INITIAL STUDY and ENVIRONMENTAL CHECKLIST

FOR

INFRASTRUCTURE AND WATER RESILIENCY UPGRADES

January 2025

Lead Agency:
Redwood Valley County Water District

Lead Agency Contact:
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LACO Project No. 8049.03

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I. PROJECT SUMMARY

Date: January 2025

Project Title: Infrastructure and Water Resiliency Upgrades

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Location: Approximately 0.4 miles north of the City of Ukiah and immediately south of the eastern portion of Hollow Tree Creek Road (see Figure 1).

Coastal Zone: No

Affected Parcel(s): Assessor's Parcel Number(s) (APNs): 170-170-06 and 170-180-10

Mendocino County General Plan Land Use Designation: Industrial (I) (see Figure 2)

Mendocino County Zoning Designation: General Industrial (I2) (see Figure 3)

Anticipated Permits and Approvals:

- Well Permit from the Mendocino County Division of Environmental Health (DEH)
- A work plan will be prepared for the Project. The work plan will be sent to the North Coast Water Quality Control Board (NCRWQCB) for review and approval.

Tribal Cultural Resources: Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

On April 19 and 22, 2024, in compliance with Assembly Bill (AB) 52, the RVCWD sent consultation letters to the THPO or appropriate representative for each of the 22 Native American tribes from the contact list obtained from the Native American Heritage Commission (NAHC), including the following: Big Valley Rancheria of Pomo Indians, Cahto Tribe, Cloverdale Rancheria of Pomo Indians, Coyote Valley Band of Pomo Indians, Elem Indians Colony Pomo Tribe, Estom Yumeka Maidu Tribe of the Enterprise Rancheria, Guidiville Rancheria of California, Hopland Band of Pomo Indians, Koi Nation of Northern California, Lytton Rancheria, Manchester Band of Pomo Indians of California, Noyo River Indian Community, Pinoleville Pomo Nation, Potter Valley Tribe, Little River Band of Pomo Indians of the Redwood Valley Rancheria, Robinson Rancheria of Pomo Indians, Round Valley Reservation/Covelo Indian Community, Scotts Valley Band of Pomo, Sherwood Valley Rancheria of Pomo, and Yokayo Tribe. A copy of the letter sent to Native American tribes has been included in Appendix 8. Two (2) responses were received, including a response from the Cahto Tribe and the Sherwood Valley Rancheria of Pomo Indians, expressing that both tribes had no concerns related to the Project. As no requests for consultation were received within the 30-day deadline specified by Public Resources Code

section 21082.3 (d), the RVCWD, as Lead Agency, has deemed the tribal consultation process pursuant to AB 52 complete.

CEQA Requirement:
The proposed project is subject to the requirements of the California Environmental Quality Act (CEQA). The Lead Agency is the Redwood Valley County Water District. The purpose of this Initial Study (IS) is to provide a basis for determining whether to prepare an Environmental Impact Report (EIR) or a Negative Declaration. This IS is intended to satisfy the requirements of the CEQA (Public Resources Code, Div. 13, Sec. 21000-21177) and the State CEQA Guidelines (California Code of Regulations, Title 14, Sec 15000-15387).

CEQA encourages lead agencies and applicants to modify their projects to avoid significant adverse impacts (CEQA Section 20180(c) (2) and State CEQA Guidelines Section 15070(b) (2)).

Section 15063(d) of the State CEQA Guidelines states that an IS shall contain the following information in brief form:

1) A description of the project including the project location
2) Identification of the environmental setting
3) Identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to provide evidence to support the entries
4) Discussion of means to mitigate significant effects identified, if any
5) Examination of whether the project would be consistent with existing zoning, plans, and other applicable land use controls
6) The name of the person or persons who prepared and/or participated in the Initial Study

II. PROJECT DESCRIPTION

Project Overview

The Redwood Valley County Water District (RVCWD) proposes to develop up to two (2) new water supply wells and connect the well(s) to existing water system infrastructure in order to establish a reliable water source for customers of the RVCWD (Project). The Project is proposed on the parcels identified by Assessor's Parcel Numbers (APN): 170-170-06 and 170-180-10 (Site).

Construction would be anticipated to occur between May 5 and June 30, 2025. Construction would occur between the hours of 7:00 a.m. and 7:00 p.m. Monday through Saturday. Construction equipment to be used would include but not be limited to a drill rig, backhoe, light-duty trucks, and hand tools.

Project Background

The RVCWD provides domestic and agricultural water services to the community of Redwood Valley with a service area of approximately 15 square miles. As of 2016, the RVCWD served a total of 1,345 equivalent dwelling units (EDUs) and 200 agricultural customers. At that time, the RVCWD delivered approximately 750 acre feet (AF) per year for residential and commercial uses and 1,450 AF per year for agricultural purposes, for a total of 2,200 AF per year. The RVCWD's water supply currently comes from Lake Mendocino. A pump station located at Lake Mendocino pumps water to a holding reservoir approximately 4.5 miles away in the Redwood Valley area. The holding reservoir has a capacity of 68 AF. Domestic water is delivered from the holding reservoir to the water treatment plant by gravity flow. The water treatment plant can treat up to 5.2 AF (or 1.7 million gallons) per day. Treated water is pumped to six (6) covered steel tanks with a total volume of 5.7 AF (or 1.85 million gallons), where it then flows by gravity to customers. Irrigation water flows by gravity directly from the holding reservoir to the irrigation distribution system. During periods of high demand, gravity flow is augmented by pressure flow from the pump station at Lake Mendocino (LAFCo, 2016).

The RVCWD has a permit to divert up to 4,900 AF per year from Lake Mendocino. However, the RVCWD is only permitted to divert water between November 1st and April 30th when stream flows in the main stem of the Russian River, as measured near the confluence of the East and West forks, exceeds 150 cubic feet per second (cfs) and water stored in Lake Mendocino exceeds the U.S. Army Corps of Engineer's (USACE) operating target storage curve, which varies between 64,000 AF and 86,400 AF per year. These limitations represent a relatively narrow window during which the RVCWD can divert water. This has equated to as many as 70 days in wet years and as little as one (1) or two (2) days in dry years. During dry years and during the dry months of the year when the RVCWD is not permitted to divert water from Lake Mendocino, the RVCWD must purchase surplus water from neighboring water districts to meet its customers' demands. Due to the uncertain water supply, the RVCWD is currently under a court-ordered moratorium for domestic connections and a moratorium initiated by the RVCWD's board for irrigation connections (LAFCo, 2016), in which no new service connections can occur.

As the RVCWD does not have an adequate reliable water source, the RVCWD is proposing to construct up to two (2) new water supply wells that would provide a minimum capacity of 300 gallons per minute (gpm). Western Groundwater Surveyors, Inc. (Western Groundwater) performed a groundwater survey on November 12 and 14, 2024, consisting of seismoelectric sounding to evaluate the underlying aquifer at the Site for development of a well. Based on the groundwater survey, Western Groundwater recommended three (3) locations at the Site to drill test wells. The RVCWD intends to drill test wells at these three (3) locations to evaluate groundwater potential at these locations and determine whether development of a water supply well at one (1) or two (2) of these locations would provide a minimum capacity of 300 gpm.

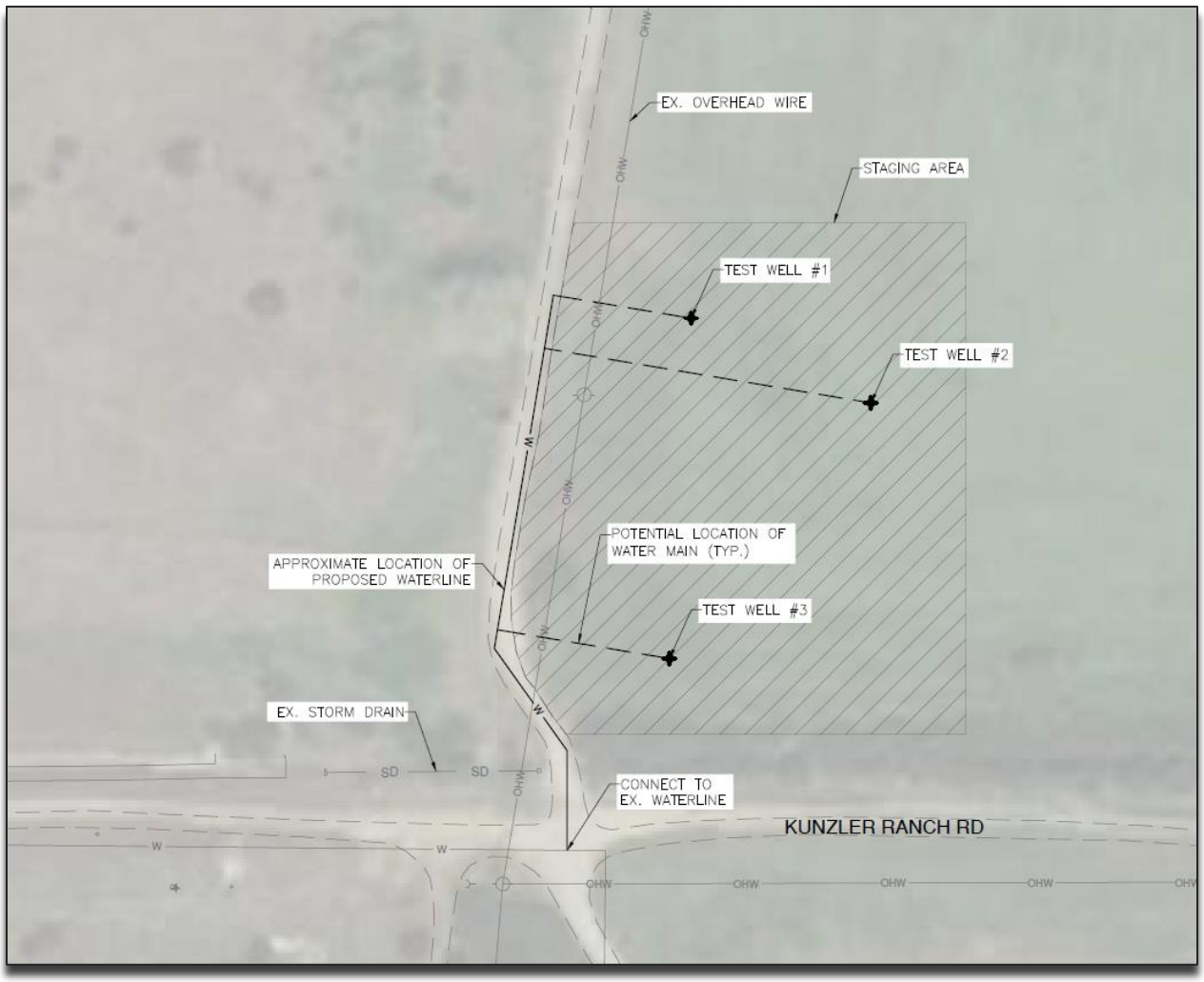
Project Need

As described above, the RVCWD does not have an adequate reliable water source. The RVCWD's permit to divert water from Lake Mendocino is only valid during the wet months of the year (November through April) and is contingent on adequate water levels in Lake Mendocino and the Russian River. During times when the RVCWD is unable to divert water from Lake Mendocino, the RVCWD must purchase surplus water from neighboring water districts to meet demands. Due to the uncertain water supply, the RVCWD is currently under a court-ordered moratorium for new domestic connections and a moratorium initiated by the RVCWD's board for new irrigation connections. The Project would establish an additional water source for the RVCWD, allowing it to provide a reliable water supply for its customers.

Proposed Improvements

The Project involves developing up to two (2) new water supply wells and connecting the well(s) to existing water system infrastructure. See Figure 1: *Site Plan* and Appendix 2 for potential well locations and water line alignments.

Figure 1. Site Plan



As described above, the RVCWD intends to drill test wells at three (3) locations to evaluate groundwater potential. In March 2023, the RVCWD found the test well drilling to be categorically exempt from the CEQA and filed a Notice of Exemption (NOE). Test well drilling is therefore not part of the Project. Assuming the test wells show that one (1) or two (2) of these locations would provide an adequate water supply, the RVCWD proposes to develop up to two (2) water supply wells as within the general vicinity of the test wells. If one (1) well would produce 300 gpm, the RVCWD would only develop one (1) water supply well. Otherwise, the RVCWD would develop two (2) water supply wells. If two (2) of the test well locations would not provide a combined 300 gpm, the RVCWD would not develop production wells at these locations. The test wells would be located at the following approximate coordinates:

- Test Well #1: 39.1746, -123.2016
- Test Well #2: 39.1745, -123.2013
- Test Well #3: 39.1741, -123.2016

Drilling and Well Development

Water supply wells would be drilled approximately within 100 feet of the test wells. The water supply wells would be anticipated to be less than one (1) square foot in surface area. The depth of the water supply wells would be dependent on results from the test wells (anticipated test well depths are as follows: Test Well #1: 250 feet, Test Well #2: 250 feet, Test Well #3: 320 feet). The following is a general description of work that would be required to drill and develop a well; however, specific methods would be determined in the field by the well driller based on observed Site conditions:

A borehole would be drilled by percussion or rotary-drilling machines. As the well is being drilled, a water well casing would be placed to stabilize the borehole. A well screen would be perforated into the well casing to allow water to enter the well. The location of the well screen would be dependent on the water production zone found during the drilling operation. A filter pack would be placed around the well screen to stabilize the formation without impairing flow into the well. To prevent contaminates from entering the well, a seal would be added between the borehole and the non-perforated section of the well casing. During the well drilling process, the well driller would keep a record of relevant information, including but not limited to the depth at which water is produced and details regarding the well casing, well screen, filter pack, pump, and well head. Fluids from the drilling process would be contained in a pit dug in the vicinity of the well location(s) and connected to the drilling area via a ditch or would otherwise be managed by the well driller.

After the well is drilled, the well would be developed to repair any damage done to the formation surrounding the borehole by drilling and to improve permeability and stability near the well. Well development generally entails cleaning out clay and silt introduced during the drilling process. Common methods used for cleaning out clay and silt include but would not be limited to overpumping, mechanical surging, airlifting, and surging.

Water Lines Installation

Water lines would be installed to connect the proposed wells to existing water system infrastructure at the Site belonging to the Millview County Water District (MCWD). Proposed water lines would be installed from the wells to the gravel road to the east. Additionally, a water line would be installed within the gravel road to connect to an existing water line southeast of the wells. See Figure 1: *Site Plan* and Appendix 2 for the potential water line alignment. Please note, only one (1) or two (2) of the test wells would be developed as a water supply well, and, therefore, water lines would only need to be installed for these locations. The water line in the gravel road would be a maximum of 320 feet, and, if developed, the water lines from the wells to the gravel road would be an approximate maximum of 200 feet each. Installation of the water lines would require trenches up to approximately three (3) to four (4) feet deep and four (4) to five (5) feet wide.

Waste Disposal

Waste generated at the Site throughout the entire duration of the Project would be hauled away and properly disposed of at permitted disposal facilities.

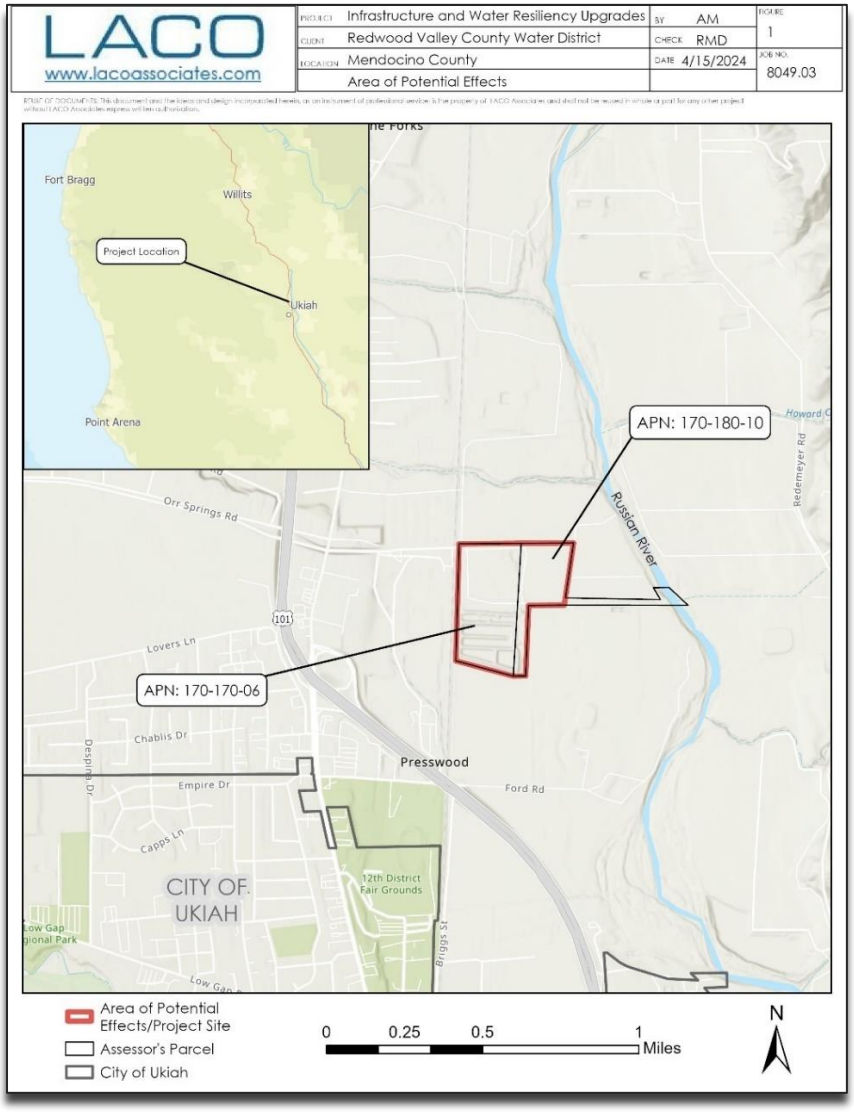
Access and Staging

The Site is accessed via an existing driveway at the northwestern corner of the Site. Access to the Site is restricted via a locked gate. Existing gravel roads at the Site would be used to access the test well locations. When not in use, construction equipment would be staged in the vicinity of the wells (see proposed staging area in Figure 1: *Site Plan* and Appendix 2).

