Initial Study and
Mitigated Negative Declaration

Loma Prieta Joint Unified School District
Domestic Water Supply Project

SCH#_____

Prepared by:

northgate
environmental management, inc.

(This page intentionally blank)

DRAFT

Initial Study and Mitigated Negative Declaration
Loma Prieta Joint Union School District
Domestic Water Supply Project

Prepared for:

Loma Prieta Joint Union School District
23800 Summit Road
Los Gatos, CA 95033

With Technical Assistance from:

California State Water Resources Control Board
Under Technical Assistance Contract with University Enterprises, Inc.
California State University, Sacramento

Prepared by:

Northgate Environmental Management, Inc.
428 13th Street, 4th Floor
Oakland, California 94612

June 2019

(This page intentionally blank)

TABLE OF CONTENTS

TABLES

FIGURES

APPENDICES

1.0 INTRODUCTION

The Loma Prieta Joint Union School District (LPJUSD) 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 LPJUSD's proposed Domestic Water Supply Project (Proposed 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 Proposed Project is evaluated at a project level (CEQA Guidelines § 15378). The LPJUSD would be the CEQA Lead Agency for the Proposed Project, and would consider its potential environmental impacts in its Project approval actions. The State Water Resources Control Board would be a CEQA Responsible Agency for this Project. This IS/MND is an informational document to be used in the planning and decision-making process for the Proposed Project and does not recommend approval or denial of the Proposed Project. The site plans for the Proposed Project included in this IS/MND are conceptual. This IS/MND describes the Proposed Project; its environmental setting, including existing conditions and regulatory setting, as necessary; and the potential environmental impacts of the Proposed 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 Proposed Project. Accordingly, the LPJUSD is now 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 would be considered by the Water Board during its deliberations on whether to approve the Proposed Project. To provide input on this project, please send comments to the following contact:

Paul Harville
Director of Facilities
Loma Prieta Joint Union School District
23800 Summit Road
Los Gatos CA, 95033
(408) 353-8632

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 Proposed Project, including its objectives, the project site where the Proposed 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 Proposed 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 Proposed 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, References**, provides a bibliography of printed references, websites, and personal communications used in preparing this IS/MND.
- **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

The Loma Prieta Joint Union School District (LPJUSD) owns and operates two schools (Loma Prieta Elementary School and C.T. English Middle School) that serve residents of a portion of the Santa Cruz Mountains in southern Santa Clara and northern Santa Cruz counties. The proposed water supply project would serve domestic water needs at the schools, at 23800 Summit Road in Santa Cruz County. The schools are located on a single campus, about two and one-half miles east of Highway 17 and 13 miles south of the City of San Jose. The proposed new wells would be located on both sides of Summit Road, one in Santa Clara County and two in Santa Cruz County. The Project location is shown on Figure 1. The existing and Proposed Project facilities are shown on Figure 2.

LPJUSD has its own Water System supplying domestic water to the total daily campus population of approximately 560 students, staff and visitors. LPJUSD's Water System is classified as a non-transient, non-community water system (ID# 4300721). LPSD's water system is regulated by the Santa Clara District of the Division of Drinking Water of the State Water Resources Control Board. LPJUSD's Water System is supplied by three on-site Wells: 1, 2, and 3. Water is treated by chlorine for disinfection and to oxidize iron and manganese which are removed by filtration prior to distribution to the School buildings (see Section 2.5.1)

Loma Prieta Elementary School was originally developed in the 1950s on the north side of Summit Road in Santa Clara County. The original water source for Loma Prieta Elementary School was a spring. Well 1 was drilled in 1976 and became the School's water source. Wells 2 and 3 were drilled in 1994 to meet additional water supply needs at LPJUSD. In 1989, the Loma Prieta earthquake caused extensive damage to Loma Prieta Elementary School and it was rebuilt on the south side of campus/Summit Road near C. T. English Middle School. It appears that Well 1 was also damaged in the earthquake, and a 4-inch diameter PVC casing was inserted inside the original 8.5-inch diameter steel casing to allow it to continue to function (see below). Many of the buildings for the former Elementary School were demolished in 1999. The original north campus (on the north side of Summit Road) is now primarily used for facilities maintenance, offices, storage and play fields.

Three underground storage tanks (USTs) were installed near the bus garage when the School was originally built. The USTs were used to supply fuel to school vehicles. Well 1 was installed less than 10 feet from the gasoline UST. The three USTs (one 550-gallon gasoline, one 550-gallon diesel, and one 1,000-gallon diesel) operated until just prior to their removal on April 9, 1996. After the USTs were removed, soil and groundwater investigations indicated a release of

gasoline from the UST closest to Well 1. Methyl tert Butyl Ether (MTBE), a gasoline additive, was detected in Well 1 at concentrations above the Secondary (taste and odor) Maximum Contaminant Level (MCL) of 5 micrograms per liter (µg/L) but below the primary health-based MCL of 13 µg/L. MTBE was also detected in the distribution system at concentrations below the secondary MCL. The source of MTBE in the distribution system was determined to be Well 1. Based on the detection of MTBE, Well 1 was removed from potable water service in 1998. MTBE was not detected in the potable water system after Well 1 was disconnected from it. MTBE was not detected in the other on-site wells (2 and 3), the on-site spring, or the closest off-site well.

Source zone remediation by over-excavation and proper off-site disposal of approximately 156 tons of hydrocarbon/MTBE-impacted soil at the removed gasoline UST location was conducted by ETIC in February 2000 (ETIC March 2000). MTBE has not been detected in Well 1 since 2002. Based on their knowledge of MTBE contamination in groundwater and the information available about the MTBE release at LPJUSD and the subsequent remedial activities, the Project Engineers (Weber, Hayes and Associates) have concluded that the MTBE release at LPJUSD has been effectively remediated by source zone remediation and groundwater pumping of Well 1 for irrigation purposes. The analytical data for MTBE from Well 1 supports this conclusion.

Wells 2 and 3 did not provide sufficient yield to meet drinking water needs at the LPSD campus during the drought years of 2012 to 2016. As an occasional emergency measure, the School brought in potable water via truck (adding it to the potable water system storage tanks) to supply potable water to the student and staff population. In 2014, due to low yield from Wells 2 and 3 during the drought, LPJUSD was given temporary permission to resume supplying potable water from Well 1 (with monitoring for MTBE), with the caveat that LPJUSD would search for other, more protected sources of water (Division of Drinking Water, 2014).

2.2 Project Purpose and Objectives

The goal of the Proposed Project is to implement a safe, reliable drinking water supply for the schools that meets all current state and federal requirements. Various alternatives were assessed by the District's consultants and a preferred approach was developed that includes new wells near the existing wells, new pipelines connecting the new wells, plus a new pipeline to connect to the schools' existing distribution system. The objective of the Proposed Project is to permit and implement this system.

The completed water system would conform to Chapter 16, California Waterworks Standards, Code of Regulations, Title 22. These regulations are related to quantity of supply, source

capacity, reservoir design, system pressure, water mains, flushing, valves, and other distribution appurtenances.

2.3 Project Location and Setting

The Loma Prieta School is located at 23800 Summit Road, in unincorporated Santa Cruz County, about two and one-half miles east of Highway 17 and 13 miles south of the City of San Jose. The proposed new wells would be located on both sides of Summit Road, one in Santa Clara County and two in Santa Cruz County. The Project location is shown on Figure 1. Land uses in the area are a mix of rural residential, commercial, agriculture (forestry), and open space.

Three potential locations for new wells have been identified at the School based on local hydrogeologic conditions. The Proposed Project facilities are shown on Figure 2. The on-site source investigation would drill and test wells at these three locations. The proposed pipeline would extend from the wells across Summit Road (over the roadway on the existing pedestrian bridge) to the school's existing water supply system.

2.4 Proposed Project Characteristics

Well Drilling

Each well would be drilled to a depth of approximately 250 feet below the ground surface (bgs) by a California-licensed well driller. The drilling and staging area at each boring would be approximately 50-feet long and 30-feet wide. The drilling area would be surrounded by silt fencing to contain drill cuttings and dust generated by drilling activities. The top 100 feet of each boring would be 11 inches in diameter to accommodate a 3-inch thick annular seal. The bottom 250 feet of each boring would be 9 inches in diameter. The total volume of drill cuttings from each boring would be approximately seven cubic yards. The drill cuttings could be disposed of on-site in the unpaved overflow parking area. If no water is found in a test boring, it would be sealed by filling with cement grout according to County and State guidelines.

Well Testing

Each successful well (significant water encountered during drilling) would be completed with a 4.5-inch diameter PVC Casing, an 8 X 16 Lapis Sand filter pack, and a cement sanitary seal. After completion and allowing the sanitary seal to set, a 72-hour pumping test

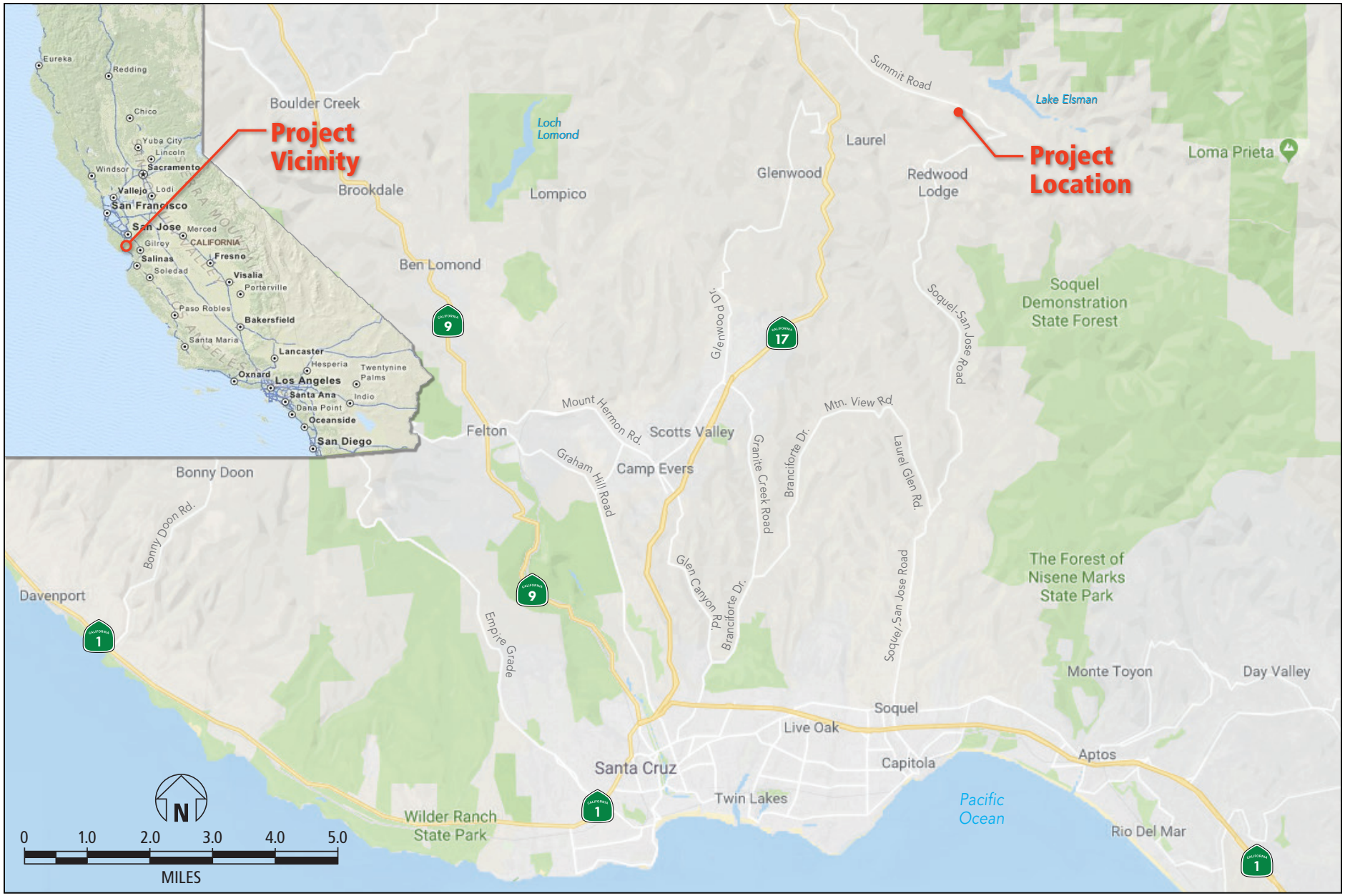

Figure 1
Project Location

Source: Google Maps and Grassetti Environmental

Figure 2

Site Map with Water System Components, Including Existing and Potential Well Locations

