was reported in the Project Area or vicinity and habitat is not present. Due to the disturbed nature of the Project Area and lack of suitable habitat, there is <b>no potential</b> for this species to occur.
Loch Lomond Coyote thistle (button-celery)	<i>Eryngium constancei</i>	None	None	1B.1	Vernal pools.	No occurrence of this species was reported in the Project Area or vicinity and vernal pool habitat is not present. Due to the disturbed nature of the Project Area and lack of suitable habitat, there is <b>no potential</b> for this species to occur.

Common Name	Scientific Name	Federal Status	State Status	CDFG/CNPS Status*	Habitat Description	Potential to Occur
Boggs Lake hedge-hyssop	<i>Gratiola heterosepala</i>	None	Endangered	1B.2	The species is restricted to clay soils in or near shallow water such as at the margins of lakes and vernal pools.	No occurrence of this species was reported in the Project Area or vicinity and clay soils and vernal pool habitat is not present. Due to the disturbed nature of the Project Area and lack of suitable habitat, there is <b>no potential</b> for this species to occur.
Glandular western flax	<i>Hesperolinon andenophyllum</i>	None	None	1B.2	Chaparral ecosystems on serpentine soils.	No occurrence of this species was reported in the Project Area or vicinity. No suitable soils exist as habitat for this species. There is <b>no potential</b> for this species to occur.
Two-carpellate western flax	<i>Hesperolinon bicarpellatum</i>	None	None	1B.2	Chaparral ecosystems on serpentine soils.	No occurrence of this species was reported in the Project Area or vicinity and serpentine soils are not present. Due to the disturbed nature of the Project Area and lack of suitable habitat, there is <b>no potential</b> for this species to occur.
Lake County western flax	<i>Hesperolinon didymocarpum</i>	None	Endangered	1B.2	This species has been found growing in open areas of serpentine soil chaparral and has only been found in several square kilometers of habitat north of Middletown in Lake County.	No occurrence of this species was reported in the Project Area or vicinity. Due to the disturbed nature of the Project Area and lack of suitable serpentine soils, there is <b>no potential</b> for this species to occur.
Bolander's horkelia	<i>Horkelia bolanderi</i>	None	None	1B.2	Found along meadow borders and stream beds and restricted to volcanic ash soils south of Clear Lake.	No occurrence of this species was reported in the Project Area or vicinity and habitat is not present. There is <b>no potential</b> for this species to occur.

Common Name	Scientific Name	Federal Status	State Status	CDFG/CNPS Status*	Habitat Description	Potential to Occur
California satintail	<i>Imperata brevifolia</i>	None	None	2B.1	Mojavean desert scrub, meadows and seeps, riparian scrub.	No occurrence of this species was reported in the Project Area or vicinity and habitat is not present. There is <b>no potential</b> for this species to occur.
Burke's goldfields	<i>Lasthenia burkei</i>	Endangered	Endangered	1B.1	Meadows and seeps; vernal pools.	No occurrence of this species was reported in the Project Area or vicinity and habitat is not present. There is <b>no potential</b> for this species to occur.
Colusa layia	<i>Layia septentrionalis</i>	None	None	1B.2	Chaparral, cismontane woodland, valley and foothill grassland on sandy, serpentinite soils.	No occurrence of this species was reported in the Project Area or vicinity and soils habitat is not present. There is <b>no potential</b> for this species to occur.
Bristly leptosiphon	<i>Leptosiphon acicularis</i>	None	None	4.2	Coastal prairie, valley and foothill grassland, chaparral, and cismontane woodland.	No occurrence of this species was reported in the Project Area. Due to the disturbed and developed nature of the Project Area, there is a <b>low potential</b> for this species to occur. This species is not considered sensitive, it just has limited distribution in California.
Wooly meadowfoam	<i>Limnanthes floccose ssp. floccosa</i>	None	None	4.2	Vernal pools.	No occurrence of this species was reported in the Project Area or vicinity and habitat is not present. There is <b>no potential</b> for this species to occur.
Little mouseltail	<i>Myosurus minimus ssp. apus</i>	None	None	3.1	Vernal pools.	No occurrence of this species was reported in the Project Area or vicinity and habitat is not present. There is <b>no potential</b> for this species to occur.