III. PROJECT SETTING AND LOCATION

The Site is located approximately 0.4 miles north of the City of Ukiah within unincorporated Mendocino County on the 31-acre parcel identified by APN: 170-170-06 and an approximately 14-acre portion of APN: 170-180-10. See Figure 2: *Area of Potential Effects* (APE) for an overview of the project area.

Figure 2. Area of Potential Effects



The Site is currently partially developed with several gravel roads, existing MCWD water system infrastructure along the northeastern boundary of the Site, a Pacific Gas and Electric Company (PG&E) storage yard, and several infiltration basins in the southern portion of the Site. The MCWD infrastructure consists of a fenced area with a production well and distribution equipment. The PG&E construction yard is fenced off and consists of both gravel and undeveloped land. The remainder of the Site consists of grassy vegetation and several tree stands. The eastern leg of the Site extends to the Russian River, approximately 900 feet east of the bulk of the Site. Surrounding uses of the Site include generally undeveloped land to the north, east, and south, commercial development to the northwest, the abandoned Masonite Corporation to the west, and operational industrial and commercial development to the southwest. The Masonite Corporation west of the Site is the location of an abandoned industrial manufacturing plant that is listed as an active cleanup program site by the State Water Resources Control Board (SWRCB, 2024). See Appendix 3 for photos of the Site and Figure 3: *Existing Conditions* for an overview of existing conditions at the Site.

Figure 3: Existing Conditions

North Coast Resource Management (NCRM) prepared a Biological Assessment (BA), dated September 13, 2024, to analyze potential biological resources that may occur at the Site, along with potential impacts associated with the Project and feasible ways to mitigate potential impacts (Appendix 4). The BA is based on a desktop review of relevant resources and biological surveys conducted on April 24 and June 10, 2024. As described in the BA, the Site is largely comprised of non-native vegetation consisting primarily of annual grasses interspersed with shrubs and trees. There are five (5) infiltration basins located on the southern portion of the Site and a manmade watercourse that was established for agricultural use. No special-status species were observed at the Site during the field surveys. See Section IV *Biological Resources*, below, for further discussion pertaining to the BA and potential biological impacts associated with the Project.

IV. ENVIRONMENTAL EFFECTS

An environmental checklist follows this section and addresses all potential adverse effects resulting from the proposed project. No significant adverse effects are expected from any of the proposed activities.

V. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

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

An explanation for all checklist responses is included, and all answers take into account the whole action involved and the following types of impacts: off-site and on-site; cumulative and project-level; indirect and direct; and construction and operational. The explanation of each issue identifies (a) the threshold of significance, if any, used to evaluate each question; and (b) the mitigation measure identified, if any, to reduce the impact to less than significance.

In the checklist the following definitions are used:

"**Potentially Significant Impact**" means there is substantial evidence that an effect may be significant.

"**Potentially Significant Unless Mitigation Incorporated**" means the incorporation of one or more mitigation measures can reduce the effect from potentially significant to a less than significant level.

"**Less Than Significant Impact"** means that the effect is less than significant, and no mitigation is necessary to reduce the impact to a lesser level.

"**No Impact"** means that the effect does not apply to the proposed project, or clearly will not impact nor be impacted by the proposed project.

DETERMINATION: (To be completed by the Lead Agency on the basis of this initial evaluation)

☐	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☒	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
☐	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☐	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
☐	I find that 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.

JW

Signature

1/16/2025

Date

Jared Walker, General Manager

Name and Title

I. **AESTHETICS**. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized 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?	☐	☐	☐	☒

DISCUSSION

There are no designated state scenic highways within the vicinity of the Site, according to the California Department of Transportation (Caltrans) California State Scenic Highway System Map (Appendix 5) (Caltrans, 2024). The nearest eligible state scenic highway is Highway 20, located approximately 4.4 miles north of the Site. According to Chapter 4 (Resource Management Element) of the *Mendocino County General Plan* (2020), there are no officially designated state scenic highways in Mendocino County, although there are two designated state scenic byways through forests, which include the North Central Coast Heritage Corridor on State Route 1 and the Tahoe-Pacific Heritage Corridor encompassing sections of State Route 20 and Highway 101; however, the Site is not located within the vicinity of these forested state scenic byways.

The Site is currently partially developed with several gravel roads, existing water system infrastructure along the northeastern boundary of the Site, and several infiltration basins in the southern portion of the Site. The existing water system infrastructure consists of a fenced area with a production well and distribution equipment. The remainder of the Site consists of grassy vegetation and several tree stands. The Project involves developing up to two (2) new water supply wells and connecting them to existing water system infrastructure in order to establish a reliable water source for customers of the RVCWD. Upon completion of the Project, the only above-ground improvements that would remain visible would be the wells, which would be consistent with the existing water system infrastructure along the northeastern boundary of the Site. No lighting is proposed under the Project.

I.a-b) As discussed above, the only above-ground improvements that would remain visible after construction would be the wells, which would be consistent with the existing water system infrastructure along the northeastern boundary of the Site. Additionally, as discussed above there are no state scenic highways or scenic vistas located within the vicinity of the Site (Caltrans, 2024 and County of Mendocino, 2020). Since the Site is not located within the vicinity of a designated scenic vista or state scenic highway and visual changes would be minor and consistent with existing development at the Site, the Project would not impact a scenic vista nor damage scenic resources or views along a state scenic highway. ***No impact would occur.***

I.c) The proposed Project has no physical elements that would block or impact views or substantially degrade the existing visual character or quality of public views of the Site and its surroundings. The Site is visible from

portions of Highway 101 south of the Site; however, the portion of the Site where work would occur is over 0.4 miles northeast of Highway 101. Upon completion of the Project, the only above-ground improvement that would remain visible would be the wells, which would be consistent with the existing water system infrastructure along the northeastern boundary of the Site. As such, ***a less than significant impact would occur.***

I.d) No lighting is proposed as part of the Project. Therefore, the Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. ***No impact would occur.***

MITIGATION MEASURES

No mitigation required.

FINDINGS

The proposed Project would have a ***Less Than Significant Impact*** on Aesthetics.

II. AGRICULTURE AND FORESTRY RESOURCES. 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 PRC 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 forestland to non-forest use?	☐	☐	☐	☒

DISCUSSION

The Site is a grassy field partially developed with several gravel roads, existing water system infrastructure along the northeastern boundary of the Site and several infiltration basins in the southern portion of the Site and does not currently contain agricultural or forestry uses. The Site has a land use designation of Industrial (I) pursuant to the *Mendocino County General Plan* (2020) and a zoning designation of General Industrial (I2) pursuant to the *Mendocino County Code* (2023). According to the California Department of Conservation's (DOC) California Important Farmland Finder (2022), the Site is designated as Grazing Land, Other Land, and Urban and Built-Up Land (Appendix 6).

II.a) As discussed above, according to the DOC's California Important Farmland Finder (2022), the Site is designated as Grazing Land, Other Land, and Urban and Built-Up Land (Appendix 6) and does not contain land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Therefore, the proposed Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. ***No impact would occur.***

II.b) The Site has a land use designation of Industrial (I) pursuant to the *Mendocino County General Plan* (2020) and a zoning designation of General Industrial (I2) pursuant to the *Mendocino County Code* (2023) and is not currently under a Williamson Act contract. As such, the Project would not conflict with existing zoning for agricultural use or a Williamson Act contract. ***No impact would occur.***

II.c) The Site has a land use designation of Industrial (I) pursuant to the *Mendocino County General Plan* (2020) and a zoning designation of General Industrial (I2) pursuant to the *Mendocino County Code* (2023). The Site is not zoned for forestland, timberland, or timberland zoned Timberland Production, and therefore would not conflict with existing zoning for forestland, timberland, or timberland zoned Timberland Production. ***No impact would occur.***

II.d) The Site is a grassy field partially developed with several gravel roads, existing water system infrastructure along the northeastern boundary of the Site, and several infiltration basins in the southern portion of the Site. The Site does not contain forest land, and, therefore, would not result in the loss of forest land or conversion of forest land to non-forest use. ***No impact would occur.***

II.e) The Project involves developing up to two (2) new water supply wells and connecting them to existing water system infrastructure in order to establish a reliable water source for customers of the RVCWD. There are no components of the Project that would 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 forestland to non-forest use. ***No impact would occur.***

MITIGATION MEASURES
No mitigation required.

FINDINGS
The proposed Project would have ***No Impact*** on Agricultural and Forestry Resources.

III. AIR QUALITY. 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?	☐	☐	☒	☐

DISCUSSION

Air pollution control in California is based on federal, State of California (State), and local laws and regulations. The United States Environmental Protection Agency (EPA), California Air Resources Board (CARB), and regional clean air agencies all regulate air quality. The EPA and the CARB have set thresholds for each of the criteria pollutants, which include ozone (O_3), carbon monoxide (CO), oxides of nitrogen (NO_x), lead (Lb), sulfur dioxide (SO_2), particulate matter less than 10 microns in size (PM_{10}), and particulate matter less than 2.5 microns in size ($PM_{2.5}$). The standards set by the CARB are generally more stringent than those set by the EPA and the CARB has set additional standards for visibility-reducing particles (of any size), sulfates, and hydrogen sulfide (H_2S). These standards are based on observable short-term (acute) health effects (MCAQMD, 2005). Table 1, below, is a comparative analysis of the federal and State air quality standards.

Table 1 – Federal and State Ambient Air Quality Standards [CARB, 2024(a)]

Pollutant	Averaging Time	Federal [A,C]	State [B,C]
Ozone (O_3)	1 hour	NA	0.09 ppm (180 µg/m^3)
	8 hour	0.07 ppm (137 µg/m^3)	0.07 ppm (137 µg/m^3)
Carbon Monoxide (CO)	1 hour	35 ppm (40,000 µg/m^3)	20 ppm (23,000 µg/m^3)
	8 hour	9 ppm (10,000 µg/m^3)	9.0 ppm (10,000 µg/ m^3)
Nitrogen Dioxide (NO_2)	1 hour	0.100 ppm (188 µg/m^3)	0.18 ppm (339 µg/m^3)
	Annual	0.053 ppm (100 µg/m^3)	0.03 ppm (57 µg/m^3)
Sulfur Dioxide (SO_2)	1 hour	0.075 ppm (196 µg/m^3)	0.25 ppm (655 µg/m^3)
	24 hour	0.14 ppm	0.04 ppm (105 µg/m^3)
	Annual	0.03 ppm	NA
Particulate Matter (PM_{10})	24 hour	150 µg/m^3	50 µg/m^3
	Annual	NA	20 µg/m^3
Particulate Matter ($PM_{2.5}$)	24 hour	35 µg/m^3	NA
	Annual	12 µg/m^3	12 µg/m^3
Sulfates	24 hour	NA	25 µg/m^3
Lead (Pb)	30 day	NA	1.5 µg/m^3
	Calendar Quarter	0.15 µg/m^3	NA
Hydrogen Sulfide (H_2S)	1 hour	NA	0.03 ppm (42 µg/m^3)
Vinyl Chloride	24 hour	NA	0.010 ppm (26 µg/m^3)

A *Federal standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.*

B *State standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not*

to be exceeded. Other State standards are not to be equaled or exceeded.
C *ppm = parts per million by volume; µg/m3 = micrograms per cubic meter.*
NA *Not Applicable.*

The Site is located within the North Coast Air Basin (NCAB) and is subject to Mendocino County Air Quality Management District (MCAQMD) requirements. The MCAQMD is responsible for monitoring and enforcing the State and federal Clean Air Acts as well as local air quality protection regulations in Mendocino County. Air quality standards are set for emissions that may include, but are not limited to, visible emissions, particulate matter, and fugitive dust. The entire NCAB is currently designated as "non-attainment," or in excess of allowable limits, for the State 24-hour PM_{10} standard for breathable particulate matter of 10 microns or less (PM_{10}), and as "attainment," or within allowable limits, with respect to the balance of the criteria pollutants (NCUAQMD, No Date).

The MCAQMD has been determined to be in "attainment", or within allowable limits, for all federal air quality standards and in attainment for all State air quality standards except PM_{10}. The California Clean Air Act does not require attainment plans or transportation conformity for local air districts that exceed the PM_{10} standard, but only requires that local air districts make reasonable efforts toward coming into attainment, defined as a five percent reduction in emissions per year, until the standard is attained. Although not required for coming into attainment for the State standard, the MCAQMD adopted the *Particulate Matter Attainment Plan* in 2005. The *Particulate Matter Attainment Plan* includes a description of local air quality, the sources of local particulate matter (PM) emissions, and recommended control measures to reduce future PM_{10} levels. While PM_{10} levels have dropped over the last 20 years due to changing industrial base, enhanced regulations, and increased enforcement by the MCAQMD, the MCAQMD still exceeds the State PM_{10} level several times a year. The majority of these exceedances result from wildfires, residential wood burning, unpaved roads, and construction activities (MCAQMD, 2005).

The proposed Project involves developing up to two (2) new water supply wells and connecting them to existing water system infrastructure. Construction equipment to be used would include, but not be limited to, a drill rig, backhoe, light-duty trucks, and hand tools. Emissions from the Project would consist of temporary and permanent direct and indirect emissions, with the majority of emissions anticipated to be temporary, during construction. Direct emissions during construction, including exhaust and fugitive dust, would result from operation of construction equipment and would be temporary in nature. Operational emission sources would include exhaust from operation of the wells and fugitive dust during occasional maintenance activities.

III.a-b) As discussed above, the MCAQMD is in non-attainment for PM_{10} (MCAQMD, 2005). Therefore, any use or activity that generates unnecessary airborne particulate matter may be of concern to MCAQMD and has the potential to create significant effects to air quality. The Project would not conflict with or obstruct implementation of any air quality plan or result in a cumulatively considerable net increase of PM_{10}, the only criteria pollutant for which the MCAQMD is in non-attainment. The Project would generate temporary emissions from use of construction equipment. However, the Project would be required to comply with California Code of Regulations (CCR), Title 13, §2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (adopted 2005), which limits idling from both on-road and off-road diesel-powered equipment, and Rule-1-430 (Fugitive Dust Emissions) of Chapter IV (Prohibitions) of Regulation 1 (Air Pollution Control Rules) of the MCAQMD's Rules and Regulations (2011), which suppresses fugitive dust during construction and operation. Additionally, the Project may create exhaust during operation of the wells and fugitive dust during occasional maintenance activities; however, these emissions would be minimal and

would be consistent with existing operations at the Site. The Project would neither conflict with the MCAQMD's *Particulate Matter Attainment Plan* (2005) nor result in a cumulatively considerable net increase of PM_{10}, as construction emissions would be temporary, construction and operation emissions would be minimal, and the Project would be required to comply with the above-mentioned regulations. ***A less than significant impact would occur.***

III.c-d) The proposed Project would not expose sensitive receptors to substantial pollutant concentrations nor create objectionable odors affecting a substantial number of people. Sensitive receptors are defined as people that have an increased sensitivity to air pollution or environmental contaminants and include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling unit(s). The nearest potential sensitive receptors to the Site are the Tree of Life Charter School, located approximately 0.33 miles southwest of the Site, and residential development, located approximately 0.48 miles west of the Site.

The Project would be anticipated to create exhaust and fugitive dust during construction of the Project. However, the Project would be required to comply with CCR, Title 13, §2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (adopted 2005), which limits idling from both on-road and off-road diesel-powered equipment, and Rule-1-430 (Fugitive Dust Emissions) of Chapter IV (Prohibitions) of Regulation 1 (Air Pollution Control Rules) of the MCAQMD's Rules and Regulations (February 2011), which suppresses fugitive dust during construction and operation. Given the distance to the nearest sensitive receptors and compliance with the abovementioned regulations, fugitive dust and exhaust emissions would be minimized. Additionally, the Project may create exhaust during operation of the wells and fugitive dust during occasional maintenance activities; however, these emissions would be minimal and would be consistent with existing operation at the Site. ***A less than significant impact would occur.***

MITIGATION MEASURES

No mitigation required.

FINDINGS

The proposed Project would have a ***Less Than Significant Impact*** on Air Quality.

IV. 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 Game 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, and regulations or by the California Department of Fish and Game 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?	☐	☐	☐	☒

DISCUSSION

The following environmental setting is generally based on the Biological Assessment (BA) prepared by North Coast Resource Management (NCRM), dated September 13, 2024, to analyze potential biological resources that may occur at the Site, along with potential impacts associated with the Project and feasible ways to mitigate potential impacts (Appendix 4). The BA is based on a desktop review of relevant resources and biological surveys conducted on April 24 and June 10, 2024. As described in the BA, the Site is largely comprised of non-native vegetation consisting primarily of annual grasses interspersed with shrubs and trees. There are five (5) infiltration basins located on the southern portion of the Site and a manmade watercourse that was established for agricultural use.