Source: Weber, Hayes and Associates

would be conducted to estimate well yield. A test pumping rate of approximately seven gallons per minute (gpm) would yield approximately 30,000 gallons of water during each test. The project engineers anticipate that the water generated would be put into the School's non-potable fire/irrigation water storage system. Samples of the well water would be collected at the end of the pumping test and analyzed for drinking water constituents at a State-certified analytical laboratory.

Connection to Existing Water System

The project engineers anticipate that one or more wells with sufficient yield (greater than approximately 5 gpm) and water quality would be connected to the existing water system by new underground supply piping. The project engineers anticipate that a two to five horsepower submersible pump would be installed in each supply well that is connected to the water system. The total new trench length would be approximately 1,100 feet, depending on which and how many of the test wells are connected to the water system (see Figure 2). Staging for trenching/construction of the new water supply piping would likely be in the overflow parking area. The trenches would likely be dug with a backhoe. Electrical power and well pump control/data wiring would be installed in conduits in the same trench as the underground piping. The utility trenches would be 18- to 30-inches deep and approximately one foot wide. Water supply piping would likely be two inches in diameter.

If wells across Summit Road are used, a new pipeline would be extended across Summit Road along the existing elevated pedestrian walkway.

Water from the new wells would be distributed through the existing water distribution system. Depending on water quality (the presence of iron and or manganese), the water from the new well(s) may be treated by the existing iron and manganese filter system.

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 (10 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 Proposed Project would take place in phases, beginning in Summer 2019. The initial phase would be well drilling and testing. Each well will take approximately two weeks to construct and an additional week to test. The second phase would be completing the well – constructing a well building, installing the pump in the well, installing other water system appurtenances, and connecting the well to the existing water treatment and storage/distribution systems. Phase 2 work would take approximately one month at each well. Construction activities would occur Monday through Friday between 7:00 a.m. and 6:00 p.m.

Best Management Practices

Proposed 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 to be Implemented for the Proposed Project

Number	Title	BMP Description
BMP-1	Best Management Practices for Construction Air Quality	The contractor would 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.
BMP-2	Best Management Practices for Construction Emissions, Including Fugitive Dust Emissions	Implementation of construction BMPs to limit construction emissions, particularly fugitive dust emissions, as follows: • All exposed areas of bare soil should be watered twice per day to minimize fugitive dust emissions. • All haul trucks transporting soil, sand, or other loose material off-site should be covered or maintain at least two feet of free board space. Any haul trucks traveling along freeways or major roadways should be covered.

Number	Title	BMP Description
		• All visible mud or dirt track-out onto adjacent public roads should be removed using wet power-vacuum street sweepers at least once per day. The use of dry power sweeping should be prohibited. • All vehicle speeds on unpaved roads should be limited to 15 miles per hour (mph). • Idling times should 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 should be provided for construction workers at all access points. • All construction equipment should be maintained and properly tuned in accordance with manufacturer's specifications. All equipment should be checked by a certified visible emissions evaluator and determined to be running in proper condition before it is operated. The Proposed Project would implement these measures as required.
BMP-3	Best Management Practices for Sediment Control	Site specific BMPs to control sediments during construction activities, which may include but not be limited to: • 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. • 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. • Minimize soil disturbance area. • Implement other practices to maintain water quality, including use of silt fences, stabilized construction entrances, and storm-drain inlet protection. • Where feasible, limit construction to dry periods. • Possibly revegetate disturbed areas.

Number	Title	BMP Description
		BMPs would 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.
BMP-4	Best Management Practices for Hazardous Materials	Site-specific hazardous materials BMPs during construction activities, which may include but not be limited to: • 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. • Install, implement, and maintain BMPs consistent with the California Storm Water Quality Association Best Management Practice Handbook (CASQA 2015) or equivalent to minimize the discharge of pollutants to the MS4s, consistent with the requirements of the construction site stormwater and hazardous materials control requirements of the Counties of Santa Clara and Santa Cruz. • Implement practices to minimize the contact of construction materials, equipment, and maintenance supplies with stormwater. • Limit fueling and other activities involving hazardous materials to designated areas only; provide drip pans under equipment and conduct daily checks of vehicle condition. • Require the proper disposal of trash and any other construction-related waste. • 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 Caltrans; 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

Number	Title	BMP Description
		containers, maintaining required clearances, and handling materials using the applicable federal, state, and/or local regulatory agency protocols. • BMPs would 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.
BMP-5	Best Management Practices for Biological Resources	Site specific BMPs to control sediments during construction activities, which may include, but not be limited to: • 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; • 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; • Minimize soil disturbance area; • Implement other practices to maintain water quality, including use of silt fences, stabilized construction entrances, and storm-drain inlet protection; • Where feasible, limit construction to dry periods; and • Revegetate disturbed areas. BMPs would 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.
BMP-6	Best Management Practices for Biological Resources	The following BMPs would be incorporated into the Proposed Project construction documents: • Provide enclosures and noise mufflers for stationary equipment, shrouding or shielding for impact tools, and barriers around particularly noisy activity areas on the site.

Number	Title	BMP Description
		• Use quietest type of construction equipment whenever possible, particularly air compressors. • Provide sound-control devices on equipment no less effective than those provided by the manufacturer. • Locate stationary equipment, material stockpiles, and vehicle staging areas as far as practicable from sensitive receptors. • Prohibit unnecessary idling of internal combustion engines. • Require applicable construction-related vehicles and equipment to use designated truck routes when entering/leaving the site. • Designate a noise (and vibration) disturbance coordinator at the Lead Agency 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. • Prohibit Proposed Project construction activity between the hours of eight p.m. and six a.m. on weekdays; on Friday commencing at eight p.m. through and including seven a.m. on Saturday; on Saturdays commencing at eight p.m. through and including seven a.m. on the next following Sunday and on each Sunday after the hour of eight p.m.
BMP-7	Best Management Practices for traffic	The following BMPs would be incorporated into the Proposed Project construction documents: • At least one lane of traffic access shall be maintained during construction. • All roadway excavation shall employ flag-people during active construction activities. • All excavations and trenches in the roadways shall be covered with steel plates in evenings and weekends when no active construction is occurring until repaving occurs.

3.0 ENVIRONMENTAL CHECKLIST

3.1 Summary of Project Information

1. Project title: Loma Prieta Joint Union School District Domestic Water Supply Project

2. Lead agency name and address:
   Loma Prieta Joint Union School District,
   23800 Summit Road
   Los Gatos, CA 95033

3. Contact Person, Email, and Phone Number:

   Paul Harville
   Facilities Director
   Loma Prieta Joint Union School District,
   23800 Summit Road
   Los Gatos, CA 95033
   (408) 353-8632

4. Project Location: Summit Road just west of Morrill Road and Morrill Cutoff Road, Santa Clara and Santa Cruz Counties.

5. Project sponsor's name and address:
   Loma Prieta Joint Union School District,
   23800 Summit Road
   Los Gatos, CA 95033

6. General plan designation: Santa Clara County Sites: H (Hillsides). Santa Cruz County: P (Public Facilities)

7. Zoning: Santa Clara County Sites: HS-sr (Hillsides -Single-family Residential), Santa Cruz County: PF (Public Facilities)

8. Description of project: Please see Project Description, above.

9. Surrounding land uses and setting: Briefly describe the project's surroundings: Please see Project Description, above.

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.

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

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.

X 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 _____ Date _____

Printed name _____

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 by the City Planning Commission.

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 Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) 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?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

Background

The overall visual character of the Loma Prieta School area includes expansive views west over the mountains and to the Pacific Ocean and limited views east into the forested Santa Cruz Mountains. The well sites are in forested areas adjacent to or near current or former school buildings. The Project area along Summit Road includes scattered residential and commercial land uses among forested areas.

Well Site 1is adjacent to a parking area just north of the school. It is surrounded by mature trees and is not visible from Summit Road (see Figure 3).

Well Site 2 is north of Summit Road, in a forested area just west of the old school site. It is set back from Summit Road, and views from the road are precluded by intervening trees and shrubs (See Figure 4).

Well Site 3 is at the far end of the grass-covered school play field of the current Loma Prieta School, on the east side of the campus. A row of trees between the well site and Summit Road prevents views of the site from that road (see Figure 5).

The proposed pipeline would cross Summit Road on the existing pedestrian overcrossing, which is visible as a paved, 2-lane roadway, and connections to the existing water system would occur in the developed school campus area.

Figure 3: View of Well Site 1 Looking West


Figure 4: View of Well Site 2 Looking West

Figure 5: View of Well Site 3 from School Play Field.

Discussion

a. Scenic Vista – While the school site affords scenic vistas of the mountains and ocean to the west and hills to the east, the proposed project would involve drilling and operating subsurface wells and a pipeline crossing over Summit Road. During well drilling, it is possible that portions of the drilling rig at Wells 1 and 3 would be visible from Summit Road and the school campus. Well 3 would be clearly visible from the playfield. It is unlikely that the rig at Well 2 would be visible from any off-site locations. Well drilling would be of short duration and the rigs would not be prominent in any scenic vista, therefore not significant. After the wells are drilled, views would be minimally affected as surface features would be essentially unchanged. Therefore the Proposed Project would not have the potential to affect any scenic vistas, and **no impact** would occur.

b. Scenic Highway – There are no scenic highways in the project vicinity. Highway 17, west of the site, is eligible but not designated as a scenic highway. **No impact** to scenic highway would occur.

c. Visual Quality – As the Proposed Project would be comprised of underground and surface-surface level facilities, it would not have the potential to affect visual quality in the area, and **no impact** would occur.

d. Light and Glare – The project would not have any associated lighting. In addition, construction would occur only during daylight hours. Therefore it would not have the potential to create light or glare, and **no impact** would occur.

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

Background

Although there are forested areas adjacent to the sites, the Proposed Project would be located on a school campus, under and existing road, and in a cleared area adjacent to the former Loma Prieta School. There is no agricultural land on or adjacent to Proposed Project facility sites.