Common Name	Scientific Name	Federal Status	State Status	CDFG/CNPS Status*	Habitat Description	Potential to Occur
Baker's navarretia	<i>Navarretia leucocephala</i> ssp. <i>bakeri</i>	None	None	1B.1	Meadows and vernal pools.	No occurrence of this species was reported in the Project Area or vicinity and habitat is not present. There is <b>no potential</b> for this species to occur.
Few-flowered navarretia	<i>Navarretia leucocephala</i> ssp. <i>pauciflora</i>	None	None	1B.1	Vernal pools on volcanic ash flows.	No occurrence of this species was reported in the Project Area or vicinity and habitat is not present. There is <b>no potential</b> for this species to occur.
Many-flowered navarretia	<i>Navarretia leucocephala</i> ssp. <i>plieantha</i>	Endangered	Endangered	1B.2	Vernal pools on volcanic ash flows.	No occurrence of this species was reported in the Project Area or vicinity and habitat is not present. There is <b>no potential</b> for this species to occur.
Slender Orcutt grass	<i>Orcuttia tenuis</i>	Threatened	Endangered	1B.1	Vernal pools.	No occurrence of this species was reported in the Project Area or vicinity and habitat is not present. There is <b>no potential</b> for this species to occur.
Michael's rein orchid	<i>Piperia michaelii</i>	None	None	4.2	Cismontane woodland, coastal scrub, lower montane coniferous forest.	No occurrence of this species was reported in the Project Area. Due to the disturbed and developed nature of the Project Area, there is a <b>low potential</b> for this species to occur. This species is not considered sensitive, it just has limited distribution in California.
Eel-grass pondweed	<i>Potamogeton zosteriformis</i>	None	None	2B.2	Freshwater marshes and swamps.	The CNDDDB reported an occurrence of this species at the south end of Clear Lake near Wygals Resort in 1945. The Project Area is not near lake shore habitat. There is <b>no potential</b> for this species to occur.

Common Name	Scientific Name	Federal Status	State Status	CDFG/CNPS Status*	Habitat Description	Potential to Occur
Lake County stonecrop	<i>Sedella leiocarpa</i> ( <i>Parvisedum leiocarpum</i> )	Endangered	Endangered	1B.1	Vernal pools within mesic depressions in volcanic outcrops within woodlands and grasslands.	No occurrence of this species was reported in the Project Area or vicinity and habitat is not present. There is <b>no potential</b> for this species to occur.
Marsh checkerbloom	<i>Sidalcea oregana ssp. hydrophila</i>	None	None	1B.2	Meadows and seeps, riparian forest.	No occurrence of this species was reported in the Project Area or vicinity and habitat is not present. There is <b>no potential</b> for this species to occur.
Marsh zigandenus	<i>Toxicoscordion fontanum</i>	None	None	4.2	Meadows and seeps, marshes and swamps.	No occurrence of this species was reported in the Project Area or vicinity and habitat is not present. There is <b>no potential</b> for this species to occur.
Oval-leaved viburnum	<i>Viburnum ellipticum</i>	None	None	2B.3	Chaparral, cismontane woodlands, and lower montane coniferous forest habitat types.	No occurrence of this species was reported in the Project Area or vicinity and based on the disturbed and cleared habitat for fuel reduction, supportive habitat is not present. There is <b>no potential</b> for this species to occur.

Notes: \* CNPS Ranking for Plant Species and CDFG Status for Wildlife Species

## **APPENDIX B**

### **MITIGATION MONITORING AND REPORTING PROGRAM (to be added in Final IS)**