As described above, as part of the preparation of the BA, NRCM performed a desktop review of relevant resources, including the U.S. Department of Agriculture (USDA) - Natural Resource Conservation Service's (NRCS) Web Soil Survey, the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database, the U.S. Fish and Wildlife Service's (USFWS) National Wetlands Inventory, and USFWS's Information for Planning and Consulting. Special-status species legally protected under State and federal regulations were evaluated for their potential for occurrence at the Site. The potential for each special-status species to occur at the Site was categorized in the BA as "none," "unlikely," "moderate," "high," or "present" based on a combination of factors including habitat, range, observation data, and known threats. For a complete

list of special-status species with the potential to be found in the vicinity of the Site, see Appendix A of the BA (Appendix 4).

Seven (7) special-status species were determined to have a "moderate" potential to occur at the Site, and no species were determined to have a "high" potential to occur at the Site. Table 2 shows a summary of these special-status species. None of these special-status species were observed at the Site during the field surveys. Additionally, the BA did not identify habitat at the Site that would be considered a sensitive natural community.

Table 2. Special-Status Species

Common Name	Scientific Name	Species Type
Roderick's fritillaria	*Fritillaria roderickii*	Plant
Bristly leptosiphon	*Leptosiphon aureu*	Plant
Lobb's aquatic buttercup	*Ranunculus lobbii*	Plant
Tricolored blackbird	*Agelaius tricolor*	Bird
Grasshopper sparrow	*Ammodramus savannarum*	Bird
Foothill yellow-legged frog	*Rana boylii*	Amphibian
Western pond turtle	*Emys marmorata*	Reptile

IV.a) As discussed above and shown in Table 2 of this Initial Study, the following special-status plant species were determined to have a "moderate" potential to occur at the Site: Roderick's fritillaria (*Fritillaria roderickii*), bristly leptosiphon (*Leptosiphon aureu*), and Lobb's aquatic buttercup (*Ranunculus lobbii*). According to the BA, bristly leptosiphon and Lobb's aquatic buttercup do not meet the definition of rare or endangered, according to CEQA Section 12380. Although suitable habitat for Roderick's fritillary is present within the Site, it is unlikely to thrive due to substantial habitat disturbance and alteration. The Site has a history of road maintenance and agricultural and infrastructural uses, leading to ongoing disturbances. Additionally, the Site is currently overrun with non-native and invasive species, exacerbating habitat degradation by reducing biodiversity and altering water availability. Furthermore, Roderick's fritillaria, bristly leptosiphon, and Lobb's aquatic buttercup were not observed at the Site. A less than significant impact with respect to special-status plant species would occur.

The following special-status bird species were determined to have a "moderate" potential to occur at the Site: tricolored blackbird (*Agelaius tricolor*) and grasshopper sparrow (*Ammodramus savannarum*). The habitat preference of the tricolored blackbird includes freshwater, marshlands, and wetlands. Although the infiltration basins provide habitat which could draw the tricolored blackbird to the Site, it is considered suboptimal habitat. Additionally, the Site is located outside of the known range of the tricolored blackbird, further reducing the likelihood of the tricolored blackbird utilizing the Site for habitat. The grasshopper sparrow prefers thick grassy prairies in valleys and foothills, which are present at the Site; however, the grasshopper sparrow also prefers native grasses. The Site is primarily populated by invasive grasses; therefore, it would be less desirable for the grasshopper sparrow. The tricolored black bird and grasshopper sparrow were not observed at the Site. Although the Site provides suboptimal habitat, these bird species may be present at the Site and if present, would have the potential to be impacted by construction activities. As such, Mitigation Measure BIO-1 requires that if construction is initiated during the nesting season (February 15 through August 15), a nesting bird survey should take place prior to construction. With mitigation incorporated, a less than significant impact with respect to special-status bird species would occur.

One (1) special-status amphibian species, the foothill yellow-legged frog (*Rana boylii*), and one (1) special-status reptile species, the western pond turtle (Emys marmorata), were determined to have a "moderate"

potential to occur at the Site. The foothill yellow-legged frog has been observed nearby and thrives in quiet, permanent watercourses, damp woods, and meadows with rocky substrate. The western pond turtle generally occupies streams, lakes, ponds, and wetlands. Nesting for the western pond turtle generally occurs in dry soil with little vegetation from May to mid-July. The infiltration basins and manmade watercourse could potentially attract the foothill yellow-legged from and western pond turtle. Although construction would not occur within the infiltration basins and manmade watercourse, the area where construction would occur is in close proximity to the manmade watercourse. If present, the foothill yellow-legged frog and western pond turtle would have the potential to be impacted by construction activities. To reduce the potential for impact, Mitigation Measures BIO-2 and BIO-3 would be incorporated into the project. Mitigation Measure BIO-2 requires that, prior to construction, a qualified biologist survey the area where work would occur for foothill yellow-legged frogs and western pond turtles. Mitigation Measure BIO-3 recommends that construction vehicles utilize existing roadways when possible and minimize unnecessary disturbance around the work area as feasible. ***A less than significant impact with mitigation incorporated would occur.***

IV.b) As discussed above, the Site is largely comprised of non-native vegetation consisting primarily of annual grasses interspersed with shrubs and trees. Additionally, the BA did not identify habitat at the Site that would be considered a sensitive natural community. As such, the Project would not have a substantial adverse effect on riparian habitat or other sensitive natural communities identified in local or regional plans, policies, and regulations or by the CDFW or USFWS. ***A less than significant impact would occur.***

IV.c) According to the BA, there are five (5) infiltration basins located on the southern portion of the Site and a manmade watercourse that was established for agricultural use. According to the USFWS National Wetlands Inventory (2021), there are five (5) freshwater ponds located in the southern portion of the Site (infiltration basins). Riverine habitat and freshwater forested/shrub wetland are located approximately 0.15 miles east of the Site (Russian River), and riverine habitat is located approximately 0.16 miles north of the Site (Ackerman Creek). There are no wetlands located at the Site (Appendix 7). No work would occur within the infiltration basins or manmade watercourse. As such, the Project would not have a substantial adverse effect on state or federally protected wetlands. ***No impact would occur.***

IV.d) The Project would not be anticipated to 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. Upon completion of the Project, the only above-ground improvements that would remain visible would be the wells, which would not impede wildlife movement. Construction activities would not impede wildlife movement, as construction would be limited to a small area and undeveloped land surrounding the construction area would continue to facilitate wildlife movement. ***A less than significant impact would occur.***

IV.e) The Project would not conflict with any local policies or ordinances protecting biological resources. No trees would be removed under the Project, and although sensitive species may be present on-site, Mitigation Measures BIO-1 through BIO-3 would reduce potential impacts to a less-than-significant level. ***A less than significant impact with mitigation incorporated would occur.***

IV.f) There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans that apply to the Site. ***No impact would occur.***

MITIGATION MEASURES

BIO-1: If construction activities begin during the nesting season (February 15 through August 15), a qualified biologist shall conduct a pre-construction survey for active nests in suitable nesting habitat within 500 feet of

the construction area no more than seven (7) days prior to the initiation of construction. If no active nests are identified during the pre-construction survey, no further mitigation is necessary. If construction is paused for a period of seven (7) days or longer during the nesting season, a supplemental pre-construction survey shall be conducted prior to construction resuming.

If active nests are found within the construction footprint or immediately adjacent to construction activities, the qualified biologist shall establish a species-appropriate buffer or exclusion zone around the nest (to be determined by the qualified biologist). Construction activities shall avoid nest buffers until the qualified biologist determines that the birds have fledged and are no longer reliant upon the nest or parental care for survival. The qualified biologist may modify these buffers, in consultation with CDFW, depending upon the species, nest location, and existing visual buffers.

If construction activity is required within the established buffer, the qualified biologist shall be consulted prior to beginning construction activities within this area. If the qualified biologist determines that the activity would impact the nest, the qualified biologist shall have the authority to stop work. If the qualified biologist determines that the activity would not disturb the nest, construction may continue under supervision of the qualified biologist or designee.

BIO-2: A qualified biologist shall conduct a pre-construction survey for foothill yellow-legged frogs and western pond turtles within the area where work will occur no more than seven (7) days prior to the initiation of construction. If these species are not identified, no further mitigation is necessary. If construction is paused for a period of seven (7) days or longer, a supplemental pre-construction survey shall be conducted prior to construction resuming.

If foothill yellow-legged frogs or western pond turtles are found within the construction footprint or immediately adjacent to construction activities, the qualified biologist shall relocate the individual(s) from the work area to a safe location. If a western pond turtle nest is found, the qualified biologist shall establish a 300-foot no disturbance buffer until the hatchings have departed or the nest is determined to be inactive by the qualified biologist.

BIO-3: Construction vehicles should utilize existing roadways when possible and minimize unnecessary disturbance around the work area as feasible.

FINDINGS

The proposed Project would have a ***Less Than Significant Impact with Mitigation Incorporated*** on Biological Resources.

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

DISCUSSION:
According to Chapter 3 (Development Element) of the *Mendocino County General Plan* (2020), ten (10) Native American tribes historically had territory in what is now Mendocino County. Native American tribes known to inhabit Mendocino County concentrated mainly along the coast and along major rivers and streams, while mountainous areas and redwood groves were occupied seasonally by some tribes. The first permanent non-native settlers came to Mendocino County in the middle of the 16th century, exploring and establishing small outposts. It was almost 300 years before the first permanent non-Spanish settlements in Mendocino County were established in April of 1852 on the coast north of Big River. As European-American settlement expanded in Mendocino County, most of the tribes known to inhabit the land were restricted to reservations and rancherias. During the 19th century, other tribes from the interior of California were forced to settle on the Round Valley Reservation in the northeastern portion of Mendocino County.

Various policies exist related to the protection and preservation of cultural and historical resources in Mendocino County, in particular Native American sites. These include, but are not limited to, an archaeological ordinance, adopted as Chapter 22.12 (Archaeological Resources) of the *Mendocino County Code* (1983), and Chapter 3 (Development Element) of the *Mendocino County General Plan* (2020). The archaeological ordinance establishes a Mendocino County Archaeological Commission that evaluates the potential impacts of proposed projects on archaeological resources and recommends measures to reduce or eliminate impacts on these resources. The ordinance additionally establishes procedures to follow in the event that archaeological or cultural resources and/or human remains are unearthed during project construction. These procedures are outlined in Sections 22.12.090 and 22.12.100 of the *Mendocino County Code* (1983). Both Policy DE-115 of Chapter 3 (Development Element) of the *Mendocino County General Plan* (2020) and Sections 22.12.050 through 22.12.100 of the *Mendocino County Code* (1983) include provisions for archaeological sensitivity review, field evaluations, impact mitigations, archaeological discovery, and human remain discovery protocols.

An Archaeological Survey Report (Archaeological Report) was prepared for the Project on April 22, 2024, by Alta Archaeological Consulting (ALTA) in order to identify cultural resources at the Site. For the purposes of the Archaeological Report, the area of the proposed Project and surrounding lands has been identified as the Project Area. Due to the sensitive and confidential nature of this Archaeological Report, a copy is not included in this Initial Study.

The Archaeological Report included a records search at the Northwest Information Center (NWIC). The records search included a review of all study reports and resources on file within a quarter mile radius of the Project Area. Review of historic registers and inventories indicates that no California Historical Landmarks or Points of Interest are present within the Project Area, and no National Register-listed or eligible properties are

located within a quarter mile of the Project Area. Review of archaeological site and survey maps revealed that 14 cultural resource studies have been previously performed within a quarter mile of the Project Area, although no studies have been previously conducted within the Project Area. Based on these 14 cultural resource studies, three (3) cultural resources are documented within a quarter mile of the Project Area; however, there are no cultural resources documented within the Project Area.

ALTA contacted the Native American Heritage Commission (NAHC) on March 26, 2024, to request a review of the Sacred Lands File (SLF) for information of Native American cultural resources within the Project Area and to request a list of Native American contacts in the Project Area. The NAHC responded on March 28, 2024, indicating that a search of the SLF returned a positive result and recommended contacting the Pinoleville Pomo Nation for more information. The NAHC also provided a contact list of Native American tribes with an interest in the Project Area. On March 26, 2024, ALTA sent a letter to the Tribal Historic Preservation Officer (THPO) or appropriate representative of each tribal group associated with the Project Area to notify them of the Project. As of April 22, 2024, no responses had been received.

ALTA conducted a field survey of the Site on April 9, 2024. The majority of the Site was surveyed, aside from the PG&E construction yard that could not be accessed. No cultural resources were identified during the field survey.

On April 19 and 22, 2024, in compliance with Assembly Bill (AB) 52, the RVCWD sent consultation letters to the THPO or appropriate representative for each of the 22 Native American tribes from the NAHC contact list, including: Big Valley Rancheria of Pomo Indians, Cahto Tribe, Cloverdale Rancheria of Pomo Indians, Coyote Valley Band of Pomo Indians, Elem Indians Colony Pomo Tribe, Estom Yumeka Maidu Tribe of the Enterprise Rancheria, Guidiville Rancheria of California, Hopland Band of Pomo Indians, Koi Nation of Northern California, Lytton Rancheria, Manchester Band of Pomo Indians of California, Noyo River Indian Community, Pinoleville Pomo Nation, Potter Valley Tribe, Little River Band of Pomo Indians of the Redwood Valley Rancheria, Robinson Rancheria of Pomo Indians, Round Valley Reservation/Covelo Indian Community, Scotts Valley Band of Pomo, Sherwood Valley Rancheria of Pomo, and Yokayo Tribe. A copy of the letter sent to Native American tribes has been included in Appendix 8. Two (2) responses were received, including a response from the Cahto Tribe and the Sherwood Valley Rancheria of Pomo Indians, expressing that both tribes had no concerns related to the Project. As no requests for consultation were received within the 30-day deadline specified by Public Resources Code section 21082.3 (d), the RVCWD, as Lead Agency, has deemed the tribal consultation process pursuant to AB 52 complete.

V.a) The Project is not anticipated to have an adverse effect on historical resources, as none have been identified at the Site. As discussed above, according to the Archaeological Report, no California Historical Landmarks or Points of Interest are present within the Project Area and no National Register-listed or eligible properties are located within a quarter mile of the Project Area (Appendix 9). ***No impact would occur.***

V.b-c) The Project is not anticipated to cause a substantial adverse change in the significance of an archaeological resource or disturb human remains. According to the Archaeological Report, no cultural resources were identified within the Project Area. However, there is a possibility that an archaeological resource or human remains could be inadvertently discovered due to the ground-disturbing activities required during construction of the Project. Mitigation Measures CUL-1 and CUL-2 would require that standard protocol is implemented during construction of the Project in the event of inadvertent discovery, which includes halting work, notifying proper contacts, and evaluating the find(s) in the event that resources and/or human remains are encountered, which would ensure that archaeological resources, cultural

resources, and human remains are not adversely impacted by the proposed Project. ***A less than significant impact with mitigation incorporated would occur.***

MITIGATION MEASURES

CUL-1: In the event archaeological resources or cultural resources, including human remains, are inadvertently unearthed or discovered during construction, the contractor shall immediately halt all grading/land-clearing activities and contact the RVCWD, who will contact a qualified archaeologist to evaluate the encountered resource(s). Prehistoric resources include, but are not limited to, chert or obsidian flakes, projectile points, mortars, pestles, and dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic-era resources include stone or abode foundations or walls; structures and remains with square nails; and refuse deposits or bottle dumps, often located in old wells or privies. Project personnel shall not collect the potential resources. All activity in the vicinity of the resources shall cease until a qualified archaeologist can evaluate it. If the qualified archaeologist determines that the resources may be significant, they shall notify the RVCWD and develop an appropriate treatment plan for the resources. The archaeologist shall consult with Native American representatives in determining appropriate treatment for prehistoric or Native American cultural resources. In considering any suggested mitigation proposed by the archaeologist, and Native American representative(s), where applicable, the RVCWD will determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, Project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) will be instituted. Work may proceed in other parts of the Site while mitigation for cultural resources is being carried out.

CUL-2: As identified in California Health and Safety Code Section 7050.5, if human remains are encountered on-site, all work must stop in the immediate vicinity of the discovered remains and the Mendocino County Coroner and a qualified archaeologist shall be notified immediately so that an evaluation can be performed. If the remains are deemed to be Native American and prehistoric, per Public Resources Code 5097.98, the NAHC shall be contacted by the Mendocino County Coroner so that a "Most Likely Descendant" can be designated and further recommendations regarding treatment of the remains can be provided.

FINDINGS

The proposed Project would have a ***Less Than Significant Impact with Mitigation Incorporated*** on Cultural Resources.

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

DISCUSSION

On October 7, 2015, Governor Edmund G. Brown, Jr. signed into law Senate Bill (SB) 350, known as the *Clean Energy and Pollution Reduction Act of 2015*, which sets ambitious annual targets for energy efficiency and renewable electricity aimed at reducing greenhouse gas (GHG) emissions. SB 350 requires the State to double statewide energy efficiency savings in electricity and natural gas end uses by 2030. This mandate is one of the primary measures to help the State achieve its long-term climate goal of reducing GHG emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050(CEC, No Date).

The proposed Project involves developing up to two (2) new water supply wells and connecting them to existing water system infrastructure. Construction equipment to be used would include, but not be limited to, a drill rig, backhoe, light-duty trucks, and hand tools. As the only permanent infrastructure that will be installed as part of the Project are up to two (2) wells and water lines connecting them to water system infrastructure, the Project would not be subject to CCR, Title 24, §6 (2022 Energy Code), which contains energy conservation standards applicable to residential and non-residential buildings throughout California (CEC, 2022). Chapter 4 (Resource Management Element) of the *Mendocino County General Plan* (2020) includes multiple policies that are geared towards renewable energy or energy efficiency, including Policies PM-53 through RM-61.