Discussion

a, b. Farmland, Willamson Act – As discussed above, the project would consist of surface and subsurface well features and pipelines, and associated connections in and adjacent to cleared areas and two developed school sites. 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 – As discussed above, the project would consist of surface and subsurface wells and pipelines, and associated connections in and adjacent to cleared areas and two developed school sites. Therefore it would have no potential to affect any forested lands. **No impact** would occur.

e. Conversion of Farmland – As discussed above, the project would consist of surface and subsurface wells and pipelines, and associated connections in and adjacent to cleared areas and two developed school sites. 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 or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) 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?	☐	☒	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Background

The Project's water system/supply improvements are proposed at the Loma Prieta Joint Union School District's (LPJUSD) two schools, Loma Prieta Elementary School and C.T. English Middle School, both located at 23800 Summit Road in unincorporated Santa Cruz County, which is part of the Monterey Bay Air Resources District's (MBARD) North Central Coast Air Basin (NCCAB), which also includes Monterey and San Benito counties. It should be noted that one of the proposed new well sites is north of Summit Road, in Santa Clara County, which is in the Bay Area Air Quality Management District's jurisdiction. However, because most of the trenching and well drilling activities would be in Santa Cruz County, this analysis focuses on impacts in the NCCAB.

The NCCAB's main air quality problems with ozone and particulate matter (the latter pollutant having two varieties - PM_{10} [particulate matter less than 10 microns in diameter] and $PM_{2.5}$ [particulate matter less than 2.5 microns in diameter]) tend to occur in the summer and fall when seasonal wind patterns and atmospheric conditions, in combination with local topography, either restrict the dispersion of locally emitted pollutants or transport pollutants from the San Francisco Bay area or the Central Valley into the NCCAB. The NCCAB attains all federal ambient air quality standards for ozone, particulate matter and all other major air pollutants according to the California Air Resources Board (CARB) *Area Designation Maps* (https://www.arb.ca.gov/desig/adm/adm.htm).

The most recently adopted air quality plan for the NCCAB is the *2008 Air Quality Management Plan* (MBARD, 2008). The MBARD maintains a number of air quality monitoring stations in the NCCAB, which continually measure the ambient concentrations of major air pollutants. The

closest NCCAB monitoring station to the Project site is at 2544 Soquel Avenue in Santa Cruz, about 10 miles south of the project site. The data collected show a few recent violations of the federal ozone and $PM_{2.5}$ particulate standards (see Table AQ-1), which have not been sufficiently severe or frequent to affect the official attainment status of the NCCAB with respect to these pollutants.

TABLE AQ-1

Local Ambient Air Quality Monitoring Summary

Pollutant	Air Quality Standard	Maximum Concentrations and Number of Days Standards Exceeded		
		2015	2016	2017
Ozone				
Maximum 8-hour concentration (ppm)		60	57	75
# Days 8-hour federal standard exceeded	70 ppb	0	0	1
Suspended Fine Particulates ($PM_{2.5}$)				
Maximum 24-hour concentration ($\mu g/m^3$)		20.5	12.7	47.3
# Days federal 24-hour standard exceeded	35 $\mu g/m^3$	0	0	2

Notes:
As monitored at the MBARD station at 2544 Soquel Avenue in Santa Cruz.
$\mu g/m^3$ = micrograms per cubic meter

ppb = parts per billion.

Source: : CARB, iADAM: Air Quality Data Statistics https://www.arb.ca.gov/adam/

In addition to the major air pollutants (as identified above), many other chemical compounds, generally termed toxic air contaminants (TACs), pose a present or potential hazard to human health through airborne exposure. A wide variety of sources, stationary (e.g., dry cleaning facilities, gasoline stations, and emergency diesel-powered generators, etc.) and mobile (e.g., motor vehicles, construction equipment, etc.), emit TACs. The health effects associated with TACs are quite diverse. TACs can cause adverse health effects from long-term exposure (e.g., cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage) and/or from short-term exposure (e.g., eye watering, respiratory irritation, running nose, throat pain, and headaches). Most of the estimated carcinogenic/chronic health risk in California can be attributed to relatively few airborne compounds, the most important being particulate matter from diesel-fueled engines (DPM). The CARB has identified DPM as being responsible for about 70 percent of the cumulative cancer risk from all airborne TAC exposures in California (*Summary: Diesel Particulate Matter Health Impacts* https://ww2.arb.ca.gov/resources/summary-diesel-particulate-matter-health-impacts)

The analytical methodologies and significance criteria as specified in *CEQA Air Quality Guidelines* (MBARD, 2008) were used to assess the Project's emissions of air pollutants from construction operations and the potential for exposure of local sensitive receptors to DPM in the construction equipment exhaust. The *Guidelines'* specific significance criteria relevant to evaluating this project's construction air quality impacts are listed below:

- **Ozone Precursor Emissions**. Construction projects using typical construction equipment (e.g., dump trucks, loaders, backhoes, etc.) emit ozone precursors (i.e., nitrogen oxides [NOx] and reactive organic gases [ROG] that are accommodated in the emission inventories of State and federal air quality plans. Such emissions from any development project would not have a significant impact on the attainment and maintenance of the ozone ambient air quality standards in the NCCAB.
- **Particulate Emissions**. PM_{10} emissions of 82 lbs./day or less from construction equipment exhaust and fugitive sources from any development project would not have a significant impact on the attainment and maintenance of particulate ambient air quality standards in the NCCAB. Based on this threshold, the *Guidelines* set the following limits on the active daily area worked at construction sites to assure that the daily PM_{10} emissions are below the 82 lbs./day emission threshold:
    - Construction with Minimal Earthmoving – 8.1 acres/day
    - Construction with Earthmoving (grading, excavation) – 2.2 acres/day
- **DPM Health Risk**. Any development project with the potential to increase cancer risk from DPM emissions to proximate maximally exposed individuals by 10 chances in one million or more during construction (or operation) would have a significant impact.

Discussion

a and b. Air Quality Planning, Standards, Non-Attainment - 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 US Environmental Protection Agency (EPA) *General Conformity* rule (https://www.epa.gov/general-conformity/what-general-conformity) specifies *de minimis* emission thresholds (https://www.epa.gov/general-conformity/de-minimis-tables) for ozone and its precursors 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 State Implementation Plan (SIP) for attainment of federal air quality standards and would not make cumulatively considerable contributions to the NCCAB ambient ozone or particulate matter levels.

Further, since the Project would produce no net new operational emissions, and its ozone precursors emitted during construction are already accounted for in the emission inventories of the *2008 Air Quality Management Plan*, the Project would not significantly interfere with the maintenance of the ozone ambient air quality standards in the NCCAB.

TABLE AQ-2

Project Emissions and Comparisons with EPA *De Minimis* Thresholds (tons/year)

Pollutant	Santa Cruz County Federal Attainment Status [a]	EPA *De Minimis* Threshold [b]	Project Construction Emissions [c]	Project Operational Emissions
Ozone (O_3)[d]	Attainment/Unclassified	100	0.1213	0
Oxides of Nitrogen (NO_x)	Attainment/Unclassified	100	0.1111	0
Reactive Organic Gases (ROG)	----	100	0.0102	0
Volatile Organics (VOCs)[e]	----	100	0.0102	0
Particulate Matter ($PM_{2.5}$)	Attainment/Unclassified	100	0.0046	0
Particulate Matter (PM_{10})	Unclassified	100	0.0050	0
Carbon Monoxide (CO)	Attainment/Unclassified	100	0.0725	0
Sulfur Dioxide (SO_2)	Attainment/Unclassified	100	0.0002	0
Lead (Pb)	Attainment/Unclassified	25	----	0

Emission estimates assume project construction equipment with California-average emitting engines during the year 2019 construction period.

[a] Source: CARB, Area Designations Maps / State and National https://www.arb.ca.gov/desig/adm/adm.htm

[b] Source: EPA, General Conformity De Minimis Tables https://www.epa.gov/general-conformity/de-minimis-tables

[c] Emissions from Project construction equipment (as specified by the project engineer) were calculated using the CalEEMod Model, Version 2016.3.2.

[d] Ozone is not directly emitted but is formed from its precursors, NOx and ROG. Thus, ozone emissions were taken to be the sum of the two precursors.

[e] VOCs are similar to ROGs but are not directly calculated by CalEEMod. However, for their effect on ozone formation, VOC emissions were assumed to be equivalent to ROG emissions.

Project construction would also produce PM_{10} emissions as a component of fugitive dust generated by earthmoving, excavation, grading, etc. However, according to the Project Description the active construction area of each of the three new water supply wells would be no more than half an acre. The drilling of each well would not occur simultaneously, but installation of the new water supply system would occur during the last month of the three-month Project construction period. Thus, maximum total active daily construction area would

not exceed 1.5 acres, less than the MBARD 2.2-acre limit to assure that fugitive particulate emissions would not exceed 82 lbs./day. Thus, combined maximum daily PM_{10} emissions would not exceed the MBARD threshold nor be cumulatively considerable, and would therefore be a **less-than-significant** impact.

c. Sensitive Receptors - The Project could adversely impact local PM_{10} concentrations at sensitive receptors during construction. To limit the generation of fugitive dust, construction best management practices shall be implemented as recommended in MBARB's *CEQA Air Quality Guidelines (2008)*. With the implementation of **Mitigation Measure AQ-1** (below), project construction impacts on local ambient PM_{10} concentrations would be reduced to a **less-than-significant** level.

The cancer risk from project equipment DPM emissions would be far below the 10-in-a-million significance threshold for the following reasons: 1) the relatively small equipment sets specified for Project construction (i.e., a drill rig and pump during drilling, and one each – backhoe, loader, paver, roller during water system installation); 2) the relatively short times that the equipment would be active in each of the three new well areas (i.e., 5 days for each well, and a month total for water system installation), which would reduce local receptor exposure durations (and since cancer risk is typically evaluated over a reference 70-year exposure period, Project cancer risk would be proportionate to these much shorter Project exposure durations); and 3) the relatively large distances between the well areas and local sensitive receptors (i.e. Well #4 is about150 feet from the nearest existing residence, while Well #5 and #6 are a few hundred feet from existing school buildings). Thus, there would be a **less-than-significant** health risk to local sensitive receptors from ambient exposure to DPM from project construction equipment.

d. Other emissions - Diesel exhaust that would be emitted by project construction equipment has a characteristic odor. But there would be at most two pieces of equipment operating in each Action Area at any given time (i.e., a drill rig and pump during well drilling, a backhoe and loader during meter/pipe installation; a paver and roller for close-up after installation is complete). Any odors they produced would be tightly localized to the locus of equipment operation and be of short duration (i.e., 5 days during drilling; 2-3 weeks total during system installation). Thus, project odor impacts would be **less than significant**.

Mitigation Measures

Mitigation Measure AQ-1 – Fugitive Dust Emission Minimization: The Loma Prieta Joint Union School District shall require its construction contractor to implement a Dust Control Plan that shall include the following measures:

- Water all active construction areas at least twice daily. Frequency should be based on the type of operation, soil, and wind exposure.

- Prohibit all grading activities during periods of high wind (over 15 mph).
- Haul trucks shall maintain at least 2'0" of freeboard.
- Cover all trucks hauling dirt, sand, or loose materials.
- Cover inactive storage piles.
- Sweep streets if visible soil material is carried out from the construction site.
- Post a publicly visible sign which specifies the telephone number and person to contact regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the MBARD shall be visible to ensure compliance with Rule 402 (Nuisance).