VI.a) The proposed Project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources during Project construction or operation. The consumption of energy would occur during construction through the use of fossil fuels and electricity for construction equipment and vehicles. Construction equipment to be used would include, but not be limited to, a drill rig, backhoe, light-duty trucks, and hand tools. Construction would be temporary in nature and would be required to comply with CCR, Title 13, §2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (adopted 2005), which limits idling from both on-road and off-road diesel-powered equipment. Therefore, it is anticipated that construction of the Project would not result in wasteful, inefficient, or unnecessary consumption of energy.

Operation of the Project would require a minimal increase in energy above current usage at the Site, as energy usage of the wells would be consistent with the existing water system infrastructure at the Site. As the increase in energy usage would be minimal and consistent with existing energy usage, Project operation is not anticipated to result in wasteful, inefficient, or unnecessary consumption of energy. ***A less than significant impact would occur.***

VI.b) The proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. CCR, Title 24, §6 (2022 Energy Code) contains energy conservation standards applicable to residential and non-residential buildings throughout California, and, therefore, would not be applicable to the Project. Chapter 4 (Resource Management Element) of the *Mendocino County General Plan* (2020) includes multiple policies that are geared towards renewable energy or energy efficiency, including Policies

PM-53 through RM-61. However, as energy usage for construction would be temporary and minimal, and as operation would only require a minimal increase in energy above current usage at the Site, the Project would not be anticipated to conflict with or obstruct policies related to renewable energy or energy efficiency in the *Mendocino County General Plan* (2020). ***A less than significant impact would occur.***

MITIGATION MEASURES

No mitigation required.

FINDINGS

The proposed Project would have a ***Less Than Significant Impact*** on Energy.

VII. 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 wastewater 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?	☐	☒	☐	☐

DISCUSSION

The Site is located in the California Coast Geomorphic Province, a seismically active and geologically complex province due to historic and ongoing tectonic deformation that is characterized by northwest trending faults and topographic and geologic features (CGS, 2002). The Site is relatively flat and at an approximate elevation of 615 feet above sea level. According to the DOC California Geological Survey's (CGS) Earthquake Zones of Required Investigation (2022) and Fault Activity Map of California (2015), the Maacama Fault is approximately 0.48 miles east of the Site (Appendix 10).

According to the NRCS Web Soil Survey (2019), the Site is comprised of 81.1 percent Cole loam (0 to 2 percent slopes), 11.4 percent Feliz clay loam (0 to 2 percent slopes), and Russian loam (0 to 2 percent slopes) (Appendix 11). Cole loam (0 to 2 percent slopes) has a drainage classification of "somewhat poorly drained" and a runoff classification of "high." Feliz clay loam (0 to 2 percent slopes) and Russian loam (0 to 2 percent slopes) have a drainage classification of "well drained" and a runoff classification of "low" (NRCS, 2019). The area where the Project would occur is located in the portion of the Site comprised of Cole loam (0 to 2 percent slopes).

VII.a.i) Alquist-Priolo earthquake fault zones are regulatory zones surrounding the surface traces of active faults in California. According to the CGS, the Earthquake Zones of Required Investigation (2022) can be used to determine whether a property is within an Alquist-Priolo earthquake fault zone (CGS, No Date). As shown on the CGS Earthquake Zones of Required Investigation (2022) and Fault Activity Map of California (2015), the Site is not located within an Alquist-Priolo earthquake fault zone, as the Maacama Fault is approximately 0.48 miles east of the Site (Appendix 10). Therefore, the Project would not expose people or structures to increased potential substantial adverse effects, including the risk of loss, injury, or death. ***A less than significant impact would occur.***

VII.a.ii). As noted above, there are no mapped Alquist-Priolo special earthquake fault zones at the Site (Appendix 10). Since the Site is located within a seismically active region and given the proximity of the Maacama Fault to the Site, the Site will likely experience strong ground shaking during the economic life span of any development at the Site. However, the Project would involve developing up to two (2) new water supply wells and connecting them to existing water system infrastructure and would not introduce a significant amount of development or new structures to the Site. As the existing infrastructure at the Site already requires occasional maintenance, maintenance of the two (2) new wells would only minimally increase the presence of people at the Site. Due to the nature of the Project, it would not expose people or structures to increased potential substantial adverse effects related to strong seismic shaking, including the risk of loss, injury, or death. ***A less than significant impact would occur.***

VII.a.iii) According to Chapter 3 (Development Element) of the *Mendocino County General Plan* (2020), liquefaction is a condition that occurs during an earthquake when some soils behave more like a liquid than a solid, often with catastrophic results for buildings built on these soils. There are several alluvial basins in Mendocino County where the subsurface conditions are locally conducive to liquefaction, including the alluvial basins in the Willits, Ukiah, and Covelo areas. Fine-grained alluvial deposits along river systems and other small alluvial deposits in Mendocino County also are susceptible to liquefaction. However, the Project would involve developing up to two (2) new water supply wells and connecting them to existing water system infrastructure and would not introduce a significant amount of development or new structures to the Site. As the existing infrastructure at the Site already requires occasional maintenance, maintenance of the two (2) new wells would only minimally increase the presence of people at the Site. Due to the nature of the Project, it would not expose people or structures to increased potential substantial adverse effects related to liquefaction, including the risk of loss, injury, or death. ***A less than significant impact would occur.***

VII.a.iv) The Site is relatively flat and at an approximate elevation of 615 feet above sea level. Due to the flat topography of the Site and surrounding area, the Site is not anticipated to be in an area subject to landslides. ***A less than significant impact would occur.***

VII.b) The Project would involve developing up to two (2) new water supply wells and connecting them to existing water system infrastructure and would not introduce a significant amount of new development or new structures to the Site. Drilling the wells would have the potential to temporarily create erosion and loss of topsoil. However, Ordinance No. 4313, (Stormwater Runoff Pollution Prevent Procedure) of the *Mendocino County Code* (2023) (Chapter 16.30 et. seq.) requires any person performing construction and grading work anywhere in the unincorporated areas of Mendocino County to implement appropriate Best Management Practices (BMPs) to control erosion and prevent the discharge of construction waste, debris, or contaminants from construction materials, tools, and equipment from entering the storm drainage system (off-site). BMPs that must be implemented during construction activities are listed in Section 16.30.070 of the *Mendocino County Code* (2023). Implementation of the required BMPs pursuant to the *Mendocino County Code* (2023) would prevent soil erosion during construction. ***A less than significant impact would occur.***

VII.c) Due to the flat topography of the Site and surrounding area, the Site is not anticipated to be in an area subject to landslides. As discussed in Sections VII.a.ii and VII.a.iii, above, the Site may experience ground shaking or liquefaction. However, the Project would involve developing up to two (2) new water supply wells and connecting them to existing water system infrastructure and would not introduce a significant amount of development or new structures to the Site. As such, the Project is not anticipated exacerbate the risk for or cause landslide, lateral spreading, subsidence, liquefaction, or collapse. ***A less than significant impact would occur.***

VII.d) Expansive soils generally consist of cohesive fine-grained clay soils and represent a significant structural hazard to buildings founded on them as they have a tendency to undergo volume changes (shrink or swell) with changes in moisture content. The Plasticity Index describes the numerical difference between the liquid limit and plastic limit of a soil, also described as the range of water content in which a soil exhibits the characteristics of a plastic solid. A Plasticity Index of less than 15 percent represents a low potential for soil expansion. The area where the Project would occur is located in the portion of the Site comprised of Cole loam (0 to 2 percent slopes). As indicated by the NRCS Web Soil Survey (2019), Cole loam (0 to 2 percent slopes) has a Plasticity Index of 22.8 percent. Although soils in the area where work would occur may be expansive, the Project, which would involve developing up to two (2) new water supply wells and connecting them to existing water system infrastructure, would not introduce a significant amount of development or new structures to the Site. As such, the Project would not introduce direct or indirect risks to life or property as a result of expansive soils. ***A less than significant impact would occur.***

VII.e) The proposed Project would involve developing up to two (2) new water supply wells and connecting them to existing water system infrastructure. There are no existing septic systems or other alternative wastewater disposal systems at the Site, nor would they be introduced to the Site as part of the Project. ***No impact would occur.***

VII.f) The potential exists for unique paleontological resources or site or unique geological features to be encountered within the project area during ground-disturbing construction activities, including drilling the two (2) wells and installing water lines. In the event that any archaeological or paleontological resources are discovered during Site preparation or other earth-disturbing construction activities, the contractor would immediately halt all work and contact the County of Mendocino and a qualified paleontologist, as required by Mitigation Measure GEO-1. ***A less than significant impact with mitigation incorporated would occur.***

MITIGATION MEASURES

GEO-1: In the event that paleontological resources, including individual fossils or assemblages of fossils, are encountered during construction activities all ground disturbing activities shall halt, and the County of Mendocino shall be contacted. Additionally, a qualified paleontologist shall be procured to evaluate the discovery and make treatment recommendations.

FINDINGS

The proposed Project would have a ***Less Than Significant Impact with Mitigation Incorporated*** on Geology and Soils.

VIII. **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 (GHG), either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

DISCUSSION

The Global Warming Solutions Act of 2006, also known as Assembly Bill (AB) 32, is a State law that establishes a comprehensive program to reduce GHG emissions from all sources throughout the State. AB 32 requires the State to reduce its total GHG emissions to 1990 levels by 2020, a reduction of approximately 15 percent below emissions expected under a "business as usual" scenario. Pursuant to the AB 32 Scoping Plan (last reviewed in 2018), the CARB must adopt regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. The following major GHGs and groups of GHGs being emitted into the atmosphere are included under AB 32: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). The 2020 GHG emissions statewide limit set by AB 32, equal to the 1990 level, is 431 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) (CARB, 2018. Pursuant to Senate Bill (SB) 32 and Executive Order S-3-05, California has a reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.

The CARB, in its *2000-2022 GHG Inventory (2024 Edition)*, states that GHG emissions within the State are following a declining trend. In 2022, statewide GHG emissions were 371.1 $MMTCO_2e$, 9.3 $MMTCO_2e$ lower than 2021 levels. The transportation sector remains the largest source of GHG emissions in the State, accounting for 39 percent of the State's GHG emissions in 2022 [CARB, 2024(b)].

The Site is located within the NCAB and is subject to the requirements of the MCAQMD. The MCAQMD is responsible for monitoring and enforcing federal, state, and local air quality standards in the Mendocino County. As noted in Chapter 4 (Resource Management Element) of the *Mendocino County General Plan* (2020), due to the rural nature of Mendocino County, the amount of GHG generated by human activities (primarily the burning of fossil fuels for vehicles, heating, and other uses) is small as compared to other, more urban counties and miniscule in statewide or global terms. However, GHG emissions in Mendocino County are higher per capita due to the distances involved in traveling around the county.

VIII.a) The proposed Project would not generate GHG emissions either directly or indirectly, that may have a significant impact on the environment, as neither construction nor operation of the Project would generate significant amount of GHG emissions above baseline conditions. A limited amount of GHG emissions would be anticipated to occur during construction activities. However, construction of the Project would be temporary in nature and would be required to comply with CCR, Title 13, §2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (adopted 2005), which limits idling from both on-road and off-road diesel-powered equipment. As such, it is anticipated that construction would not result in significant GHG emissions.

Operation of the Project would require a minimal increase in GHG emissions above current usage at the Site, as GHG emissions from operation of the wells would be consistent with the existing water system infrastructure

at the Site. As the increase in GHG emissions would be minimal and consistent with existing GHG emissions, operation of the Project is not anticipated to result in significant GHG emissions. ***A less than significant impact would occur.***

VIII.b) The proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. Action Item RM-50.2 of Chapter 4 (Resource Management Element) of the *Mendocino County General Plan* (2020) requires the County of Mendocino to "create a greenhouse gas reduction plan for the unincorporated areas of the county that sets specific reduction strategies and targets to meet." Although this plan has not yet been prepared and adopted, a significant amount of GHG emissions is not anticipated under the Project, as described above. In addition, the Project would not conflict with local, MCAQMD, State, or federal regulations pertaining to GHG emissions, since the Project would have a negligible increase in current GHG emissions from the Site. ***A less than significant impact would occur.***

MITIGATION MEASURES

No mitigation required.

FINDINGS

The proposed Project would have a ***Less Than Significant Impact*** on Greenhouse Gas Emissions.

IX. 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 complied pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

DISCUSSION

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency, or has characteristics defined as hazardous by a federal, state, or local agency. Chemical and physical properties such as toxicity, ignitability, corrosiveness, and reactivity cause a substance to be considered hazardous. These properties are defined in the CCR, Title 22, §66261.20-66261.24. A "hazardous waste" includes any hazardous material that is discarded, abandoned, or will be recycled. Therefore, the criteria that render a material hazardous also cause a waste to be classified as hazardous (California Health and Safety Code, §25117).

GeoTracker is an online database managed by the State Water Resources Control Board (SWRCB) that provides statewide data of authorized or unauthorized discharges of waste to land, or unauthorized releases of hazardous substances from underground storage tanks. This system consists of a relational database, on-line compliance reporting features, a geographical information system (GIS) interface, and other features that are utilized by the SWRCB, regional boards, local agencies, regulated industry, and the public to input, manage, or access compliance and regulatory tracking data. EnviroStor, managed by the Department of Toxic Substances Control (DTSC), is an online database for tracking cleanup, permitting, enforcement, and investigation efforts at hazardous waste sites with known or suspected contamination. Additionally, through the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), also known as "Superfund," the EPA oversees the cleanup of contaminated sites that include manufacturing facilities,

processing plants, landfills, and mining sites. These databases were queried for active sites on or within 1,000 feet of the Site (Appendix 12) (SWRCB, 2024; DTSC, 2024; and EPA, 2023). One (1) active cleanup program site was identified on GeoTracker approximately 200 feet west of the Site. The site is referred to as the Masonite Corporation, has a status of "Open – Eligible for Closure," and concerns groundwater contamination (SWRCB, 2024).

The proposed Project would require the transport, use, storage, and disposal of small quantities of hazardous materials common for equipment and site management and operation, such as gasoline, diesel fuel, hydraulic fluids, oils, lubricants, and cleaning solvents and supplies. However, all hazardous materials would be utilized and disposed of in accordance with all applicable federal and state regulations.

IX.a-b) The proposed Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, nor would it create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The proposed Project would require the transport, use, storage, and disposal of small quantities of hazardous materials common for equipment and site management and operation, such as gasoline, diesel fuel, hydraulic fluids, oils, lubricants, and cleaning solvents and supplies. However, all hazardous materials would be utilized and disposed of in accordance with all applicable federal and state regulations. ***A less than significant impact would occur.***

IX.c) No existing or proposed schools are located within one-quarter mile of the Site. The nearest school to the Site is the Tree of Life Charter School, located approximately 0.33 miles southwest. It is not anticipated that hazardous materials would be used at the Site in a quantity or application that could impact the Tree of Life Charter School or other schools. ***No impact would occur.***

IX.d) The SWRCB's GeoTracker (2024), DTSC's EnviroStor (2024), and EPA's Superfund (2023) databases were queried for active sites on or within 1,000 feet of the Site (Appendix 12). One (1) active cleanup program site was identified on GeoTracker approximately 200 feet west of the Site. The site is referred to as the Masonite Corporation, has a status of "Open – Eligible for Closure," and concerns groundwater contamination. As the Project would involve developing up to two (2) new water supply wells, groundwater contamination at the Site may create a hazard to the public or the environment.

On July 18, 2023, LACO Associates (LACO) prepared a work plan for drilling test wells at the Site (separate from the test well locations described for this Project) and sent the work plan to the NCRWQCB. The work plan determined that a HVOC plume from the Masonite Corporation is located south of the Site; however, monitoring of the existing MCWD well at the Site indicates that the plume has not impacted groundwater resources at the Site. The NCRWQCB sent a letter on July 19, 2023, approving the work plan. The work plan and the NCRWQCB approval have been included as Appendix 13. Please note the work plan was not prepared for this Project; and, if required, a new work plan will be prepared for this Project and approved by the NCRWQCB prior to construction. However, the finding that the HVOC plume has not impacted groundwater at the Site is still relevant. Therefore, although an active cleanup program site was identified on the SWRCB's GeoTracker (2024), it would not create a significant hazard to the public or the environment. ***A less than significant impact would occur.***

IX.e) The Site is not included in an airport land use plan and is not within two miles of a public airport or public use airport. The nearest airport is Ukiah Municipal Airport, located approximately 2.6 miles south of the Site. Therefore, the Project would not result in a safety hazard for people at the Site. ***No impact would occur.***

IX.f-g) The proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, nor would it expose people or structures to a significant risk of less, injury or death involving wildland fires. The Site is located within the Local Responsibility Area (LRA) (CAL FIRE, No Date). Fire protection services at the Site are provided by the Ukiah Valley Fire Authority (County of Mendocino, 2020). The nearest fire station to the Site is located at 141 Lovers Lane, Ukiah, approximately 0.45 miles west of the Site. According to Figure 3-11A (Wildfire Hazard Severity Zones) of Chapter 3 (Development Element) of the *Mendocino County General Plan* (2020), the Site is mapped as a "Moderate" fire hazard severity zone (FHSZ). However, the Site consists of water system infrastructure and the Project would involve developing up to two (2) new water supply wells and connecting them to existing water system infrastructure in order to establish a reliable water source for customers of the RVCWD. As such, since the Project would not introduce a significant amount of development or new structures to the Site, the Project would not cause increased exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires, nor would it impair implementation of an adopted emergency response plan. ***A less than significant impact would occur.***

MITIGATION MEASURES

No mitigation required.