3.4.4 Biological Resources

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

Background

A biological assessment for special-status plants and wildlife was conducted for the Proposed Project by Northgate Environmental Management (NGEM) in March 2019 (NGEM 2019). The area evaluated in the report is the project's disturbance footprint (including staging areas) and areas surrounding areas that would be subjected to temporary construction-related noise. Given the types of equipment to be used and existing noise levels at the site, it is assumed that construction activities would result in a substantial temporary increase in noise levels within 600 feet of the construction and staging areas. The action area includes the school property, nearby woodlands and other undeveloped land, and nearby homes.

Habitats were mapped and evaluated for the potential presence of special-status wildlife and botanical resources, including special-status[1] plant species and sensitive habitats (e.g., riparian corridors, streams, wetlands, and sensitive vegetation communities).

Prior to conducting field studies, a background literature search was conducted to determine which special-status plant species and other sensitive botanical resources have potential to inhabit the region based on documented occurrences and range distribution. Existing spatial information depicting the action area and its physical characteristics were compiled and reviewed prior to the field survey. This information included publicly available digital ortho-rectified aerial photography and topographical quadrangle maps. In addition, a review of the California Natural Diversity Database (CNDDB) was conducted to identify federally listed species known to occur in the project region and their locations relative to the construction area. Service species lists for the project were also obtained on May 18, 2018 (Appendix A).

On May 8, 2018, Josh Phillips, Senior Northgate Biologist, 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 proposed action includes drilling three exploratory wells and then tying one or more of those wells into the existing water distribution system. The biological conditions at each of the well locations, and within areas that could be disturbed tying those wells into the water system, are discussed below.

Well Site 1

This site is located along the outer edge of a compacted dirt/gravel parking area and is bounded on all other sides by school grounds and roads (see Figure 2). This site is actively used for parking and is devoid of vegetation. However, this site is bordered to the south by a mixed evergreen woodland that includes a variety of mature coniferous trees, such as Douglas fir (*Pseudotsuga menziesii*), incense cedar (*Calocedrus decurrens*), and Monterey pine (*Pinus*

[1] Special-status plant species are defined here to include: (1) all plants that are listed under the Federal or State Endangered Species Acts as rare, threatened or endangered; (2) all federal and state candidates for listing; (3) plants that qualify under the definition of "rare" in the California Environmental Quality Act (CEQA), section 15380; and (4) all plants included in Lists 1 and 2 (and Lists 3 and 4 when they meet the definition of "rare") in California Native Plant Society Inventory of Rare and Endangered Plants (CNPS 2019).

radiata); the site was previously a Christmas tree farm which likely explains the presence of some of these species. Within the adjacent woodland, there is generally a thick layer of conifer needles on the ground, with a sparse ground cover of quaking grass (*Briza minor*), ripgut brome (*Bromus diandrus*), poison oak (*Toxicodendron diversilobum*), Italian thistle (*Carduus pycnocephalus*), French broom (*Genista monspessulana*), and California blackberry (*Rubus ursinus*). The soils are generally compacted within the informal footpaths in the area.

A non-wetland swale is located approximately 150 feet southwest of this proposed well drilling location. This area contains a dense growth of poison oak, French broom, and California blackberry. An offsite seasonal pond/detention basin occurs approximately 300 feet northwest of this proposed well site (see Figure 6). The pond is outside of the project's disturbance boundary. At the time of the site visit, standing water was present and some emergent vegetation was just breaching the surface of the water. The pond is fenced and trees bordering the pond include coast live oak (*Quercus agrifolia*) and several arroyo willow (*Salix lasiolepis*), with herbaceous vegetation being dominated by French broom and other weedy species.

Figure 6. Offsite Seasonal Pond

If this well site is found to be viable, the water supply piping would be routed through an existing parking area, it would then cross the outer edge of the mixed conifer woodland described above, then tie into the existing water distribution system on the developed portion of the school grounds.

Well Site 2

This site is located on the north side of Summit Road, just north of an existing well and maintenance yard. This well location is at the outer edge of a mowed grassland area, dominated by annual grasses and weedy plant species. There is a forest just to the north of this location, with coast live oak, big-leafed maple (*Acer macrophyllum*), and California bay laurel (*Umbellularia californica*) being the dominant tree species near the proposed well location, and with coast redwoods (*Sequoia sempervirens*) becoming dominant approximately 100 feet to the north. Within the forested area (north of the well location), there is a thick ground cover dominated by miner's lettuce (*Claytonia perfoliata*), but with French broom, bedstraw (*Galium* sp.), and California blackberry also occurring. If this well site is found to be viable, the water supply piping would be routed a short distance to the south to existing water supply piping and the associated disturbance area would include previously disturbed areas dominated by annual grasses.

Well Site 3

This site is located within or adjacent to the northeast corner of the running track and associated athletic field. The track itself consists of compacted dirt, with the adjacent grassland area consisting of mowed annual grasses and weedy plant species. This area is bordered to the north by a fence, with Monterey pine, big-leafed maple, and coast live oak trees occurring on the other side of the fence. If this well site is found to be viable, the water supply piping would be routed along the edge of the existing track and the associated disturbance area would include the track and previously disturbed areas dominated by mowed annual grasses.

Federally Listed Species in the Project Vicinity

Official Service species lists were obtained from the Sacramento and Ventura offices on May 18, 2018 (Appendix A). The potential for all the species included on those lists to be affected by the proposed action was evaluated. California red-legged frog, a federally listed species, could occur in the action area based on the presence of potential habitat and documented occurrences in the project region. Table BIO-1 summarizes the reasons this species could occur, as well as the reasons why the other species included on the species lists obtained from the Service are not expected to occur in areas affected by the proposed action. Figure 7 shows the location of federally listed species documented in the project region relative to the action area.

TABLE BIO-1

Federally Listed Species Known from the Project Region

Common Name	Status	General Habitat Description	Potential to Occur on Project Site
Birds			
California least tern *Sterna antillarum*	FE	Nests on sandy, upper ocean beaches, and occasionally uses mudflats. Forages on adjacent surf line, estuaries, or the open ocean.	**Not Expected:** The project site is in a wooded/developed area and suitable nesting and foraging habitat is not present.
Least Bell's vireo *Vireo bellii pusillus*	FE	Fairly dense riparian habitat.	**Not Expected:** The project site and surrounding area lacks suitable habitat due to the absence of dense riparian habitat.
Marbled murrelet *Brachyramphus marmoratus*	FT	Nests in old-growth redwood dominated forests, up to six miles inland, often in Douglas-fir.	**Not Expected:** Old growth forest does not occur in the action area, and the project activities would occur along forest edges and within/near areas subject to ongoing disturbance from school-related activities. Based on the CNDDB, the closest documented occurrence is approximately 10 miles west of the project site.
Southwestern willow flycatcher *Empidonax traillii extimus*	FE	Dense riparian vegetation near surface water or saturated soil.	**Not Expected:** The project site and surrounding area lacks suitable habitat due to the absence of dense riparian habitat.
Reptiles			
San Francisco garter snake *Thamnophis sirtalis tetrataenia*	FE	Vicinity of freshwater marshes, ponds and slow-moving streams in San Mateo County and extreme northern Santa Cruz County. Prefers dense cover and water depths of at least one foot. Upland areas near water are also very important.	**Not Expected:** The species is not associated with coniferous woodland habitat types and the developed land uses on the site. The species is also not known from the project area – based on the CNDDB, the closest documented occurrence is approximately 18 miles from the project site.
Amphibians			
California tiger salamander	FT	Needs underground refuges (e.g., ground squirrel burrows) and vernal pools or	**Not Expected**: This species is not associated with the mixed conifer/redwood forest habitat types

Common Name	Status	General Habitat Description	Potential to Occur on Project Site
Ambystoma californiense		other long-lasting seasonal water sources for breeding.	that are dominant in the project area. The species is generally associated with open grasslands and cismontane woodlands/savannah, with vernal pools or stock ponds, which do not occur in the project area. The species is not known from the project area - based on the CNDDB, the closest documented occurrence is approximately 6 miles from the project site.
California red-legged frog *Rana draytonii*	FT	In or near permanent or long-lasting sources of deep water, generally with dense, shrubby or emergent vegetation.	**Potential**: The coniferous woodland and developed habitats within the project's disturbance boundary provide marginal habitat for the species. However, the species has been documented within approximately 0.6 mile of the project site and the nearby offsite pond provides potential habitat. Therefore, there is potential that the species could disperse across the project site.
Insects			
Bay checkerspot butterfly *Euphydryas editha bayensis*	FT	Restricted to native grasslands on outcrops of serpentine soil in the vicinity of San Francisco Bay. Plantago erecta is the primary host plant; Orthocarpus densiflorus & O. purpurscens are the secondary host plants.	**Not Expected:** Suitable habitat is not present due to the absence of serpentine soils and native grasslands.
Fish			
Delta smelt *Hypomesus transpacificus*	FT	Bays and estuaries.	**Not Expected:** No bay or estuarine habitat present.
Tidewater goby *Eucyclogobius newberryi*	FE	Brackish water habitats along the California coast, found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	**Not Expected:** No lagoon/lower stream reach habitat present.

Common Name	Status	General Habitat Description	Potential to Occur on Project Site
Plants			
Marsh sandwort *Arenaria paludicola*	FE	Sandy opening, within marshes and swamps.	**Not Expected:** The project site does not contain marsh/swamp habitat, or sandy openings.
Metcalf Canyon Jewelflower *Streptanthus albidus* ssp. *albidus*	FE	Serpentinite, within valley and foothill grassland.	**Not Expected:** The project site does not contain serpentinite habitats.
Robust spineflower *Chorizanthe robusta* var. *robusta*	FE	Sandy terraces and bluffs or in loose sand, within cismontane woodland, coastal dunes, coastal scrub, chaparral.	**Not Expected:** The project site does not provide suitable habitat due to the absence of sandy soils and other habitat characteristics.
Santa Clara Valley dudleya *Dudleya setchellii*	FE	Serpentinite, rock areas, within cistmontane woodland and valley and foothill grassland.	**Not Expected:** The project site does not contain serpentinite habitats.
Scotts Valley polygonum *Polygonum hickmanii*	FE	Mudstone and sandstone, within valley and foothill grassland	**Not Expected:** The project site does not contain suitable grassland habitat and the species is only known only from Scotts Valley (CNPS 2018)
Scotts Valley spineflower *Chorizanthe robusta* var. *hartwegii*	FE	Meadows and seeps (sand), valley and foothill grasslands (mudstone and Purisima outcrops)	**Not Expected:** The project site does not contain suitable sandy habitats or meadows or seeps.