FINDINGS

The proposed Project would have a ***Less Than Significant Impact*** on Hazards or Hazardous Materials.

X. HYDROLOGY AND WATER QUALITY. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
i) Result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
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?	☐	☐	☒	☐

DISCUSSION

Ordinance No. 4313, (Stormwater Runoff Pollution Prevent Procedure) of the *Mendocino County Code* (2023) (Chapter 16.30 et. seq.) requires any person performing construction and grading work anywhere in the unincorporated areas of Mendocino County to implement appropriate Best Management Practices (BMPs) to control erosion and prevent the discharge of construction waste, debris, or contaminants from construction materials, tools, and equipment from entering the storm drainage system (off-site). BMPs that must be implemented during construction activities are listed in Section 16.30.070 of the *Mendocino County Code* (2023).

The only surface waters at the Site are the infiltration basins in the southern portion of the Site and a manmade watercourse that was established for agricultural use. The nearest off-site surface water to the Site is the Russian River, located approximately 0.15 miles east. Additionally, Ackerman Creek, a tributary to the Russian River, is located approximately 0.16 miles north of the Site.

The Site is located within the Russian River Watershed, which is currently listed on the EPA Clean Water Act Section 303(d) list of Impaired Waters due to water quality impairments by sediment, temperature, pathogens, mercury, phosphorus, and dissolved oxygen (NCRWQCB, 2024).

The Site is located within the Ukiah Valley Groundwater Basin (DWR, 2018) (Appendix 14). According to the Ukiah Valley Basin Groundwater Sustainability Agency's (GSA's) *Ukiah Valley Groundwater Sustainability Plan*

(2021), historic water surface elevations were analyzed to identify trends in groundwater level fluctuations in the Ukiah Valley Groundwater Basin. In general, between 2014 and 2019, water levels in the Ukiah Valley Groundwater Basin have remained stable. There was very little fluctuation in groundwater levels for the north and central portions of the Ukiah Valley Groundwater Basin, where the Site is, with seasonal fluctuations ranging to around 10 feet but holding steady over the entire study period (2021).

According to the USFWS National Wetlands Inventory (2021), there are five (5) freshwater ponds located in the southern portion of the Site (infiltration basins). Riverine habitat and freshwater forested/shrub wetland are located approximately 0.15 miles east of the Site (Russian River), and riverine habitat is located approximately 0.16 miles north of the Site (Ackerman Creek). There are no wetlands located at the Site (Appendix 7).

As shown on the Federal Emergency Management Agency (FEMA) Flood Rate Insurance Map (FIRM) panel number 06045C1512F (effective 6/2/2011), the northeastern portion of the Site is located within Zone "AE," or the Special Flood Hazard Area (SFHA), which is defined as the area that will be inundated by the flood event having a 1-percent chance of being equaled or exceeded in any given year. The 1-percent chance flood is also referred to as the base flood or 100-year flood. The western border of the Site is located within Zone "X" (shaded), which is defined as the area that will be inundated by the flood event having a 0.2-percent chance of being equaled or exceeded in any given year. The 0.2-percent chance flood is also referred to as the 500-year flood. The portion of the Site where the infiltration basins are located is within Zone "X" (unshaded). Zone "X" (unshaded) is defined as an area of minimal flood hazard. The proposed wells and water lines would be located within the 100-year flood zone (Appendix 15).

According to Section 22.17.305 (Establishment of Development Permit) of the *Mendocino County Code* (2023), "a development permit shall be obtained before any construction or other development begins within any area of special flood hazard." According to Section 22.17.120 of the *Mendocino County Code* (2023), development is defined as "any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials;" therefore, drilling the wells and installation of water lines are considered development. However, Government Code Section 53091(d) and (e) states that building ordinances and zoning ordinances of a county or city shall not apply to the location or construction of facilities for the production of water by a local agency. Although Chapter 22.17 (Floodplain Ordinance) is not part of Mendocino County's building or zoning ordinance, it is authorized by Government Code Section 65800, which is related to the authority to provide a zoning ordinance. Therefore, the Project does not need to comply with Chapter 22.17 (Floodplain Ordinance) of the *Mendocino County Code* (2023) and is not required to obtain a development permit. Furthermore, according to communication with Mendocino County staff, a development permit is not required for developing a well, provided that the project does not involve a structure requiring a building permit (see Appendix 16). As such, a development permit from the Mendocino County Department of Planning and Building Services is not required for the Project. However, a well permit would still be required from the Mendocino County Division of Environmental Health.

X.a) The Project would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. The Project would be required to comply with Ordinance No. 4313, (Stormwater Runoff Pollution Prevent Procedure) of the *Mendocino County Code* (2023) (Section 16.30 et. seq.), which requires any person performing construction and grading work anywhere in the unincorporated areas of Mendocino County to implement appropriate BMPs to control erosion and prevent the discharge of construction waste, debris or contaminants from construction materials, tools, and equipment from entering the storm drainage system (off-site). BMPs that must be implemented during

construction activities are listed in Section 16.30.070 of the *Mendocino County Code* (2023). Additionally, prior to construction, the RVCWD would be required to obtain a well permit from the Mendocino County Health Department, pursuant to Title 16 of the *Mendocino County Code* (2023). One of the purposes of Title 16 of the *Mendocino County Code* (2023) is to "preserve and protect the groundwaters of Mendocino County from contamination or pollution." Through compliance with Ordinance No. 4313, proper implementation of appropriate BMPs, and compliance with a well permit, the Project would not violate water quality standards or waste discharge requirements.

On July 18, 2023, LACO prepared a work plan for drilling test wells at the Site (separate from the test well locations described for this Project) and sent the work plan to the NCRWQCB. The work plan determined that a HVOC plume from the Masonite Corporation is located south of the Site; however, monitoring of the existing MCWD well at the Site indicates that the plume has not impacted groundwater resources at the Site. The NCRWQCB sent a letter on July 19, 2023, approving the work plan. The work plan and the NCRWQCB approval have been included as Appendix 13. Please note the work plan was not prepared for this Project; and, if required, a new work plan will be prepared for this Project and approved by the NCRWQCB prior to construction. However, the finding that the HVOC plume has not impacted groundwater at the Site is still relevant. As such, water quality at the Site is not a concern for the Project. ***A less than significant impact would occur.***

X.b) The proposed Project is not anticipated to substantially decrease groundwater supplies or interfere with groundwater recharge such that the Project may impede sustainable groundwater management of a groundwater basin. The Site is located within the Ukiah Valley Groundwater Basin (DWR, 2018) (Appendix 14). According to the Ukiah Valley GSA's *Ukiah Valley Groundwater Sustainability Plan* (2021), historic water surface elevations were analyzed to identify trends in groundwater level fluctuations in the Ukiah Valley Groundwater Basin. In general, between 2014 and 2019, water levels in the Ukiah Valley Groundwater Basin have remained stable. There was very little fluctuation in groundwater levels for the north and central portions of the Ukiah Valley Groundwater Basin, where the Site is, with seasonal fluctuations ranging to around 10 feet but holding steady over the entire study period (2021). Although the Project involves developing up to two (2) new water supply wells that would provide a minimum capacity of 300 gpm and connecting them to existing water system infrastructure, the Project is not anticipated to substantially decrease groundwater supplies or interfere with groundwater recharge, as historic groundwater levels in the Ukiah Valley Groundwater Basin have remained stable. The aquifer in which the Site is located (Terrace Deposits) has an estimated available storage of 324,000 acre-feet (Ukiah Valley GSA, 2021). The 300 gpm that the new wells would produce would be miniscule in comparison to the 324,000 acre-feet of storage within the aquifer. The Site receives an average of 39.93 inches of precipitation a year (United States Climate Data, No Date). As the Project would not substantially increase impervious surfaces at the Site, the Project would not interfere with groundwater recharge from precipitation. Furthermore, pursuant to Title 16 of the *Mendocino County Code* (2023), the RVCWD would be required to obtain a well permit from the Mendocino County Health Department. This would ensure that the proposed wells would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. ***A less than significant impact would occur.***

X.c.i) The Project would not alter the existing drainage pattern of the Site in a manner which would result in substantial erosion or siltation on- or off-site. The Project would involve developing up to two (2) new water supply wells and connecting them to existing water system infrastructure. Upon completion of the Project, the only above-ground improvement that would remain in place would be the wells. As such, the existing drainage patterns of the Site would remain largely unaltered. In addition, as discussed above, the Project would be required to comply with Ordinance No. 4313, (Stormwater Runoff Pollution Prevent Procedure) of the *Mendocino County Code* (2023) (Section 16.30 et. seq.), which requires any person performing

construction and grading work anywhere in the unincorporated areas of Mendocino County to implement appropriate BMPs to control erosion and prevent the discharge of construction waste, debris, or contaminants from construction materials, tools, and equipment from entering the storm drainage system (off-site). BMPs that must be implemented during construction activities are listed in Section 16.30.070 of the *Mendocino County Code* (2023). As a result, implementation of the Project would not result in substantial erosion or siltation. ***A less than significant impact would occur.***

X.c.ii-iii) The Project would not substantially increase the rate or amount of surface runoff in a matter which would result in flooding on- or off-site, 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. The Project would involve developing up to two (2) new water supply wells and connecting them to existing water system infrastructure. Upon completion of the Project, the only above-ground improvement that would remain in place would be the wells. The majority of the Site would remain undeveloped such that the majority of stormwater runoff from the Site would continue to follow natural drainage patterns and infiltrate into the soil. Through implementation of the Project, existing drainage patterns of the Site would remain largely unaltered. ***A less than significant impact would occur.***

X.c.iv) As discussed above, the northeastern portion of the Site is located within the 100-year flood zone, the western border of the Site is located within the 500-year flood zone, and the portion of the Site where the infiltration basins are located is defined as an area of minimal flood hazard. The proposed wells and water lines would be located within the 100-year flood zone. As discussed above, a floodplain development permit is not required for the Project.

The Project would not be anticipated to impede or redirect flood flows. Upon completion of the Project, the only above-ground improvement that would remain in place would be the wells. The majority of the Site would remain undeveloped such that floodwater would flow in a similar manner as before construction of the Project. ***A less than significant impact would occur.***

X.d) The northeastern portion of the Site is located within the 100-year flood zone, the western border of the Site is located within the 500-year flood zone, and the portion of the Site where the infiltration basins are located is defined as an area of minimal flood hazard. The proposed wells and water lines would be located within the 100-year flood zone. As discussed above, a floodplain development permit is not required for the Project.

The Project would not risk the release of pollutants due to inundation. Although the Project is located in the floodplain, the Project involves developing up to two (2) new water supply wells and connecting them to existing water system infrastructure. The proposed Project would require the transport, use, storage, and disposal of small quantities of hazardous materials common for equipment and site management and operation, such as gasoline, diesel fuel, hydraulic fluids, oils, lubricants, and cleaning solvents and supplies. However, all hazardous materials would be utilized and disposed of in accordance with all applicable federal and state regulations. Due to the nature of the Project and compliance with applicable federal and state regulations, there would not be a risk of the release of pollutants due to inundation. ***A less than significant impact would occur.***

X.e) The Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. The Ukiah Valley GSA's *Ukiah Valley Groundwater Sustainability Plan* (2021) contains six (6) sustainability indicators: (1) chronic lowering of groundwater levels; (2) reduction of groundwater storage; (3) seawater intrusion; (4) degraded water quality; (5) land subsistence; and (6)

depletions of interconnected surface water. The absence of undesirable results related to the six (6) sustainability factors indicate that the *Ukiah Valley Groundwater Sustainability Plan* (2021) is achieving its sustainability goal. As discussed above, the Project is not anticipated to substantially degrade surface or groundwater quality, substantially decrease groundwater supplies, or interfere with groundwater recharge. As such, the Project would not be anticipated to conflict with or obstruct implementation of the *Ukiah Valley Groundwater Sustainability Plan* (2021). ***A less than significant impact would occur.***

MITIGATION MEASURES

No mitigation required.

FINDINGS

The proposed Project would have a ***Less Than Significant Impact*** on Hydrology and Water Quality.

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

DISCUSSION

The Site is located within unincorporated Mendocino County. The Site has a land use designation of Industrial (I) pursuant to the *Mendocino County General Plan* (2020) and a zoning designation of General Industrial (I2) pursuant to the *Mendocino County Code* (2023). The proposed Project involves developing up to two (2) new water supply wells and connecting them to existing water system infrastructure.

XI.a) The proposed Project would not physically divide an established community. The only above-ground development resulting from the Project would be the two (2) wells and connecting to existing water system infrastructure. This would not physically divide an established community, as the Project would be consistent with the existing infrastructure at the Site. ***No impact would occur.***

XI.b) The proposed Project would not 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. The Project is a permitted use at the Site and would be consistent with the existing infrastructure at the Site. ***A less than significant impact would occur.***

MITIGATION MEASURES

No mitigation required.

FINDINGS

The proposed Project would have a ***Less Than Significant Impact*** on Land Use and Planning.

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

DISCUSSION

The Project is not located in an area of known rock, aggregate, sand, or other mineral resource deposits of local, regional, or state residents. There are no known mineral resources of significance on the Site that would be made unavailable by the Project. Furthermore, the Site is not utilized for Surface Mining and Reclamation Act (SMARA) activities.

XII.a-b) The Site does not contain mineral resources that are of value locally, to the region, or to residents. The Site is not identified as a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Therefore, the Project would not interfere with materials extraction or otherwise cause a short-term or long-term decrease in the availability of mineral resources. ***No impact would occur.***

MITIGATION MEASURES

No mitigation required.

FINDINGS

The proposed Project would have ***No Impact*** on Mineral Resources.

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

DISCUSSION

Noise is typically defined as unwanted sound. In any one location, the noise level will vary over time, from the lowest background or ambient noise level to temporary increases caused by traffic or other sources. State and federal standards have been established as guidelines for determining the compatibility of a particular use with its noise environment. According to Table 3-C (Projected Noise levels on Major Roadways) of Chapter 3 (Development Element) of the *Mendocino County General Plan* (2020), noise levels are approximately 60 A-weighted decibels (dBA) 760 feet from the centerline of Highway 101 in the area of the Site. The nearest segment of Highway 101 to the portion of the Site where work would occur is over 0.4 miles (2,100 feet) southwest. As such, noise levels at the Site would be anticipated to be less than 60 dBA.

Sensitive noise receptors are generally defined as locations where people reside or where the presence of unwanted sound or vibration could adversely affect the primary intended use of the land. Places where people live, sleep, recreate, worship, and study are generally considered to be sensitive to noise because intrusive noise and/or vibration can be disruptive to these activities. The nearest potential sensitive receptors to the Site are the Tree of Life Charter School, located approximately 0.33 miles southwest of the Site, and residential development, located approximately 0.48 miles west of the Site.

XIII.a-b) Implementation of the proposed Project would not be expected to generate noise in excess of what is common for such improvements, nor would the Project result in excessive ground borne vibration or ground borne noise levels. During construction, temporary noise would be anticipated as a result of construction equipment. Construction equipment to be used would include, but not be limited to, a drill rig, backhoe, light-duty trucks, and hand tools. However, these noise impacts would be temporary in nature and would be limited to between the hours of 7:00 a.m. and 7:00 p.m. Monday through Saturday. Additionally, with the exception of minor nearby vibrations created from standard construction equipment, there are no elements of the proposed Project that would create either temporary or permanent ground borne vibrations of noise levels.

Once construction is complete, operational noise would be associated with existing noise levels due to operation and occasional maintenance of the existing water system infrastructure at the Site. An increase in noise, if any, would be negligible, and no ground borne vibrations would be anticipated. ***A less than significant impact would occur.***

XIII.c) The Site is not located within the vicinity of an airport. The nearest airport is Ukiah Municipal Airport, located approximately 2.6 miles south of the Site. According to Figure 3-3 (Ukiah Municipal Airport Projected Noise Contours) of Chapter 3 (Development Element) of the *Mendocino County General Plan* (2020), the Site is located outside of the Ukiah Municipal Airport noise contours. ***No impact would occur.***

MITIGATION MEASURES

No mitigation required.

FINDINGS

The proposed Project would have a ***Less Than Significant Impact*** on Noise.

XIV. 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 (e.g., by proposing new homes and/or businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

DISCUSSION

According to the Housing Element (2019-2027 Update) of the *Mendocino County General Plan* (2020), between 1970 and 2000, the County's population increased by 70 percent. The growth rate has since slowed and was only 1.3 percent from 2010 to 2019, increasing from 87,841 residents to 89,009 residents. The anticipated growth by 2030 is a 4 percent increase from 2019, resulting in a population of about 92,655 residents (County of Mendocino, 2020).

XIV.a) The Project would not induce substantial population growth in Mendocino County as the Project involves developing up to two (2) new water supply wells and connecting them to existing water system infrastructure. No residential units would be introduced to the Site. Constructions would be temporary in nature, and as construction workers would likely be local, people would not need to move to the area as a result of the Project. The two (2) wells would be operated by existing staff as part of ongoing maintenance and operation, with no additional staff needed. Although the Project would involve developing up to two (2) wells, the Project is intended to provide a reliable water supply to the RVCWD's existing customers, as the RVCWD does not currently have an adequate reliable water source. As such, the Project would not be anticipated to induce substantial population growth through the extension of water system infrastructure. ***A less than significant impact would occur.***

XIV.b) The Project would not displace existing people or housing as no existing residential units are located at the Site and the Project would not induce population growth. ***No impact would occur.***

MITIGATION MEASURES

No mitigation required.