Status: Federal Endangered (FE); Federal Threatened (FT); State Endangered (SE); State Threatened (ST)

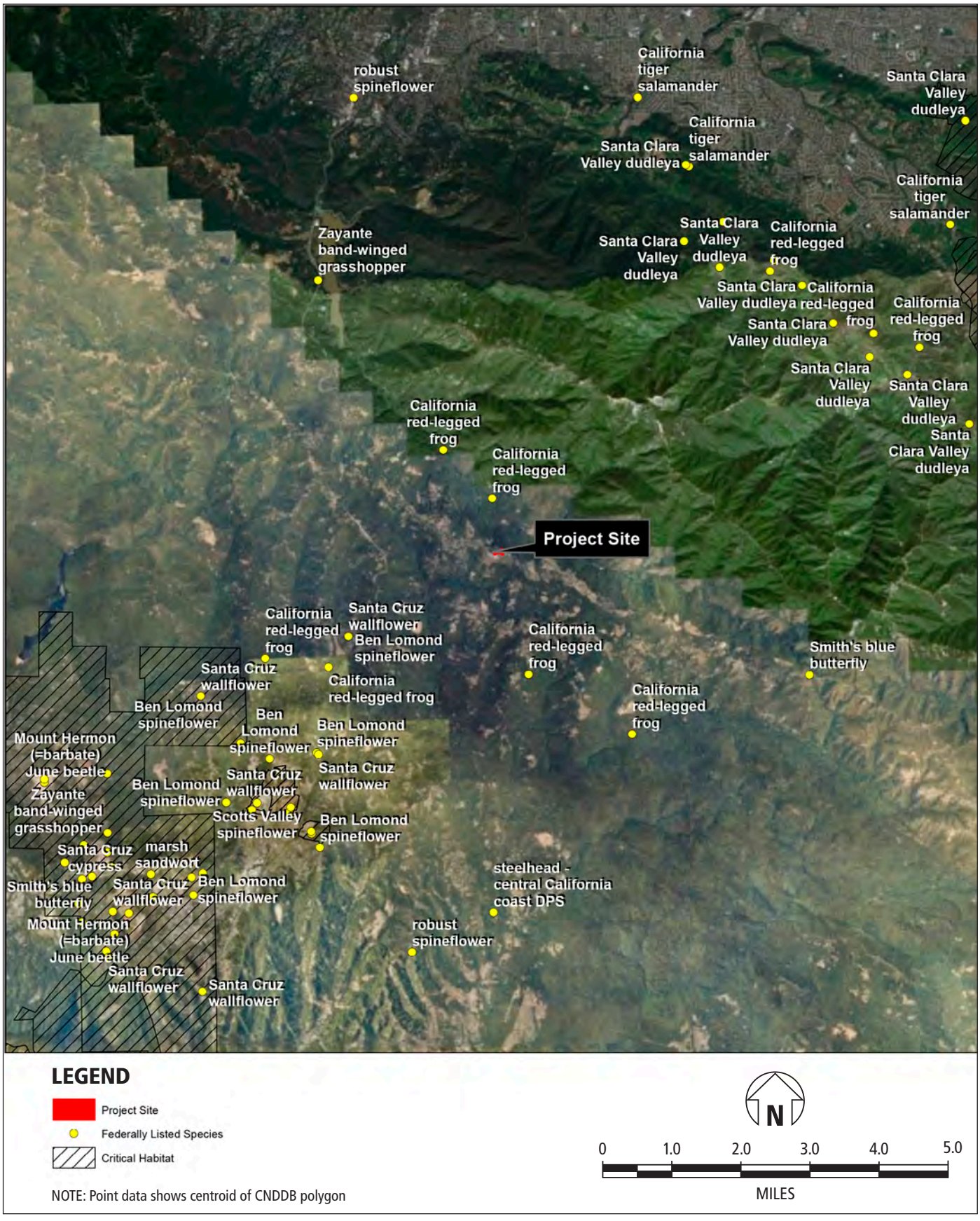

Figure 7

Documented Federally Listed Species

Source: California Natural Diversity Database

Discussion

a. Effect on Protected Species – As previously discussed, the California red-legged frog (*Rana draytonii*), a federally listed species, has potential to occur in the action area. The action area is not located within designated California red-legged frog critical habitat. However, as shown in Figure 7, this species has been documented in the vicinity of the project site, with the closest occurrence being approximately 0.6 mile north of the project site. This occurrence (CNDDB Occurrence #18) included the observation from 1989 of an adult frog found dead on the road, approximately 30 meters from Los Gatos Creek. As shown in Figure 7, the species has also been documented at several locations to the north and south at distances greater than 1.5 miles from the project site, including within a pond located within a second growth redwood forest (CNDDB Occurrence #1038). Given the above, California red-legged frog is assumed present in the project area.

The proposed action does not include any disturbance to aquatic habitats, including streams, ponds, or wetlands. However, the seasonal pond/detention basin located in the action area (but outside of the project construction area) provides suitable habitat for California red-legged frogs. The CNDDB does not include any occurrence records for the pond, but the pond likely has not been surveyed for frogs. Therefore, given known California red-legged frog occurrences in nearby areas, and because the pond provides apparently suitable habitat, California red-legged frogs could occur at the pond. The seasonal pond/detention basin is approximately 300 feet northwest of the closest proposed well site and would not be directly disturbed by the proposed project. However, should California red-legged frogs occur in the seasonal pond, they could disperse across the project construction area; this would be mostly likely to occur during or following periods of precipitation. Ground cover vegetation, which could provide cover habitat, is sparse or not present at all three well locations. The well sites also do not provide expected refuge habitat given the absence of small mammal burrows. However, it is possible that a California-legged frog could disperse through the area. Also, given the proximity of Well Site 1 to a non-wetland swale (which appears to drain towards the seasonal pond/detention basin), in the absence of implementing appropriate BMPs, construction activities could decrease water quality in the pond.

Habitat loss associated with the proposed project is not considered substantial because the three wells would be constructed in upland areas, the wells are not in an area expected to frequently be used for dispersal by frogs (e.g., between aquatic features or within a riparian corridor), and the construction of the wells would not create a barrier to dispersal in the area. The proposed action is not expected to result in adverse indirect effects to California red-legged frogs because the wells would be located on school grounds and associated maintenance activities currently occur,

and because the existing wells on the site are regularly maintained and those wells would be replaced by the proposed wells.

No other projects in the action area are anticipated by the School District and the project applicant is not aware of any proposed private activities in the action area. Additionally, the habitat loss associated with the proposed action is minor and there would be no loss of aquatic habitat. Therefore, the cumulative effects of the project on California red-legged frog and its habitats would not be substantial.

Best Management Practices would be implemented as described in Table 1 in the Project Description. In addition, as described below, mitigation measures BIO-1 through BIO-4, below would reduce **potentially significant impacts** on special-status species to a **less-than-significant** level.

b. Riparian or Other Habitats; c. Wetlands - As described above, the proposed action does not include any disturbance to aquatic habitats, including streams, ponds, or wetlands, nor is the project expected to adversely affect off-site wetland features. **No impact** would occur.

d. Wildlife Corridors – As described above, the wells are not in an area expected to frequently be used for dispersal by frogs (e.g., between aquatic features or within a riparian corridor), and the construction of the wells would not create a barrier to dispersal in the area. No long-term impacts would occur because the facilities would be at or below the surface. **No impact** would occur.

e. Local Policies/Ordinances - The project would not conflict with any Santa Cruz or Santa Clara County policy or ordinance regarding biological resources. **No impact** would result.

f. Habitat Conservation Plan/Natural Communities Conservation Plan - The project sites are not subject to any habitat conservation plans (HCP or NCCP). **No impact** would occur.

Mitigation Measures

Mitigation Measure BIO-1: Prior to the commencement of construction and immediately prior to the installation of silt fencing around the proposed drilling locations, a preconstruction survey for the California red-legged frog will be conducted by a qualified biologist at the project site. The survey will consist of walking the project limits to ascertain the possible presence of the species. The biologist will investigate all potential areas that could be used by the California red-legged frog for feeding, breeding, sheltering, movement, and other essential behaviors. If a California red-legged frog is found, all construction activities will be halted and the Service would be contacted. No attempt will be made to remove the frog from the project site.

Construction activities would not recommence until authorization to proceed has been issued by the Service. If California red-legged frog is not observed during the clearance survey, then the silt fence will be immediately installed and construction may proceed.

While not anticipated, if construction activities will occur during the wet season (October 15-May), then the silt fencing around the drilling locations should be designed and installed to prevent California red-legged frogs from entering the drilling sites. The silt fencing should be approximately 3 feet in height, with the bottom of the fencing buried, and with the fenceposts on the inside of the fenced area.

Mitigation Measure BIO-2: Before any construction activities begin on the project, a qualified biologist will conduct an employee education training for employees participating in construction activities. Personnel will be required to attend the presentation which will describe the California red-legged-frog, avoidance, minimization, and conservation measures, legal protection of the animal, and other related issues. All attendees will sign an attendance sheet along with their printed name, company or agency, email address, and telephone number.

Mitigation Measure BIO-3: Workers will cover any open trenches or design the trenches with escape ramps that can be used during non-working hours. The construction contractor will inspect open trenches prior to filling and contact a qualified biologist to remove or release any trapped wildlife found in the trenches.

Mitigation Measure BIO-4: If the project is conducted during the breeding bird season, a qualified biologist shall conduct a pre-construction breeding bird survey throughout areas of suitable habitat up to 250 feet from the project site within 15 days prior to the onset of construction activity. If bird nests are observed, buffer zones shall be established around all active nests to protect nesting adults and their young from construction disturbance. Buffer zone distances, which depend to some degree on the species and shall be established in consultation with CDFW, are typically 35 to 50 feet around native passerines, 100 feet around special-status passerines, and 250-feet or more around raptors. Work within the buffer zone shall be postponed until all the young are fledged, as determined by a qualified biologist.

Mitigation Measure BIO-5: Appropriate BMPs will be implemented during construction to prevent erosion and sedimentation. These BMPs will include specific measures to prevent runoff/sedimentation into the non-wetland swale near Well Site 1 (See Table 1 in the Project Description for a listing of the BMPs).

3.4.5 Cultural Resources

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

Background

A cultural resources assessment was conducted for the project area by the Archaeological Research Center, California State University Sacramento (ARC), in May 2018. Prior to the archaeological survey, the ARC requested a records search from the Northwest Information Center, Sonoma State University (NWIC File No. 17-0849). The records search parameters were based on an earlier version of the project, involving a nearly three-mile linear corridor to the west of the current project Area of Potential Effects (APE), as such the results of the records search report, dated October 18, 2017, extend well beyond the current proposed undertaking.

The APE, comprising approximately four acres, was defined based on detailed maps provided in the Preliminary Engineering Report (Weber, Hayes & Associates, Inc. 2017), which illustrate the proposed water system upgrades. The horizontal extent of the APE encompasses the space required for approximately 900 feet of trenching and water distribution and electrical conduit installation within paved parking areas and developed sports fields on the District campus (see Figure 2). Additional space for project access and materials staging is included within the APE and adjacent developed roadways. Final engineering design has yet to be completed, but it is assumed that trenching would be no more than two feet wide and no more than four feet deep.

As the APE is currently aligned, only portions of one previous field survey intersect the project. No resources have been documented within the APE, and only one historic abandoned road segment (P-43-002399) is located within one half mile.

The field investigation consisted of a pedestrian survey of the entire project APE. The survey was performed by two crew members under the supervision of the second report author from March 13 to March 16, 2018. Undeveloped portions of the District campus were surveyed with transects no

more than 10 meters wide. Archaeologists paid special attention to all areas of exposed soil, carefully examining them for artifacts, bones, or other potential cultural material. Ground visibility ranged from poor to moderate throughout the project area. The project APE consists of a combination of paved driving and parking surfaces, landscaped planters, imported gravel paths, and relatively natural forested areas. Nearly all of the project APE has been subject to extensive disturbances in the past to accommodate school and roadway construction, limiting the possibility for intact archaeological deposits.

The archaeological survey of the Loma Prieta School found no cultural resources in the APE. Surface conditions of the project area suggest that the area has undergone substantial ground disturbance in the past, resulting from the construction and maintenance of the school and adjacent properties. The extent of this disturbance coupled with the negative results of the surface survey leave little potential for the presence of intact subsurface cultural resources.

Discussion

a. Historic Resources – No historic resources were found on the site, and none are likely to be encountered because of the highly disturbed nature of the site.

b, c. Archaeological Resources and Human Remains – As discussed above, no cultural resources or human remains were found in the APE, nor are any likely to occur due to the disturbed nature of the site (ARC 2019). In sum, a finding of no historic properties affected is recommended for this project. If, however, new archaeological resources are encountered during construction, work should 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 **less than significant.**

Mitigation Measures

Mitigation Measure CUL-1: If previously unknown archaeological resources are discovered during construction, work must be halted within 100 feet of the find until a qualified archaeologist visits the site and assesses the significance of the resource. After the assessment is completed, the archaeologist shall submit a report describing the significance of the discovery with cultural resource management recommendations. If the find is determined to be an historical or unique archaeological resource/historic property, time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available.

Mitigation CUL-2*:* If human remains are encountered during construction activities, Section 7050.5 of the California Health and Safety Code and Public Resource Code, Section 5097.98

must be followed. To comply with these regulations, once project-related ground disturbance begins and if there is accidental discovery of human remains, the following steps shall be taken:

- There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the Coroner's Office is contacted to determine if the remains are Native American and if an investigation into cause of death is required.
- If the coroner determines the remains are Native American, the coroner shall contact the NAHC within 24 hours, and the NAHC shall identify the person or persons it believes to be the most likely descendant (MLD).
- The MLD may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC, Section 5097.98.

3.4.6 Energy.

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

Discussion

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation - The project would not result in wasteful, inefficient, or unnecessary consumption of energy, given its purpose to drill new supply wells and new distribution pipeline to the existing water system of the LPJUSD schools. The installation efforts will be accomplished with a small fleet of construction equipment (i.e., a drill rig, a backhoe, a loader, a paver and a roller) over a short time period (i.e., 3 months in the Summer/Fall of 2019) taking a total of one week per well, while work on the new water distribution system would take a total of 2-3 weeks. Further, there would be no net new energy requirements by the renovated water system after Project additions.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency - The Project water wells and pipeline 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 growing population and economy.

3.4.7 Geology and Soils

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

Background

Both the Santa Cruz and Santa Clara County project sites are within an Alquist-Priolo fault hazard zone. The Santa Clara County portions of the site area also are mapped as in landslide hazard areas, however the actual well sites are on level ground and not subject to landslide

hazards. The sites are not mapped as being in a liquefaction hazard zone (https://maps.conservation.ca.gov/cgs/EQZApp/app/).

Discussion

a) i, ii, iii Fault Rupture, Ground Shaking, Ground Failure - As discussed above, the Project area is subject to potential fault rupture. The sites are not subject to liquefaction hazards, however localized settlement may occur in a major earthquake. Ground shaking would affect all of the sites. Because the project facilities would be subsurface and above-ground facilities, they may be subject to damage in the event of ground failure. Any unsupported well shafts may fail and require re-drilling. The pipeline across Summit Road also may fail in the event of a major earthquake and require repair. However, these failures would not pose a hazard to the environment. Therefore the impact would be **less than significant**.

a. iv. Landslides - As discussed above, the Proposed Project would be comprised primarily of subsurface infrastructure. Although the Santa Clara County portion of the project is mapped as a landslide area, the actual well sites and laydown areas are nearly level and there are no steep slopes adjacent to the sites. Therefore **a less-than-significant** would occur to or from the proposed facilities due to landsliding.

b. Soil Erosion - Trenching and excavation would be required for the installation of Proposed Project pipes, connections, meters, and valves. Small amounts of earth would be subject to erosion during storage during the trenching and excavation. Erosion hazards after the Proposed 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 - See discussion in Items a and b, above. This impact would be **less than significant**.

d. Expansive Soil - Expansive soils may be encountered in project excavations. The proposed pipeline and connections would be constructed to be isolated from any such soils, or soils would be treated to eliminate this hazard. Therefore this impact would be **less than significant**.

e. Inadequate Soils for Disposal - 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 - The Project pipelines would be constructed a few feet below the surface in relatively recent colluvium that has experienced previous disturbance associated with grading for the streets. The well borings would be extremely small and localized and therefore

the likelihood of encountering significant fossil materials is low, and the impact would be **less than significant**.

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?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

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_2), methane (CH_4), and nitrous oxide (N_2O), ozone, and water vapor.

While the presence of the primary GHGs in the atmosphere are naturally occurring, CO_2, CH_4, and N_2O are also emitted from human activities, accelerating the rate at which these compounds occur within earth's atmosphere. Emissions of CO_2 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_2e).

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 snow pack, 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.

Santa Cruz County is in the process of developing a Climate Action Strategy (CAS); the latest draft CAS was posted to their website in January 2013. The intent of the CAS is to establish specific emission reduction goals and necessary actions to reduce greenhouse gas levels to pre-1990 levels as required under AB 32 legislation. Until the CAS is finalized, there are no specific County standards or criteria to apply to this project. In general, the project would maintain consistency with established GHG emission reduction strategies identified by CARB and other California agencies, which would likely be incorporated into any future guidance issued by the CAS.

The Monterey Bay Unified Air Pollution Control District (MBUAPCD) has reserved a chapter in their *2008 CEQA Air Quality Guidelines* for the eventual inclusion of climate change assessment methodology and criteria (i.e., Chapter 12 - CEQA Climate Change and Assessment of Project Impacts from Greenhouse Gases), but has yet to provide any specific content.

Discussion

a. Generate greenhouse gas emissions – Construction of the Project would generate about 17.1 metric tons total of GHG during the three months of work on the new wells and water distribution system. After its construction, the direct and indirect GHG emissions associated with any other sources in the County and State would be unchanged by the project. Project net new operational GHG emissions would be zero. 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 – The project would introduce a new water source and replace the schools' water distribution system. After completion, the Project would not affect the operational GHG emissions of any source locally or elsewhere in the State, 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 Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

Background

The project would be located in and adjacent to forested areas and school facilities. As discussed in the Project description, the area near Well Site 1 was previously contaminated with MTBE from a nearby leaking fuel tank, but was remediated in the early 2000's. Adjacent land uses are residential, school, and commercial/light industrial uses. A review of the Cortese List database shown no listed contaminated sites on or near the Project sites. The nearest listed site is the Burrell Property, a historic site about a half mile south of the Loma Prieta School (https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=43650004).

Discussion

a. Hazardous Materials Transport - The proposed water supply 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 - There would be no post-construction use of hazardous materials associated with the Project. Proposed Project construction may involve the use of equipment, fuels, solvents, drill lubricants, welding equipment, and other sources of potentially hazardous materials. BMP-4 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 - Please see discussion of hazardous materials proposed for use on the site under Item b, above. The nearest public school to the proposed Project site is the Loma Prieta School, on which some of the Project facilities would be constructed, and where Well Site 3 is located. Because the Proposed Project would not have any substantive emissions of hazardous materials, it would have no potential to pose a hazard to this school, and **no impact** would result.

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

e. Public Airport Hazards - There are no airports within two miles of the Project area. **No impact** would occur.

f. Emergency Response Plan - The Proposed Project would cross over Summit Road on an existing pedestrian bridge. Therefore, Project impacts to emergency response and access would be **less than significant**.

g. Wildland Fires - The Project area is in a Very High Fire Hazard Severity zone[2]. The project would be located mostly underground and would improve the school's fire-fighting water supply compared to existing conditions. Therefore, **no impact** would occur.

[2] http://frap.fire.ca.gov/webdata/maps/santa_cruz/fhszl06_1_map.44.pdf; http://frap.fire.ca.gov/webdata/maps/santa_clara/fhszs_map.43.pdf

3.4.10 Hydrology and Water Quality

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

Background

The Project area is along a ridgetop; the Santa Clara County portion of the site drains north into the Los Gatos Creek watershed, along with most of the Santa Cruz County portion of the site. The western edge of the Loma Prieta School campus drains west into the Laurel Creek watershed. The Project sites are unpaved and nearly level. None of the sites are located in a tsunami runup area or in a FEMA mapped 100-year flood plain, as they are atop a ridge at an elevation of about 1600 feet above sea level.

Discussion

a, c.i. Water Quality Standards - Project construction could result in some sediments being washed into local drainages from soil stockpiles and temporarily bared areas. The Proposed Project sites are 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-5). Once operational, the project would not have the potential to adversely affect water quality as disturbed areas would be compacted and soil stockpiles removed. Impacts with respect to water quality standards would **be less than significant**.

b. Groundwater Supplies - The project would not change existing permeability however it would increase any use of groundwater for the school water supply. It would not withdraw appreciably more water than currently used by the school, however the water quality and reliability of water supply would be improved. Therefore it would have a **less-than-significant impact** on groundwater supplies.

c.ii, iii, iv. Drainage and Runoff - The project facilities would be either subsurface or at grade, so there would be no potential to affect local drainage patters or flows. **No impact** would occur.

d. Flooding, Tsunami or Seiche - As discussed in the Background section above, the project would be located far upslope of the mapped tsunami runup area. It is not near a confined water body so seiches would not occur. None of the well sites would be located in mapped 100-year flood zone. In addition, project facilities would be subsurface or at grade, so would not have the potential to affect, or be affected by, flooding. **No impact** would occur.

e. Water Quality or Groundwater Management Plan - 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 Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Background

The project would be located primarily on existing school sites, clearings in forested areas, and under a public roadway. Project facilities would be subject to Santa Clara and Santa Cruz County land use plans and policies.

Discussion

a. Division of Community - The Proposed Project would consist of underground wells and pipes, and connections and above-ground features on a school site. These facilities would not change any streets on install any barriers that would have a potential to divide a community. Therefore, **no impact** would occur.

b. Plan Conflict - The Proposed Project would upgrade an existing water supply system that serves an existing school. It 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 Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

Background

The proposed wells and pipelines are all located in or adjacent to existing or former school sites and public streets, with no mineral potential.

Discussion

a. and b. Mineral Resources – The Proposed Project sites are road rights-of-way and school sites, which are not an Extractive Use Zone (M-3), nor do any of the Project sites have a Land Use Designation with a Quarry Designation Overlay (Q) (County of Santa Cruz 1994), or MRZ-2 or 4 designation (Santa Clara County). 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** is anticipated.

The Proposed Project would replace and upgrade parts of an existing water supply system. Therefore, it would have no potential to affect any mineral resources.

3.4.13 Noise

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

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).

The Project site contains the Loma Prieta Joint Union School District (LPJUSD) offices and its two schools, Loma Prieta Elementary School and C.T. English Middle School, and is located in a rural, unincorporated area of northern Santa Cruz County. The offices and schools are noise-sensitive receptors, as is an existing single-family residence north of Summit Road within a few hundred feet of the drill site of Project Well #4. Motor vehicle traffic on Summit Road is the major local noise source.