FINDINGS

The proposed Project would have a ***Less Than Significant Impact*** on Population and Housing.

XV. PUBLIC SERVICES. Would the project 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:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Fire protection?	☐	☐	☐	☒
b) Police protection?	☐	☐	☐	☒
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

DISCUSSION

According to Figure 3-12 (Fire Protection Agencies) of Chapter 3 (Development Element) of the Mendocino County General Plan (2020), fire protection services at the Site are provided by the Ukiah Valley Fire Authority. The nearest fire station to the Site is located at 141 Lovers Lane, Ukiah, approximately 0.45 miles west of the Site.

According to Chapter 3 (Development Element) of the *Mendocino County General Plan* (2020), police protection services at the Site are provided by the Mendocino County Sheriff's Office. The main station is located at 501 Low Gap Road, Ukiah, approximately 1 mile southwest of the Site.

There are 13 school districts and two (2) community college districts that serve Mendocino County, with each district comprised of various numbers of traditional public schools, charter schools, preschools, adult education, and special training opportunities. Table 3-H (Public School in Mendocino County) of Chapter 3 (Development Element) of the *Mendocino County General Plan* (2020) lists schools operated by each district in Mendocino County. The nearest school to the Site is the Tree of Life Charter School, located approximately 0.33 miles southwest.

A description of parks and recreational facilities in the general vicinity of the Site is in Section XVI (Recreation), below.

XV.a-b) The proposed Project would not create additional facilities that would require increased fire or police protection above current levels. None of the proposed improvements would require increased fire protection services and all development would be located within the existing service area of the Ukiah Valley Fire Authority. There are no portions of the proposed Project that would require additional police protection. Additionally, as discussed in Section XIV (Population and Housing), the Project would not be anticipated to induce unplanned population growth. ***No impact would occur.***

XV.c) The nearest school to the Site is the Tree of Life Charter School, located approximately 0.33 miles southwest. As discussed in Section XIV (Population and Housing), the Project would not be anticipated to induce unplanned population growth. As the proposed Project would not create a need for a new or

physically-altered school facility, the Project would not result in adverse physical impacts associated with the construction of such a facility. ***No impact would occur.***

XV.d-e) As discussed in Section XIV (Population and Housing), no residential units would be constructed, nor is the population expected to substantially increase as a result of the Project. As the Project would not substantially increase the population, it would not create a need for new or physically altered park facilities or other public facilities. Therefore, no adverse physical impacts would be associated with the construction of such facilities. ***No impact would occur.***

MITIGATION MEASURES

No mitigation required.

FINDINGS

The proposed Project would have ***No Impact*** on Public Services.

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

DISCUSSION

The Site is located in the vicinity (within 2 miles) of the following neighborhood and regional parks and recreational facilities:

- Vinewood Park, located approximately 0.75 miles southwest of the Site;
- Ukiah Sports Complex, located approximately 0.82 miles southeast of the Site;
- Oak Manor Park, located approximately 1.75 miles southeast of the Site;
- Todd Grove Park, located approximately 1.52 miles southwest of the Site;
- Giorno Park, located approximately 1.7 miles southwest of the Site; and
- Low Gap Park, located approximately 1.37 miles southwest of the Site.

XVI.a-b) No residential units would be constructed, nor is the population expected to substantially increase, as a result of the proposed Project. There would not be an increase in the usage of or demand for neighborhood and regional parks or other recreational facilities. Therefore, the Project would not result in the physical deterioration of parks or facilities, nor would they require the construction of new parks or recreational facilities. ***No impact would occur.***

MITIGATION MEASURES

No mitigation required.

FINDINGS

The proposed Project would have ***No Impact*** on Recreation.

XVII. 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 section 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?	☐	☐	☒	☐

DISCUSSION

On September 27, 2013, Governor Jerry Brown signed SB 743 into law, initiating an update to the CEQA Guidelines to change how lead agencies evaluate transportation impacts under CEQA, with the goal to better measure the actual transportation-related environmental impacts of a given project. Traditionally, transportation impacts had been evaluated by using Level of Service (LOS) analysis. Starting July 1, 2020, lead agencies are required to analyze the transportation impacts of new projects using vehicle miles traveled (VMT), instead of LOS. According to the *SB 743 Frequently Asked Questions* provided by the Governor's Office of Planning and Research (OPR), VMT measures how much actual auto travel (additional miles driven) a proposed project would create on California roads. If the Project adds excessive car travel onto the roads, the Project may cause a significant transportation impact. VMT analysis is intended to promote the state's goals of reducing greenhouse gas emissions and traffic-related air pollution, promoting the development of a multimodal transportation system, and providing clean, efficient access to destinations (OPR, No Date). The Mendocino County of Governments adopted *Senate Bill 743 Vehicle Miles Traveled Regional Baseline Study* in 2020 to summarize how Senate Bill 743 can be interpreted in Mendocino County, provide recommendations and alternatives for VMT thresholds and measurements, and recommends strategies for reducing VMT on projects in Mendocino County.

The proposed Project involves developing up to two (2) new water supply wells and connecting them to existing water system infrastructure. The Site is accessed via an existing driveway at the northwestern corner of the Site and is currently partially developed with several gravel roads.

XVII.a) The proposed Project would not conflict with a plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lands, and pedestrian paths. It is expected that construction of the Project would result in a slight temporary increase in traffic to and from the Site, as constructions workers arrive and leave the Site at the beginning and end of the day, in addition to minor interruption of traffic on adjacent streets, when equipment for Project construction is brought to and removed from the Site. However, construction-related impacts to traffic would be minimal and temporary in nature.

Operation and maintenance of the Project is not anticipated to significantly increase traffic to and from the Site, as operation and maintenance activities would be consistent with existing operation and maintenance of the MCWD infrastructure. As such, the Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. ***A less than significant impact would occur.***

XVII.b) The proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b), which states:

> *"(1) Land Use Projects. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be considered to have a less than significant transportation impact.*
>
> *(2) Transportation Projects. Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, a lead agency may tier from that analysis as provided in Section 15152."*

The proposed Project involves developing up to two (2) new water supply wells and connecting them to existing water system infrastructure, and as such the Project is not considered a land use project or transportation project. As discussed above, the Project is not anticipated to significantly increase traffic to and from the Site. Therefore, the Project would not significantly increase VMT and would not conflict with CEQA Guidelines section 15064.3, subdivision (b). ***A less than significant impact would occur.***

XVII.c-d) The proposed Project is not anticipated to substantially increase hazards due to design features or incompatible uses and would not result in inadequate emergency access, as the Project proposes no improvements to or that would interfere with existing transportation facilities or access corridors. As previously discussed, the Project involves developing up to two (2) new water supply wells and connecting them to existing water system infrastructure. The two (2) wells would be constructed and accessed during operation from existing access roads, with no changes to the existing access roads required to serve the Project. ***A less than significant impact would occur.***

MITIGATION MEASURES

No mitigation required.

FINDINGS

The proposed Project would have a ***Less Than Significant Impact*** on Transportation.

XVIII. TRIBAL CULTURAL RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §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 §5020.1(k)?	☐	☒	☐	☐
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 Resources Code §5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

DISCUSSION

Per Chapter 3 (Development Element) of the *Mendocino County General Plan* (2020), ten (10) Native American tribes historically had territory in what is now Mendocino County. Native American tribes known to inhabit Mendocino County concentrated mainly along the coast and along major rivers and streams, while mountainous areas and redwood groves were occupied seasonally by some tribes. The first permanent non-native settlers came to Mendocino County in the middle of the 16th century, exploring and establishing small outposts. It was almost 300 years before the first permanent non-Spanish settlements in Mendocino County were established in April of 1852 on the coast north of Big River. As European-American settlement expanded in Mendocino County, most of the tribes known to inhabit the land were restricted to reservations and rancherias. During the 19th century, other tribes from the interior of California were forced to settle on the Round Valley Reservation in the northeastern portion of Mendocino County.

During preparation of the Archaeological Report dated April 22, 2024, ALTA contacted the NAHC on March 26, 2024, to request a review of the SLF for information of Native American cultural resources within the Project Area and to request a list of Native American contacts in the Project Area. The NAHC responded on March 28, 2024, indicating that a search of the SLF returned a positive result and recommended contacting the Pinoleville Pomo Nation for more information. The NAHC also provided a contact list of Native American tribes with an interest in the Project Area. On March 26, 2024, ALTA sent a letter to the THPO or appropriate representative of each tribal group associated with the Project Area to notify them of the Project. As of April 22, 2024, no responses had been received.

On April 19 and 22, 2024, in compliance with AB 52, the RVCWD, sent consultation letters to the THPO or appropriate representative for each of the 22 Native American tribes from the NAHC contact list, including Big Valley Rancheria of Pomo Indians, Cahto Tribe, Cloverdale Rancheria of Pomo Indians, Coyote Valley Band of Pomo Indians, Elem Indians Colony Pomo Tribe, Estom Yumeka Maidu Tribe of the Enterprise

Rancheria, Guidiville Rancheria of California, Hopland Band of Pomo Indians, Koi Nation of Northern California, Lytton Rancheria, Manchester Band of Pomo Indians of California, Noyo River Indian Community, Pinoleville Pomo Nation, Potter Valley Tribe, Little River Band of Pomo Indians of the Redwood Valley Rancheria, Robinson Rancheria of Pomo Indians, Round Valley Reservation/Covelo Indian Community, Scotts Valley Band of Pomo, Sherwood Valley Rancheria of Pomo, and Yokayo Tribe. A copy of the letter sent to Native American tribes has been included in Appendix 8. Two (2) responses were received, including a response from the Cahto Tribe and the Sherwood Valley Rancheria of Pomo Indians, expressing that both tribes had no concerns related to the Project. As no requests for consultation were received within the 30-day deadline specified by Public Resources Code section 21082.3 (d), the RVCWD, as Lead Agency, has deemed the tribal consultation process pursuant to AB 52 complete.

XVIII.a.i-ii) As discussed in Section V (Cultural Resources), above, no historical resources have been identified at the Site, no responses were received from the tribal consultation efforts that expressed concerns regarding the Project, and there are no known tribal cultural resources at the Site. However, there is the possibility that a tribal cultural resource could be inadvertently discovered due to the ground-disturbing activities required during construction. The incorporation of Mitigation Measures CUL-1 and CUL-2 would require that standard protocol is implemented during construction of the Project in the event of inadvertent discovery, which requires work to be halted in the event that archaeological resources, cultural resources, or human remains are encountered, proper contacts be notified, and the find(s) evaluated, which would ensure that any currently unknown tribal cultural resources that are discovered during construction are not adversely impacted. ***A less than significant impact with mitigation would occur.***

MITIGATION MEASURES

Refer to Mitigation Measures CUL-1 and CUL-2 under Section V (Cultural Resources), above.

FINDINGS

The proposed Project would have a ***Less Than Significant Impact with Mitigation Incorporated*** on Tribal Cultural Resources.

XVIX. 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 stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, 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?	☐	☐	☒	☐

DISCUSSION

The proposed Project involves developing up to two (2) new water supply wells and connecting them to existing water system infrastructure. The Project would establish an additional water source for the RVCWD, allowing it to provide a reliable water supply to its customers. The Project proposes no changes to wastewater treatment facilities, electric facilities, telecommunication facilities, storm drainage infrastructure, or solid waste services.

XVIX.a) Although the Project would involve developing up to two (2) wells, the Project is intended to provide a reliable water supply to its existing customers, as the RVCWD does not currently have an adequate reliable water source. Development of the two (2) wells would not result in significant environmental effects, as no unmitigable significant environmental effects were identified in this IS.

Electricity at the Site is currently provided by Pacific Gas and Electric Company (PG&E). Although the Project would require a minimal increase in electricity usage for operation of the wells, no new or expanded electric facilities would be required.

The Project would have no impact on wastewater treatment facilities, storm drainage infrastructure, or telecommunication facilities. ***A less than significant impact would occur.***

XVIX.b) The Project would have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. As discussed in Section X (Hydrology and Water Quality), above, according to the Ukiah Valley GSA's *Ukiah Valley Groundwater Sustainability Plan* (2021), historic water surface elevations were analyzed to identify trends in groundwater

level fluctuations in the Ukiah Valley Groundwater Basin. In general, between 2014 and 2019, water levels in the Ukiah Valley Groundwater Basin have remained stable. There was very little fluctuation in groundwater levels for the north and central portions of the Ukiah Valley Groundwater Basin, where the Site is, with seasonal fluctuations ranging to around 10 feet but holding steady over the entire study period (2021). Although the Project involves developing up to two (2) new water supply wells that would provide a minimum capacity of 300 gpm and connecting them to existing water system infrastructure, the Project is not anticipated to substantially decrease groundwater supplies or interfere with groundwater recharge, as historic groundwater levels in the Ukiah Valley Groundwater Basin have remained stable. The aquifer in which the Site is located (Terrace Deposits) has an estimated available storage of 324,000 acre-feet (Ukiah Valley GSA, 2021). The 300 gpm that the new wells would produce would be miniscule in comparison to the 324,000 acre-feet of storage within the aquifer. The Site receives an average of 39.93 inches of precipitation a year (United States Climate Data, No Date). As the Project would not substantially increase impervious surfaces at the Site, the Project would not interfere with groundwater recharge from precipitation. Furthermore, pursuant to Title 16 of the Mendocino County Code (2023), the RVCWD would be required to obtain a well permit from the Mendocino County Health Department. This would ensure that the proposed wells would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. ***A less than significant impact would occur.***

XVIX.c) The Project proposes no changes to wastewater facilities and would not result in an increase in wastewater at the Site. ***No impact would occur.***

XVIX.d-e) A significant amount of solid waste is not anticipated under the proposed Project. The majority of solid waste generated by the Project would be anticipated during the construction phase. Once constructed, the Project would be anticipated to generate minimal solid waste. Waste generated at the Site throughout the entire duration of the Project would be hauled away and properly disposed of at permitted disposal facilities. ***A less than significant impact would occur.***

MITIGATION MEASURES

No mitigation required.

FINDINGS

The proposed Project would have a ***Less Than Significant Impact*** on Utilities and Service Systems.

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

DISCUSSION

Several plans that include wildfire hazard management and mitigation have been adopted in Mendocino County, including, but not limited to: *Mendocino County Community Wildfire Protection Plan* (2005), *Emergency Operations Plan* (EOP) (2016), and *Multi-Jurisdictional Hazard Mitigation Plan* (2021). The EOP, which complies with local ordinances, State law, and State and federal emergency planning guidance, serves as the primary guide for coordinating and responding to all emergencies and disasters within Mendocino County. The purpose of the EOP is to "facilitate multi-agency and multi-jurisdictional coordination during emergency operations, particularly between Mendocino County, local and tribal governments, special districts as well as state and Federal agencies" (County of Mendocino, No Date).

The Site is located within the LRA (CAL FIRE, No Date). Fire protection services at the Site are provided by the Ukiah Valley Fire Authority (County of Mendocino, 2020). The nearest fire station to the Site is located at 141 Lovers Lane, Ukiah, approximately 0.45 miles west of the Site. According to Figure 3-11A (Wildfire Hazard Severity Zones) of Chapter 3 (Development Element) of the *Mendocino County General Plan* (2020), the Site is mapped as a "Moderate" FHSZ.

XX.a) There are no components of the proposed Project that would impair an adopted emergency response plan or emergency evaluation plan. The Site is located within the LRA and within a "Moderate" FHSZ. The Site consists of water system infrastructure and the Project would involve developing up to two (2) new water supply wells, which would have no impact of emergency response or evacuation at the Site. ***A less than significant impact would occur.***

XX.b) Under the proposed Project, it is not anticipated that wildfire risks would be exacerbated due to slope, prevailing winds, and other factors. The Site is relatively flat and at an approximate elevation of 615 feet above sea level. There are no factors at the Site that would cause an exacerbated risk of wildfire due to implementation of the Project. ***A less than significant impact would occur.***

XX.c) The proposed Project would not require the installation or maintenance of associated infrastructure that would exacerbate fire risk or result in temporary or ongoing impacts to the environment. The Site currently consists of water system infrastructure and the Project would involve developing up to two (2) new water

supply wells. The two (2) wells would be accessed via existing access roads at the Site. Therefore, the Project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary ongoing impacts to the environment. ***A less than significant impact would occur.***

XX.d) The proposed Project would not 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 challenges, as the Site and surrounding area is relatively flat. ***A less than significant impact would occur.***

MITIGATION MEASURES
No mitigation required.

FINDINGS
The proposed Project would have a ***Less Than Significant Impact*** on Wildfire.

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

DISCUSSION

Certain mandatory findings of significance must be made to comply with CEQA Guidelines §15065. The proposed Project has been analyzed and it has been determined that it would not:

- Substantially degrade environmental quality;
- Substantially reduce fish or wildlife habitat;
- Cause a fish or wildlife population to fall below self-sustaining levels;
- Threaten to eliminate a plant or animal community;
- Reduce the numbers or range of a rare, threatened, or endangered species;
- Eliminate important examples of the major periods of California history or pre-history;
- Achieve short term goals to the disadvantage of long term goals;
- Have environmental effects that will directly or indirectly cause substantial adverse effects on human
- beings; or
- Have possible environmental effects that are individually limited but cumulatively considerable when viewed in connection with past, current, and reasonably anticipated future projects.

Potential environmental impacts would be related to developing up to two (2) wells and connecting them to the existing water system infrastructure. Potential environmental impacts have been analyzed in this document and mitigation measures have been included in the document to ensure impacts would be held to a less-than-significant level.