The *Santa Cruz County General Plan* (1994) includes objectives, policies and standards relating to noise in its *Public Safety and Noise Element*. Noise-related objectives call for development

throughout the County compatible with their noise environment. Policies and programs to support this objective focuses on enforcing noise and land use compatibility standards and mitigating potential noise impacts from motor vehicle traffic, trains and aircraft.

The *Public Safety and Noise Element* adopts Land Use Compatibility standards based on the L_{dn} metric[3]. Such standards for the Project land use type and the noise-sensitive land uses in the Project site vicinity are given below:

- For Residential and Schools:
  - Normally Acceptable – Ldn < 60 dBA
  - Conditionally Acceptable – Ldn > 60 dBA, but < 75 dBA
  - Unacceptable – Ldn > 75 dBA

The *Public Safety and Noise Element's* Policy 6.9.7 *"Require[s] mitigation of construction noise as a condition of future project approvals."*

The *Santa Cruz County Code* regulates noise within Santa Cruz County. Section 8.30.010 of the *Code* states that "offensive noise" shall not be permitted between the hours of 10:00 PM and 8:00 AM.

Discussion

a. Temporary/Permanent Noise Increase – 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 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 backhoe and a loader) likely to be used for the Project, as shown in Table NOI-1.

During the drilling of the new water supply wells, the closest noise-sensitive receptors (i.e., the schools south of Summit Road and the residence at #23775 Summit Road to the north), even though they are greater than 100 feet from where Project construction equipment, would likely at times exceed what are now the existing average/peak ambient background levels. And during pipeline excavation/installation/covering, the school receptors would often be less than 100 feet

[3] L_{dn}, is a 24–hour average sound level (Leq) with a 10–decibel "penalty" added to sound levels occurring at night between 10:00 p.m. and 7:00 a.m.

from construction activity. To protect students and residents from substantial Project construction noise intrusions, implementation of Mitigation Measure NOI-1 would assure that Project incremental temporary construction noise impacts remain **less than significant.**

TABLE NOI-1
Modeled Project Construction Noise Levels

Distance from Area of Construction Activity (feet)	Average Construction Daytime Noise Level L_{eq} (dBA)	Maximum Construction Daytime Noise Level Lmax (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 noise level increase will occur from the water wells and distribution system's operational sources.

b. Vibration – Although the *Public Safety and Noise Element* (Policy 6.9.6) of the Santa Cruz County General Plan requires the evaluation of vibration impacts for development site near rail lines, there are no 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. But the Project construction equipment will include only a backhoe and loader operating much farther from the vibration-sensitive receptors. Thus, the potential for vibration annoyance/damage is **less than significant**.

c. Exposure to Aircraft Noise – There are two small, private airports/airstrips near the Project site: Las Trancas Airport, about 17 miles west of the Project site, and Bonny Doon Village

Airport, about 10 miles southwest of the Project site. Aircraft operation intensity at either airport is insufficient to generate a 65 dBA daily average contour (i.e., the common federal measure of significant impact from aircraft noise) that lies outside airport property. Thus, the potential for increased aircraft noise annoyance to school student/staff from aircraft operations after Project completion would be **less than significant**.

Mitigation Measures

Mitigation Measure NOI-1*:* The following Best Management Practices shall be incorporated into the construction documents to be implemented by the Project contractor:

- Limit Project construction activity to between 7 a.m. and 6 p.m. on weekdays and prohibit it on weekends and national holidays.
- Provide enclosures and noise mufflers for stationary equipment, shrouding or shielding for impact tools, and barriers around particularly noisy activity areas on the site.
- Use quietest type of construction equipment whenever possible, particularly air compressors.
- Provide sound-control devices on equipment no less effective than those provided by the manufacturer.
- Locate stationary equipment, material stockpiles, and vehicle staging areas as far as practicable from sensitive receptors.
- Prohibit unnecessary idling of internal combustion engines.
- Require applicable construction-related vehicles and equipment to use designated truck routes when entering/leaving the site.
- Designate a noise disturbance coordinator who shall be responsible for responding to complaints about noise during construction. The telephone number of the noise disturbance coordinator shall be conspicuously posted at the construction site. Copies of the project purpose, description and construction schedule shall also be distributed to the surrounding residences.
- During pipeline excavation/installation/covering, when construction equipment needs to operate close to existing school noise-sensitive receptors, the Project contractor shall coordinate with the LPJUSD to determine alternative work procedures to avoid substantial noise impacts or to do such work during periods when school is not in session (i.e., late afternoons, holidays, weekends, or during summer vacation).

3.4.14 Population and Housing

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

Background

The Project area is in the unincorporated community of Loma Prieta, in Santa Cruz and Santa Clara Counties.

Discussion

a. Population Growth – The Proposed Project is intended to improve service to the existing school. 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 – The Proposed Project would not displace any housing or people because it is comprised entirely of water supply improvements on undeveloped lands, roadways, and existing school sites. 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 Incorporated	Less Than Significant Impact	No Impact
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
1) Fire protection?	☐	☐	☐	☒
2) Police protection?	☐	☐	☐	☒
3) Schools?	☐	☐	☐	☒
4) Parks?	☐	☐	☐	☒
5) Other public facilities?	☐	☐	☐	☒

Discussion

a.1-5. The Proposed Project would involve drilling of wells in open areas, and minor trenching and construction over public roadways. Therefore, it would not have a significant impact on police or fire services. The project would have a beneficial effect of improving the water system foe two schools. The Proposed Project would have no potential to adversely affect schools, parks, or other public facilities, and **no impact** would occur.

3.4.16 Recreation

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Discussion

a. Increase Park Usage - The Proposed Project would not increase the use of existing neighborhood and regional parks or other recreational facilities. The school track may be closed for a period of days or weeks while drilling is occurring, however this would not affect overall use of the sports field. **No impacts** would occur from project implementation.

b. Impact of Project Recreational Facilities - The Proposed 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 Incorporated	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?	☐	☐	☒	☐
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

Background

The Proposed Project would cross over Summit Road on the existing pedestrian walkway. No other roadways would be crossed or affected.

Discussion

a. Conflict with an Applicable Plan Regarding Effectiveness of Circulation System - There would be no impact because no additional traffic would be generated during project operations. However, the project would generate a small incremental increase in traffic on Summit Road during construction. However, this increase would be minimal and temporary; and therefore, would be considered less than significant. The proposed project would not conflict with either the goals and/or policies of the Regional Transportation Plan or with monitoring the delivery of state and federally funded projects outlined in the RTIP.

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 – 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 –Most Proposed Project construction (well drilling, and installation of connection infrastructure) would be in areas away from any public roads, and the pipe would pass over Summit Road attached to the existing pedestrian overpass, 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, this impact would be **less than significant.**

d. Emergency Access – As discussed above, the Proposed Project would not affect any roadways. Therefore, impacts to emergency services would be **less than significant**.

3.4.18 Tribal Cultural Resources

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

Background

At the onset of the project on September 14, 2017, a Sacred Lands File and Native American Contact list request was submitted to the Native American Heritage Commission. The Sacred Lands File search returned negative results, and a list of seven individuals was produced to contact for consultation. Initial consultation letters dated January 10, 2018, were sent to each of the contacts via certified mail describing the proposed project and regulatory context with an APE map. Follow-up emails were delivered on March 23, 2018, requesting confirmation of receipt of the initial consultation letters and soliciting comments. The Amah Mutsun Tribal Band requested additional locational information, via telephone on March 27, 2018, then declined further consultation. No other replies were received.

Discussion

A (i) and (ii). Substantial Adverse Change in the Significance of a Tribal Cultural Resource – As described above and in the Cultural Resources section of this IS, no tribal Cultural Resources have been identified in the Project area, and no potential impact to any such resources was identified by responsible tribal representatives. **No impact** would occur.

3.4.19 Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the 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?	☐	☐	☐	☒
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?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

Background

The Proposed Project includes up to three new wells and approximately 1100 feet of new water pipelines as well as new pipelines and connection facilities at the Loma Prieta School, in the community of Loma Prieta

Discussion

a. Relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities - The Proposed Project would add new wells and provide new connections to the existing school water supply system. It would not require any additional relocation or construction of utilities. **No impact** would occur.

b. Water Supplies – The Proposed Project would replace and improve existing water supply and delivery facilities for improved water quality and reliability of supply; it would not alter existing water supplies or demand. 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. Impacts to water supplies would be **less than significant.**

c. Wastewater Service - The Proposed Project would replace and improve existing water supply facilities; it would not alter or otherwise affect wastewater facilities or capacity. **No impact** would occur.

d. Solid Waste Generation – Project construction would generate small amounts of solid wastes. Excavated material would be returned to the trenches and excavations to the extent feasible. Any excess spoils would be disposed of on the site. The Proposed 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 – 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 Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

Discussion

a-d. – The Project Area is mapped as being in a severe Fire Hazard Severity zone[4]. The project would be located underground and in and adjacent to an existing school and roadway, and would improve the integrity of the fire-fighting water supply system. Prior to drilling of wells, adjacent vegetation would be cleared to facilitate the drilling and minimize fire hazards associated with construction. Emergency response and evacuation routes would be required to remain open under BMP-7. Therefore, **no impact** would occur.

[4] http://frap.fire.ca.gov/webdata/maps/santa_cruz/fhszl06_1_map.44.pdf; http://frap.fire.ca.gov/webdata/maps/santa_clara/fhszs_map.43.pdf

3.4.21 Mandatory Findings of Significance

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

Discussion

a) Mandatory Findings of Significance for Biological and Cultural Resources - As discussed in the Biological Resources section of this document, with the incorporation of mitigation measures, the Proposed 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 Proposed Project's potential impacts to cultural resources would be mitigated to a less-than-significant level. Mitigation measures have been included to reduce the impacts to biological resources and potential unidentified cultural resources to a **less-than-significant** level.

b) Cumulative Impacts. A review of Santa Clara and Santa Cruz County current projects lists indicates that there is no cumulative development proposed at or near the school site. **No impact** would occur.

c) Substantial Effects on Humans. 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 reduction in total coliform in the drinking water and 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 impact on human health.

3.5 Report Preparers

Loma Prieta Joint Union School District

Lisa Fraser, Superintendent
Paul Harville, Director of Facilities

California State Water Resources Control Board

Nadine Cross, Program Manager

California State University Sacramento Archaeological Research Center (ARC)

Nathan Stevens, PhD, Cultural Resources

University Enterprises, Inc. California State University Sacramento

Randall Marx, Program Manager

California Water Experts

Amy Fowler, Project Manager

Northgate Environmental Management, Inc.

Nancy Hendrickson, Project Coordinator
Ana Demorest, Project Planner
Richard Grassetti, CEQA Planner
Josh Phillips, Biological Resources
Jake Schweitzer, Biological Resources
Geoffrey Hornek, Air Quality and Noise Analyst

4.0 REFERENCES

Publications:

Archaeological Research Center, California State University, Sacramento, *Cultural Resources Assessment, Loma Prieta Joint Unified School District Domestic Water Supply Project*, May 2018.

Northgate Environmental Management. 2019, Biological Assessment*, Loma Prieta Joint School District Drinking Water Supply Improvements Project, Santa Cruz and Santa Clara Counties, CA*. March 22, 2019.

California Air Resources Board (CARB). 2014. *California Greenhouse Gas Emission Inventory: 2000-2012.* http://www.arb.ca.gov/cc/inventory/pubs/reports/ghg_inventory_00-12_report.pdf

CARB. Assembly Bill 32 Overview. http://www.arb.ca.gov/cc/ab32/ab32.htm

California Department of Conservation, 2019. Liquefaction Hazard Map. https://maps.conservation.ca.gov/cgs/EQZApp/app/).