XXI.a) The Project does not 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 species, 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. As discussed in Section IV (Biological Resources), Mitigation Measures BIO-1 through BIO-3 would require pre-construction surveys for birds, foothill yellow legged frogs,

and western pond turtles, and minimize unnecessary disturbance around the work area. As discussed in Section V (Cultural Resources), no cultural resources were identified at the Site, and Mitigation Measures CUL-1 and CUL-2 would require standard protocol is implemented during construction in the event of inadvertent discovery to ensure that archaeological resources, cultural resources, and human remains are not adversely impacted by the Project. ***A less than significant impact with mitigation incorporated would occur.***

XXI.b) No cumulative impacts have been identified as a result of the proposed Project. Based on the analysis in this Initial Study, it is anticipated that potential impacts from the Project would be less than significant and would not contribute to significant cumulative impacts. All potential impacts have been mitigated to less than significant levels. There are no known projects in the general vicinity of the Site that may cause a cumulative impact with the Project. ***A less than significant impact with mitigation incorporated would occur.***

XXI.c) The Project will not have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly. Based on the findings in this Initial Study, potential environmental impacts associated with the Project have been analyzed and mitigated to a less-than-significant level. ***A less than significant impact with mitigation incorporated would occur.***

MITIGATION MEASURES

Refer to Mitigation Measures BIO-1 through BIO-3 in Section IV (Biological Resources), CUL-1 and CUL-2 in Section V (Cultural Resources), GEO-1 in Section VII (Geology and Soils), above.

FINDINGS

The proposed Project would have a ***Less Than Significant Impact with Mitigation Incorporated*** on Mandatory Findings of Significance.

VI. REFERENCES

California Air Resources Board (CARB). 2018. *AB 32 Scoping Plan*. Accessed April 16, 2024. Available at: https://ww3.arb.ca.gov/cc/scopingplan/scopingplan.htm.

California Air Resources Board (CARB). 2024(a). *California Ambient Air Quality Standards.* Accessed May 23, 2024. Available at: https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards.

California Air Resources Board (CARB). 2024(b). *2000-2022 GHG Inventory (2024 Edition)*. Accessed January 6, 2025. Available at: https://ww2.arb.ca.gov/ghg-inventory-data.

California Code of Regulation (CCR). 2005. *Title 13 §2485. Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling*. Accessed April 12, 2024. Available at: https://ww2.arb.ca.gov/sites/default/files/2022-06/13_CCR_2485_OAL_06222022-2_ADA_06272022_0.pdf.

California Department of Conservation (DOC), California Geological Survey (CGS). No Date. *Alquist-Priolo Earthquake Fault Zones*. Accessed April 15, 2024. Available at: https://www.conservation.ca.gov/cgs/alquist-priolo.

California Department of Conservation (DOC), California Geological Survey (CGS). Revised December 2002. *California Geomorphic Provinces.* Accessed April 15, 2024. Available at: https://www.conservation.ca.gov/cgs/Documents/Publications/CGS-Notes/CGS-Note-36.pdf.

California Department of Conservation (DOC), California Geological Survey (CGS). 2015. *Fault Activity Map of California.* Accessed April 15, 2024. Available at: https://maps.conservation.ca.gov/cgs/fam/.

California Department of Conservation (DOC). 2022. *California Important Farmland Finder*. Accessed April 11, 2024. Available at: https://maps.conservation.ca.gov/dlrp/ciff/.

California Department of Conservation (DOC), California Geological Survey (CGS). 2022. *Earthquake Zones of Required Investigation.* Accessed April 15, 2024. Available at: https://maps.conservation.ca.gov/cgs/EQZApp/.

California Department of Fire Protection (CAL FIRE). No Date. *State Responsibility Area (SRA) Viewer.* Accessed April 19, 2024. Available at: https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=468717e399fa4238ad86861638765ce1.

California Department of Toxic Substances Control (DTSC). 2024. *EnviroStor.* Accessed April 16, 2024. Available at: https://www.envirostor.dtsc.ca.gov/public/.

California Department of Transportation (Caltrans). 2024. *Scenic Highways*. Accessed April 10, 2024. Available at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways.

California Department of Water Resources (DWR). 2018. *Groundwater Basin Boundary Assessment Tool.* Accessed April 19, 2024. Available at: https://gis.water.ca.gov/app/bbat/.

California Energy Commission (CEC). No Date. *Clean Energy and Pollution Reduction Act – SB 350*. Accessed April 12, 2024. Available at: https://www.energy.ca.gov/rules-and-regulations/energy-suppliers-reporting/clean-energy-and-pollution-reduction-act-sb-350.

California Energy Commission (CEC). 2022. *2022 Building Energy Efficiency Standards for Residential and Nonresidential Buildings: For the 2022 Building Energy Efficiency Standards Title 24, Part 6, and Associated Administrative Regulations in Part 1*. Accessed April 12, 2024. Available at: https://www.energy.ca.gov/publications/2022/2022-building-energy-efficiency-standards-residential-and-nonresidential.

County of Mendocino. No Date. *Plans and Publications: Mendocino County Operational Area Plans.* Accessed April 19, 2024. Available at: https://www.mendocinocounty.gov/government/executive-office/office-of-emergency-services/plans-and-publications.

County of Mendocino. 2005. *Mendocino County Community Wildfire Protection Plan.* Accessed April 19, 2024. Available at: https://www.co.mendocino.ca.us/bos/meetings/28658/28666/28667/28988/29050/ProtectionPlan29050.pdf.

County of Mendocino. September 2016. *Mendocino County Operational Area: Emergency Operations Plan.* Accessed April 19, 2024. Available at: https://www.mendocinocounty.gov/home/showdocument?id=8211.

County of Mendocino. Revised 2020. *Mendocino County General Plan, Chapter 3: Development Element.* Accessed April 12, 2024. Available at: https://www.mendocinocounty.gov/home/showpublisheddocument/54479/638055061911270000.

County of Mendocino. Revised 2020. *Mendocino County General Plan, Chapter 4: Resource Management Element*. Accessed April 10, 2024. Available at: https://www.mendocinocounty.gov/home/showpublisheddocument/54487/638055061981600000.

County of Mendocino. Adopted September 1, 2020. *Mendocino County General Plan*: Housing Element 2019-2027 Update. Accessed April 17, 2024. Available at: https://www.mendocinocounty.gov/home/showpublisheddocument/44814/637636854812800000.

County of Mendocino. February 4, 2021. *Mendocino County Multi-Jurisdictional Hazard Mitigation Plan.* Accessed April 19, 2024. Available at: https://www.mendocinocounty.gov/home/showpublisheddocument/54485/638055061974270000.

County of Mendocino. Updated September 26, 2023. *Mendocino County Code*. Accessed April 11, 2024. Available at: https://library.municode.com/ca/mendocino_county/codes/code_of_ordinances?nodeId=MECOCO_PR.

Federal Emergency Management Agency (FEMA). December 2021. *FEMA Flood Map Service Center*. Accessed April 19, 2024. Available at: https://msc.fema.gov/portal/home.

Mendocino Council of Governments. May 20, 2020. *Senate Bill 743 Vehicle Miles Traveled Regional Baseline Study*. Accessed May 28, 2024. Available at: https://www.mendocinocog.org/vehicle-miles-traveled-vmt-regional-baseline-study-completed.

Mendocino County Air Quality Management District (MCAQMD). January 2005. *Particulate Matter Attainment Plan*. Accessed April 1, 2024. Available at: https://www.co.mendocino.ca.us/aqmd/pm-attainment.html.

Mendocino County Air Quality Management District (MCAQMD). February 15, 2011. *Rules and Regulations. Regulation 1 – Air Pollution Control Rules.* Accessed April 12, 2024. Available at: http://www.co.mendocino.ca.us/aqmd/district-regulation-1.html.

North Coast Regional Water Quality Control Board (NCRWQCB). Updated April 29, 2024. *Russian River Watershed Total Maximum Daily Loads (TMDLS)*. Accessed April 30, 2024. Available at: https://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/russian_river/.

North Coast Unified Air Quality Management District (NCUAQMD). No Date. *Planning & CEQA*. Accessed April 11, 2024. Available at: https://www.ncuaqmd.org/planning-ceqa.

Office of Planning and Research (OPR). No Date. *SB 743 Frequently Asked Questions*. Accessed April 17, 2024. Available at: https://opr.ca.gov/ceqa/sb-743/faq.html#what-is.

State Water Resources Control Board (SWRCB). 2024. *GeoTracker.* Accessed April 16, 2024. Available at: https://geotracker.waterboards.ca.gov/.

Ukiah Valley Basin Groundwater Sustainability Agency (GSA). December 2021. *Ukiah Valley Groundwater Sustainability Plan*. Accessed April 19, 2024. Available at: https://ukiahvalleygroundwater.org/wp-content/uploads/2023/01/GSP.pdf.

United States Climate Data. No Date. *Climate Ukiah – California*. Accessed January 6, 2025. Available at: https://www.usclimatedata.com/climate/ukiah/california/united-states/usca1176.

United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). July 31, 2019. *Web Soil Survey*. Accessed April 15, 2024. Available at: https://websoilsurvey.nrcs.usda.gov/app/.

United States Environmental Protection Agency (EPA). Updated October 30, 2023. *Search for Superfund Sites Where You Live*. Accessed April 16, 2024. Available at: https://www.epa.gov/superfund/search-superfund-sites-where-you-live.

United States Fish and Wildlife Service (USFWS). Updated May 3, 2021. *National Wetlands Inventory: Wetlands mapper*. Accessed April 19, 2024. Available at: https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper.

APPENDIX 1

Mitigation Monitoring and Reporting Program

MITIGATION MONITORING AND REPORTING PROGRAM

Public Resources Code, Section 21081.6 (Assembly Bill 3180) requires that mitigation measures identified in environmental review documents prepared in accordance with California Environmental Quality Act (CEQA) are implemented after a project is approved. Therefore, this Mitigation Monitoring and Reporting Program (MMRP) has been prepared to ensure compliance with the adopted mitigation measures during the implementation of the Infrastructure and Water Resiliency Upgrades (Project). The Redwood Valley County Water District (RVCWD) is the agency responsible for implementation of the mitigation measures identified in the Initial Study.

This MMRP provides the RVCWD with a convenient mechanism for quickly reviewing all the mitigation measures including the ability to focus on select information such as timing. The MMRP includes the following information for each mitigation measure:

- The phase of the project during which the required mitigation measure must be implemented;
- The phase of the project during which the required mitigation measure must be monitored;
- The enforcement agency; and
- The level of significance after mitigation.

The MMRP includes a checklist to be used during the mitigation monitoring period. The checklist will verify the name of the monitor and the date of the monitoring activity.

Mitigation Monitoring and Reporting Program						
Mitigation Measure	**Implementation Phase**	**Monitoring Phase**	**Enforcement Agency**	**Level of Significance After Mitigation**	**Verification of Compliance**	
					Initial	**Date**
Biological Resources						
BIO-1: : If construction activities begin during the nesting season (February 15 through August 15), a qualified biologist shall conduct a pre-construction survey for active nests in suitable nesting habitat within 500 feet of the construction area no more than seven (7) days prior to the initiation of construction. If no active nests are identified during the pre-construction survey, no further mitigation is necessary. If construction is paused for a period of seven (7) days or longer during the nesting season, a supplemental pre-construction survey shall be conducted prior to construction resuming. If active nests are found within the construction footprint or immediately adjacent to construction activities, the qualified biologist shall establish a species-appropriate buffer or exclusion zone around the nest (to be determined by the qualified biologist). Construction activities shall avoid nest buffers until the qualified biologist determines that the birds have fledged and are no longer reliant upon the nest or parental care for survival. The qualified biologist may modify these buffers, in consultation with the California Department of Fish and Wildlife, depending upon the species, nest location, and existing visual buffers. If construction activity is required within the established buffer, the qualified biologist shall be consulted prior to beginning construction activities within this area. If the qualified biologist determines that the activity would impact the nest, the qualified biologist shall have the authority to stop work. If the qualified biologist determines that the activity would not disturb the nest, construction may continue under supervision of the qualified biologist or designee.	Prior to construction	During construction	RVCWD	Less than significant		
BIO-2: A qualified biologist shall conduct a pre-construction survey for foothill yellow-legged frogs and western pond turtles within the area where work will occur no more than seven (7) days prior to the initiation of construction. If these species are not identified, no further mitigation is necessary. If construction is paused for a period of seven (7) days or longer, a supplemental pre-construction survey shall be conducted prior to construction resuming. If foothill yellow-legged frogs or western pond turtles are found within the construction footprint or immediately adjacent to construction activities, the qualified biologist shall relocate the individual(s) from the work area to a safe location. If a western pond turtle nest is found, the qualified	Prior to construction	During construction	RVCWD	Less than significant		

Mitigation Monitoring and Reporting Program						
Mitigation Measure	**Implementation Phase**	**Monitoring Phase**	**Enforcement Agency**	**Level of Significance After Mitigation**	**Verification of Compliance**	
					Initial	**Date**
biologist shall establish a 300-foot no disturbance buffer until the hatchings have departed or the nest is determined to be inactive by the qualified biologist.						
BIO-3: Construction vehicles should utilize existing roadways when possible and minimize unnecessary disturbance around the work area as feasible.	During construction	During construction	RVCWD	Less than significant		
Cultural Resources						
CUL-1: In the event archaeological resources or cultural resources, including human remains, are inadvertently unearthed or discovered during construction, the contractor shall immediately halt all grading/land-clearing activities and contact the RVCWD, who will contact a qualified archaeologist to evaluate the encountered resource(s). Prehistoric resources include, but are not limited to, chert or obsidian flakes, projectile points, mortars, pestles, and dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic-era resources include stone or abode foundations or walls; structures and remains with square nails; and refuse deposits or bottle dumps, often located in old wells or privies. Project personnel shall not collect the potential resources. All activity in the vicinity of the resources shall cease until a qualified archaeologist can evaluate it. If the qualified archaeologist determines that the resources may be significant, they shall notify the RVCWD and develop an appropriate treatment plan for the resources. The archaeologist shall consult with Native American representatives in determining appropriate treatment for prehistoric or Native American cultural resources. In considering any suggested mitigation proposed by the archaeologist, and Native American representative(s), where applicable, the RVCWD will determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, Project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) will be instituted. Work may proceed in other parts of the Site while mitigation for cultural resources is being carried out.	During construction	During construction	RVCWD	Less than significant		
CUL-2: As identified in California Health and Safety Code Section 7050.5, if human remains are encountered on-site, all work must stop in the immediate vicinity of the discovered remains and the Mendocino County Coroner and a qualified archaeologist shall be notified immediately so that an evaluation can be performed. If the remains are deemed to be Native American and prehistoric, per Public Resources Code 5097.98, the NAHC shall be contacted by the Mendocino County Coroner so that a	During construction	During construction	RVCWD	Less than significant		

Mitigation Monitoring and Reporting Program						
Mitigation Measure	**Implementation Phase**	**Monitoring Phase**	**Enforcement Agency**	**Level of Significance After Mitigation**	**Verification of Compliance**	
					Initial	**Date**
"Most Likely Descendant" can be designated and further recommendations regarding treatment of the remains can be provided.						
Geology and Soils						
GEO-1: In the event that paleontological resources, including individual fossils or assemblages of fossils, are encountered during construction activities all ground disturbing activities shall halt, and the County of Mendocino shall be contacted. Additionally, a qualified paleontologist shall be procured to evaluate the discovery and make treatment recommendations.	During construction	During construction	RVCWD	Less than significant		

APPENDIX 2

Site Plan (CEQA Exhibit)

0' 25' 50' 100' 150'

SCALE: 1" = 50'

CEQA EXHIBIT

NO. REVISION | DATE

LACO SURVEYORS | ENGINEERS | PLANNERS | GRANT WRITERS
lacoassociates.com

RVCWD: WATER INFRASTRUCTURE

UKIAH, CA

CEQA EXHIBIT

PLAT NO.
JOB NO. 8049.03
DATE DECEMBER 26, 2024
DESIGNER AR
CHECKED #### DRAWN AR
SHEET C1.0

Date: Jan 02, 2025, 4:19pm User ID: lacoar
File: J:\Shares\Projects\8000\8049.03 RVCWD\Civil\DWG\8049.03 PLAN CEQA EXHIBIT.dwg

APPENDIX 3

Photo Log

LACO

Infrastructure and Water Resiliency Upgrades Photo Log

Mendocino County, California

April 24 and June 10, 2024

Photos were taken by North Coast Resource Management during field surveys and are generally representative of the Site.

LACO

APPENDIX 4

Biological Assessment prepared by North Coast Resource Management and dated September 13, 2024

Biological Assessment
for the
Redwood Valley County Water Supply Project

555 Kunzler Ranch Road, Ukiah
Mendocino County, California 95482
(APN-70-170-06 and APN-170-180-10)

Prepared for:
LACO Associates
PO Box 1023
Eureka, CA 95502

Prepared by:

2501 North State Street
Ukiah, CA 95482

September 13, 2024

TABLE OF CONTENTS

List of Abbreviations, Definitions, and Acronyms

APN	Accessor Parcel Number
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
ESU	Evolutionarily significant unit
FESA	Federal Endangered Species Act
FYLF	Foothill Yellow-Legged Frog
MCWD	Millview County Water District
MDB&M	Mount Diablo Base and Meridian
NCRM	NCRM, Inc.
NMFS	National Marine Fisheries Service
RVCWD	Redwood Valley County Water District
SNC	Sensitive Natural Communities
SSC	Species of Special Concern (wildlife)
SSS	Special-Status Species (plants)
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WPT	Western pond turtle

1.0 Summary

Botanical and wildlife surveys were conducted to determine if any direct or indirect impacts would be associated with the proposed construction of two new wells and water lines on Mendocino County assessor parcels 70-170-06 and 170-180-10 (Figure 1). These surveys were conducted to satisfy the requirements of the California Environmental Quality Act (CEQA). The parcels are located at 555 Kunzler Ranch Road, Ukiah, Mendocino County, California (herein referred to as the Project Area).