CAL FIRE. 2019. http://frap.fire.ca.gov/webdata/maps/santa_cruz/fhszl06_1_map.44.pdf; http://frap.fire.ca.gov/webdata/maps/santa_clara/fhszs_map.43.pdf

CAPCOA (California Air Pollution Control Officers Association). California Emissions Estimator Model [CalEEMod]. Available on website: http://www.caleemod.com

CARB (California Air Resources Board). *California Air Basins*. Available on website: https://www.arb.ca.gov/desig/airbasins/airbasins.htm

CARB. iADAM: Air Quality Data Statistics. Available on website: http://www.arb.ca.gov/adam/

CARB. Area Designation Maps https://www.arb.ca.gov/desig/adm/adm.htm

CARB. Assembly Bill 32 Overview http://www.arb.ca.gov/cc/ab32/ab32.htm

CCCC (California Climate Change Center). 2012. *Our Changing Climate 2012 Vulnerability & Adaptation to the Increasing Risks from Climate Change in California, A Summary Report on the Third Assessment from the California Climate Change Center*. http://uc-ciee.org/downloads/Our%20Changing%20Climate%202012.pdf

California Department of Toxic Substances Control2019. Cortese List. https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=43650004 Accessed May 1, 2019.

County of Santa Clara, 1994. *Santa Clara County General Plan*, 1995-2010, as amended. Adopted December 20, 1994.

County of Santa Cruz, 1994 *General Plan and Local Costal Program*, as Amended. December 19, 1994.

EPA. General Conformity. Available on website: https://www.epa.gov/general-conformity/what-general-conformity

EPA. *General Conformity De Minimis Tables*. Available on website: https://www.epa.gov/general-conformity/de-minimis-tables

MBARD (Monterey Bay Air Resources District). *CEQA Air Quality Guidelines*. https://www.mbard.org/files/f665829d1/CEQA_full+%281%29.pdf

FTA (Federal Transit Administration). 2006. *Transit Noise and Vibration Impact Assessment*. http://www.fta.dot.gov/documents/FTA_Noise_and_Vibration_Manual.pdf

FHWA (Federal Highway Administration). *Roadway Construction Noise Model User's Guide*. https://www.gsweventcenter.com/Draft_SEIR_References/2006_01_Roadway_Construction_Noise_Model_User_Guide_FHWA.pdf

APPENDIX A

SPECIAL-STATUS SPECIES LIST

United States Department of the Interior

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

In Reply Refer To: May 18, 2018
Consultation Code: 08ESMF00-2018-SLI-2150
Event Code: 08ESMF00-2018-E-06329
Project Name: Loma Prieta Joint School District Drinking Water Project

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

To Whom It May Concern:

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

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

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

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

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

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

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

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

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

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

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

Attachment(s):

- Official Species List

Official Species List

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

This species list is provided by:

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

This project's location is within the jurisdiction of multiple offices. Expect additional species list documents from the following office, and expect that the species and critical habitats in each document reflect only those that fall in the office's jurisdiction:

Ventura Fish And Wildlife Office
2493 Portola Road, Suite B
Ventura, CA 93003-7726
(805) 644-1766

Project Summary

Consultation Code: 08ESMF00-2018-SLI-2150

Event Code: 08ESMF00-2018-E-06329

Project Name: Loma Prieta Joint School District Drinking Water Project

Project Type: WATER SUPPLY / DELIVERY

Project Description: Three new wells would be drilled on the Loma Prieta School property to supplement or replace the existing on-site water supply wells. It is anticipated that the drilling and staging area at each boring would be approximately 50-feet long and 30-feet wide. It is anticipated that one or more wells with sufficient yield and water quality will be connected to the existing water system by new underground supply piping. The total new trench length will be up approximately 1,100 feet, depending on which and how many of the test wells are connected to the water system.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/37.126194380032814N121.9418010566319W

Counties: Santa Clara, CA | Santa Cruz, CA

Endangered Species Act Species

There is a total of 10 threatened, endangered, or candidate species on this species list.

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

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

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

---

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

Birds

NAME	STATUS
California Least Tern *Sterna antillarum browni* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	Endangered
Marbled Murrelet *Brachyramphus marmoratus* Population: U.S.A. (CA, OR, WA) There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4467	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog *Rana draytonii* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander *Ambystoma californiense* Population: U.S.A. (Central CA DPS) There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Delta Smelt *Hypomesus transpacificus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/321	Threatened
Tidewater Goby *Eucyclogobius newberryi* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/57	Endangered

Insects

NAME	STATUS
Bay Checkerspot Butterfly *Euphydryas editha bayensis* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2320	Threatened

Flowering Plants

NAME	STATUS
Metcalf Canyon Jewelflower *Streptanthus albidus ssp. albidus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4186	Endangered
Robust Spineflower *Chorizanthe robusta var. robusta* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9287	Endangered
Santa Clara Valley Dudleya *Dudleya setchellii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3207	Endangered

Critical habitats

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

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ventura Fish And Wildlife Office
2493 Portola Road, Suite B
Ventura, CA 93003-7726
Phone: (805) 644-1766 Fax: (805) 644-3958

In Reply Refer To: May 18, 2018
Consultation Code: 08EVEN00-2018-SLI-0538
Event Code: 08EVEN00-2018-E-01497
Project Name: Loma Prieta Joint School District Drinking Water Project

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

To Whom It May Concern:

The enclosed list identifies species listed as threatened and endangered, species proposed for listing as threatened or endangered, designated and proposed critical habitat, and species that are candidates for listing that may occur within the boundary of the area you have indicated using the U.S. Fish and Wildlife Service's (Service) Information Planning and Conservation System (IPaC). The species list fulfills the requirements under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the species list should be verified after 90 days. We recommend that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists following the same process you used to receive the enclosed list. Please include the Consultation Tracking Number in the header of this letter with any correspondence about the species list.

Due to staff shortages and excessive workload, we are unable to provide an official list more specific to your area. Numerous other sources of information are available for you to narrow the list to the habitats and conditions of the site in which you are interested. For example, we recommend conducting a biological site assessment or surveys for plants and animals that could help refine the list.

If a Federal agency is involved in the project, that agency has the responsibility to review its proposed activities and determine whether any listed species may be affected. If the project is a major construction project*, the Federal agency has the responsibility to prepare a biological assessment to make a determination of the effects of the action on the listed species or critical habitat. If the Federal agency determines that a listed species or critical habitat is likely to be adversely affected, it should request, in writing through our office, formal consultation pursuant to section 7 of the Act. Informal consultation may be used to exchange information and resolve conflicts with respect to threatened or endangered species or their critical habitat prior to a

written request for formal consultation. During this review process, the Federal agency may engage in planning efforts but may not make any irreversible commitment of resources. Such a commitment could constitute a violation of section 7(d) of the Act.

Federal agencies are required to confer with the Service, pursuant to section 7(a)(4) of the Act, when an agency action is likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat (50 CFR 402.10(a)). A request for formal conference must be in writing and should include the same information that would be provided for a request for formal consultation. Conferences can also include discussions between the Service and the Federal agency to identify and resolve potential conflicts between an action and proposed species or proposed critical habitat early in the decision-making process. The Service recommends ways to minimize or avoid adverse effects of the action. These recommendations are advisory because the jeopardy prohibition of section 7(a)(2) of the Act does not apply until the species is listed or the proposed critical habitat is designated. The conference process fulfills the need to inform Federal agencies of possible steps that an agency might take at an early stage to adjust its actions to avoid jeopardizing a proposed species.

When a proposed species or proposed critical habitat may be affected by an action, the lead Federal agency may elect to enter into formal conference with the Service even if the action is not likely to jeopardize or result in the destruction or adverse modification of proposed critical habitat. If the proposed species is listed or the proposed critical habitat is designated after completion of the conference, the Federal agency may ask the Service, in writing, to confirm the conference as a formal consultation. If the Service reviews the proposed action and finds that no significant changes in the action as planned or in the information used during the conference have occurred, the Service will confirm the conference as a formal consultation on the project and no further section 7 consultation will be necessary. Use of the formal conference process in this manner can prevent delays in the event the proposed species is listed or the proposed critical habitat is designated during project development or implementation.

Candidate species are those species presently under review by the Service for consideration for Federal listing. Candidate species should be considered in the planning process because they may become listed or proposed for listing prior to project completion. Preparation of a biological assessment, as described in section 7(c) of the Act, is not required for candidate species. If early evaluation of your project indicates that it is likely to affect a candidate species, you may wish to request technical assistance from this office.

Only listed species receive protection under the Act. However, sensitive species should be considered in the planning process in the event they become listed or proposed for listing prior to project completion. We recommend that you review information in the California Department of Fish and Wildlife's Natural Diversity Data Base. You can contact the California Department of Fish and Wildlife at (916) 324-3812 for information on other sensitive species that may occur in this area.

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

Attachment(s):

- Official Species List

Official Species List

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

This species list is provided by:

Ventura Fish And Wildlife Office
2493 Portola Road, Suite B
Ventura, CA 93003-7726
(805) 644-1766

This project's location is within the jurisdiction of multiple offices. Expect additional species list documents from the following office, and expect that the species and critical habitats in each document reflect only those that fall in the office's jurisdiction:

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

Project Summary

Consultation Code: 08EVEN00-2018-SLI-0538

Event Code: 08EVEN00-2018-E-01497

Project Name: Loma Prieta Joint School District Drinking Water Project

Project Type: WATER SUPPLY / DELIVERY

Project Description: Three new wells would be drilled on the Loma Prieta School property to supplement or replace the existing on-site water supply wells. It is anticipated that the drilling and staging area at each boring would be approximately 50-feet long and 30-feet wide. It is anticipated that one or more wells with sufficient yield and water quality will be connected to the existing water system by new underground supply piping. The total new trench length will be up approximately 1,100 feet, depending on which and how many of the test wells are connected to the water system.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/37.126194380032814N121.9418010566319W

Counties: Santa Clara, CA | Santa Cruz, CA

Endangered Species Act Species

There is a total of 10 threatened, endangered, or candidate species on this species list.

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

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

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

---

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

Birds

NAME	STATUS
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Marbled Murrelet *Brachyramphus marmoratus* Population: U.S.A. (CA, OR, WA) There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4467	Threatened
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered

Reptiles

NAME	STATUS
San Francisco Garter Snake *Thamnophis sirtalis tetrataenia* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5956	Endangered

Amphibians

NAME	STATUS
California Red-legged Frog *Rana draytonii* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander *Ambystoma californiense* Population: U.S.A. (Central CA DPS) There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Tidewater Goby *Eucyclogobius newberryi* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/57	Endangered

Flowering Plants

NAME	STATUS
Marsh Sandwort *Arenaria paludicola* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2229	Endangered
Scotts Valley Polygonum *Polygonum hickmanii* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3222	Endangered
Scotts Valley Spineflower *Chorizanthe robusta var. hartwegii* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7108	Endangered

Critical habitats

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

APPENDIX B

MITIGATION MONITORING AND REPORTING PROGRAM

APPENDIX B

MITIGATION MONITORING AND REPORTING PROGRAM

(to be added in Final IS/MND)