NCRM, Inc. (NCRM) botanist Laura Moreno-Baker analyzed botanical resources and conducted reconnaissance-level surveys to assess the potential for project activities to cause significant adverse impacts to special-status plants (SSS) and/or sensitive natural communities (SNC) within the Project Area. Botanical surveys were conducted on April 24, 2024, and June 10, 2024. NCRM biologist, Ben Cook, completed a desktop scoping review for wildlife species of special concern (SSC) and their associated habitats and conducted reconnaissance surveys on June 10, 2024.

Three of the 43 SSS listed in *Appendix A: Special-Status Plant Species and Communities with Potential for Occurrence* have a "moderate" likelihood of occurrence within the Project Area. Of the remaining thirty-eight species without a moderate potential to occur, twelve were deemed "unlikely" to occur, while 28 were categorized as having "none". No special-status plants or sensitive communities were observed during surveys.

Of the 22 SSC on the wildlife scoping list, six were determined to have no chance of occurring and 12 were determined unlikely to occur. Four of the SSC on the scoping list have a moderate potential to occur, while none are considered to have a "high" potential. No sensitive or SSC were observed during surveys. Please refer to Appendix B for species and communities with potential for occurrence.

Following the recommended mitigation measures, we determined that it is unlikely this project would adversely affect any SSC or SSS.

2.0 Project Location

The two parcels in which the Project Area is located are approximately 41 acres total and fall within Section 8, Township 15 North, Range 12 West, within the Ukiah 7.5-minute USGS Quadrangle, in the Mount Diablo Base and Meridian (MDB&M), Mendocino County, California. The Project Area is further identified as Mendocino County Assessor Parcel Numbers (APN) 70-170-06 and 170-180-10. The Project Area lies on the northern end of Ukiah near Highway 101, adjacent to existing industrial and agriculture operations, (see Figure 1).

3.0 Project Description

The Project Area, previously owned by the Masonite Corporation and now owned by the Redwood Valley County Water District (RVCWD), was formerly the location of a pump house, cooling tower, and lab for the existing wastewater treatment ponds (see Figure 2). Two large clarifiers were located to the west of the lab and a transformer was formerly located on a 5 by 14-foot concrete pad immediately north of the pump house and lab building. All infrastructure was reportedly removed in 2008.

RVCWD proposes to develop up to two new water supply wells and connect the well(s) to existing water system infrastructure to establish a reliable water source for customers of the RVCWD.

FIGURE #1

Redwood Valley
County Water Supply Project

555 Kunzler Ranch Road
Ukiah, CA 95482
APN 170-170-06 & 170-180-10

Portions of the
UKIAH
USGS 7.5' Quadrangle

0 0.25 0.5 1 1.5 2 Miles

Plotted Scale 1 : 95,400
1 inch = 2 miles

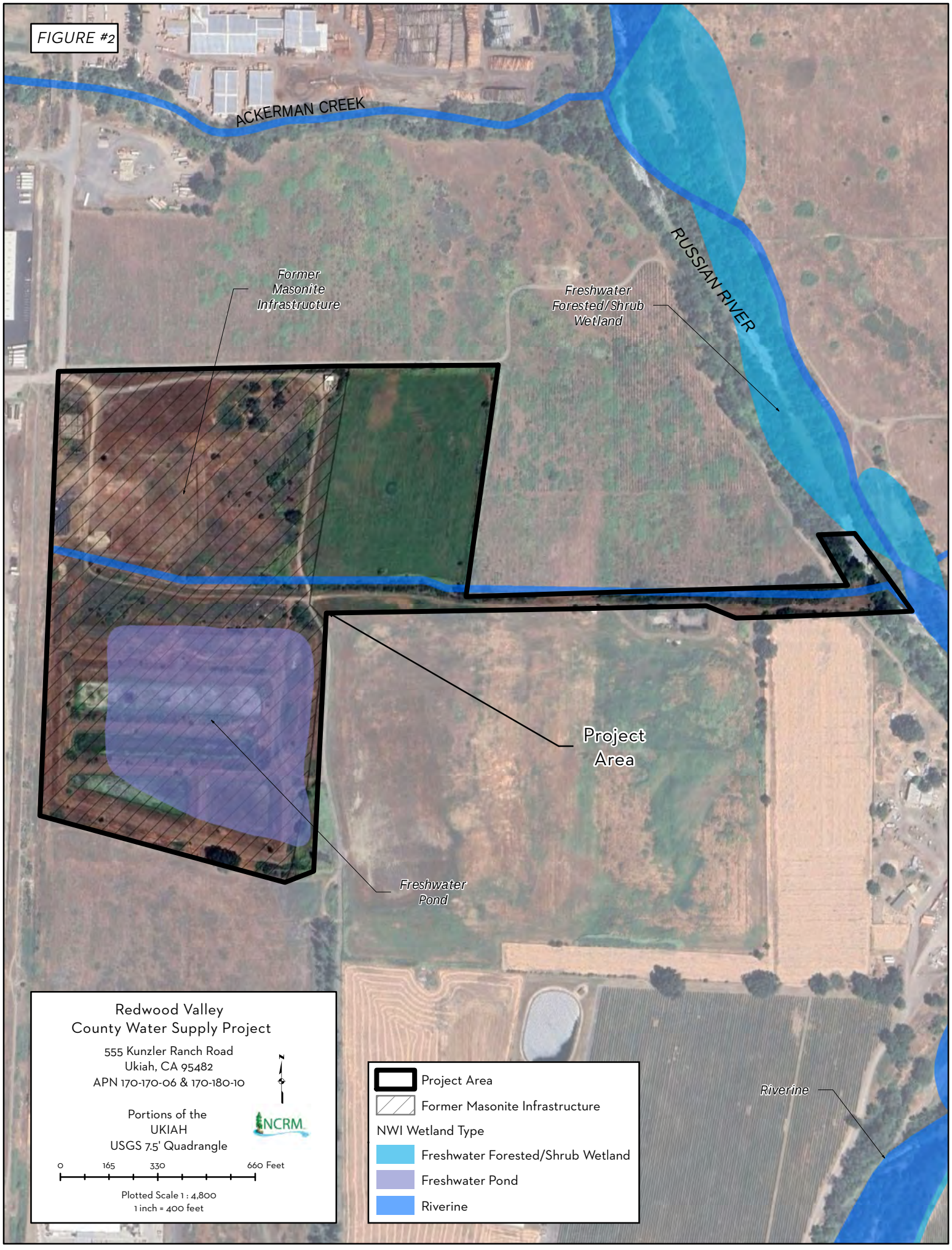


FIGURE #2
ACKERMAN CREEK
RUSSIAN RIVER
Former Masonite Infrastructure
Freshwater Forested/Shrub Wetland
Project Area
Freshwater Pond
Riverine
Redwood Valley
County Water Supply Project
555 Kunzler Ranch Road
Ukiah, CA 95482
APN 170-170-06 & 170-180-10
Portions of the
UKIAH
USGS 7.5' Quadrangle
NCRM
0 165 330 660 Feet
Plotted Scale 1 : 4,800
1 inch = 400 feet
Project Area
Former Masonite Infrastructure
NWI Wetland Type
Freshwater Forested/Shrub Wetland
Freshwater Pond
Riverine

Construction timing is unclear at the time of this report. Construction activities would occur between the hours of 7:00 a.m. and 7:00 p.m. Monday through Saturday. Construction equipment to be used would include but is not limited to, a drill rig, a backhoe, light-duty trucks, and hand tools.

At this point, the number of wells and their specific locations are unknown. The area(s) where the well(s) would be drilled are to be developed as (a) test well(s). The well(s) would be connected to the existing water system infrastructure within the project, belonging to the Millview County Water District (MCWD). Connection to the MCWD water system infrastructure would require water lines of unknown lengths. Installation of the water lines would require trenches of unknown dimensions.

Throughout the duration of the project, waste generated would be hauled away and properly disposed of at permitted disposal facilities.

4.0 Biological Setting

4.1 Wetlands

Five holding ponds (Photo1) are located on the southern portion of the Project Area, they are coded within the National Wetlands Inventory as PUBKx (Palustrine [P], Unconsolidated Bottom [UB], Artificially Flooded [K], Excavated [X]). Another wetland near the lot was identified as Freshwater Forested/Shrub Wetland coded within the National Wetlands Inventory as PSS1C (Palustrine [P], Forested [FO], Broad-leaved Deciduous [1], Temporary flooded [A]).

Photo 1: Looking at the southwestern-most holding pond area that is void of standing water.

4.2Vegetation Community

The Project Area is largely comprised of non-native vegetation consisting primarily of annual grasses interspersed with shrubs and trees (Photo 2). Predominant grassland species include soft chess (*Bromus hordeaceus*), ripgut grass (*B. diandrus*), wall barley (*Hordeum murinum*), and wildoat (*Avena fatua* and *A. barbata*). Herbaceous plants within the grasslands comprise star thistle (*Centaurea solstitialis*), plantain (*Plantago elongata, P. lanceolata, P. cornopus,* and *P. erecta*), dandelion (*Taraxacum officinale*), vetch (*Vicia villosa*), dock (*Rumex crispus*), and stork bill

Photo 2. Looking northwest from a holding pond berm at the vegetation community consisting largely of non-native herbaceous cover mixed with shrubs, coyote brush and blackberry. Star thistle dominates at the forefront of the photo.

(*Erodium cicutarium*). Shrub species present include Himalayan blackberry (*Rubus armeniacus*) and coyote brush (*Baccharis pilularis*), while tree species feature valley oak (*Quercus lobata*) and Fremont cottonwood (*Populus fremontii*). The Project Area lies within the floodplain of the Russian River, bordered approximately 500 feet to the north by Ackerman Creek, 0.2 miles to the east by the Russian River, and by agricultural and industrial operations to the south and west, respectively.

4.3 Climate

The interior Mendocino County region experiences climatic conditions typical of a Mediterranean climate; with cool, wet winters and hot, dry summers. Daytime low temperatures are in the 40's throughout the year. Daytime high temperatures range from the high 60s during winter to high 100s in the summer months. Most of the precipitation in the area is generated between October and April and comes in the form of rain during the winter months, averaging approximately 40 inches annually.

5.0 Survey Methodology

5.1 Scoping

In April 2024, the following literature and database searches were conducted and reviewed to assess the potential for SNC, SSS, and SSC:

- USDA Soil Survey Report for Mendocino County, California (Data Version 18, 2024)
- California Natural Diversity Database (CDFW 2024)
- California Native Plant Society Electronic Inventory (CNPS 2024)
- National Wetlands Inventory (USFWS 2024)
- Information on Planning and Consultation (USFWS 2024)

Scoping lists and database searches (i.e., CNDDB, CNPS) were based on the Ukiah USGS Quadrangle, as well as the eight surrounding quadrangles, including Boonville, Cow Mountain, Elledge Peak, Laughlin Range, Orrs Springs, Potter Valley, Purdys Gardens, and Redwood Valley. A total of 43 SSS and 22 SSC wildlife are known to exist in the scoped area. These lists were revised before surveys in June to ensure no changes or updates had occurred. A desktop review of species was conducted, evaluating the likelihood of presence within the Project Area based on occurrence data. The evaluation utilized citizen science platforms (including iNaturalist and CalFlora, for observation data), species known range data, habitat information, and known threats. Suitable habitat was evaluated based on the physical and biological conditions of the site. The potential for each species with special status to occur in the Project Area was categorized based on the following criteria:

- **None**. No habitat components meeting the specific requirements are present (such as coastal marsh or coastal dunes).
- **Unlikely**. Few to none of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
- **Moderate**. Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- **High**. All the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- **Present**. Species were observed on the site or have been recorded (database observation) on the site in the recent past.

For the botanical species, of the 43 SSS that were identified in the nine-quad search and included in the project scoping list (Appendix A), three were categorized as having a "moderate" likelihood of occurring based on a combination of factors including habitat, range, observation data, and known threats. None of the SSS on the scoping list were categorized as having a "high" likelihood of occurring. This was largely due to a lack of quality habitat and habitat alteration that had occurred long before this assessment (e.g., dominance of non-native/invasive species, mechanized development).

All wildlife species on the scoping list are considered SSC by State or Federal agencies, except for the North American porcupine (*Erethizon dorsatum*). The North American porcupine is not a listed species,

but CNDDB includes documented observations within its database and considers the species an S3 (vulnerable) status. Of the 22 wildlife SSC that were included in the project scoping list (Appendix B), 12 species were identified as "unlikely" to occur, and four were categorized as having a "moderate" likelihood of occurring. None were categorized as having a "high" likelihood of occurring.

5.2 Surveys

Biological surveys were conducted on April 24th and June 10th, 2024. The survey methodology involved meandering transects and traversing habitats conducive to SSC and SSS. Surveys consisted of an inventory of species observed (Appendix C and D), track and sign identification, as well as evaluations of all habitats within the proposed worksite.

6.0 Results

6.1 Natural Communities

Of the two Sensitive Natural Communities (SNC) identified during scoping, only one, Serpentine Bunchgrass, was identified as having some potential to be present within the Project Area. It was, however, considered "unlikely" due to the absence of mapped serpentine substrates nearby and the prevalence of non-native and invasive species. No SNCs were observed during surveys.

6.2 Special-Status Plant Species

Out of the 43 SSS included in the scoping list, three species were determined to have moderate potential to exist within the Project Area. These species include Roderick's fritillary (*Fritillaria roderickii*), bristly leptosiphon (*Leptosiphon aureus*), and Lobb's aquatic buttercup (*Ranunculus lobbii*). Appendix A contains this project's botanical special-status scoping list, as well as definitions of rarity rankings used below. No SSS were observed during surveys, and there are no records of these species existing on or near the property.

Below is a description of the rationale used for the SSS with a moderate to high probability of occurring within the Project Area, limited to those with State or Federally listed status or listed by the California Native Plant Society (CNPS) in categories 1A, 1B, 2A, 2B, or 3. This limited analysis excludes the following two species as they do not meet the definition of rare or endangered under CEQA Guidelines: bristly leptosiphon (*Leptosiphon aureus*, California Rare Plant Rank [CRPR] 4.2, S3, G3) and Lobb's aquatic buttercup (*Ranunculus lobbii*, CRPR 4.2, S3, G4).

CRPR 4 plant taxa are of limited distribution throughout California and their vulnerability or susceptibility to threat typically appears low. While avoidance is generally recommended for CRPR 4 plants, strict mitigation is only required if the taxa meet the definition of rare or endangered under CEQA Guidelines. According to a 2020 Technical Memorandum adopted by the CNPS Rare Plant Program, *Considerations for Including CRPR 4 Plant Taxa in CEQA Biological Resource Impact Analysis*, only taxa that, "can be shown to meet the criteria for endangered, rare, or threatened status under CEQA Section 15380(d) or that can be shown to be regionally rare or unique as defined in CEQA Section 15125(c)", require full analysis.

Roderick's fritillary (*Fritillaria roderickii*, FRRO) was found to have a moderate probability of occurring within the Project Area given the presence of potentially suitable habitat and proximal occurrence data. FRRO blooms from March to May and is known to thrive on grassy slopes. Threats are thought to include road maintenance, agricultural conversion, residential development, and erosion. Although suitable habitat is present within the project area, the species is unlikely to thrive

due to substantial habitat disturbance and alteration. The Project Area has a history of road maintenance, as well as agricultural and infrastructural uses, leading to ongoing disturbances. Additionally, the site is currently overrun with non-native and invasive species, which, while not listed as primary threats to FRRO, may exacerbate habitat degradation by reducing biodiversity and altering water availability. Furthermore, despite the presence of potentially suitable habitat, no individuals of FRRO were observed during its blooming window.

6.3 Vertebrate and Invertebrate Species of Special Concern

The interior of Mendocino County is home to numerous common terrestrial mammals including mountain lion (*Puma concolor*), black-tailed deer (*Odocoileus hemionus*), racoon (*Procyon lotor*), coyote (*Canus latrans*), gray fox (*Urocyon cinereoargenteus*), dusky-footed woodrat (*Neotoma fuscipes*), western gray squirrel (*Sciurus griseus*), brush rabbit (*Sylvilagus bachmani*), black-tailed jack rabbit (*Lepus californicus*), bobcat (*Lynx rufus*), and California black bear (*Ursus americanus californiensis*).

A total of 22 SSC vertebrate and invertebrate species were identified during the scoping phase of our desktop analysis. Nine of these species are federally listed (FESA) and 19 are state-listed species (CESA). Although these 22 species were observed and reported in the scoping area in the past and have the potential to occur, no species on the list were observed during wildlife surveys.

Based on the presence of habitat in areas surrounding the parcels and documented detections, we believe that only four species have a "moderate" potential to occur. Twelve SSC were identified as "unlikely" to occur and six species were identified as having a probability of "none", given the lack of suitable habitat around the work site. Due to the presence of tall grasses, shrubs, and wet areas, there is, however, a potential for nesting birds to inhabit the Project Area.

6.3.1 Birds

Following the site visit, no sensitive bird species were identified as having the potential to be directly impacted by the proposed project. Although no bird species from the scoping list were observed during our survey, we believe that two species have a "moderate" potential of occurring in the area.

The tricolored blackbird (*Agelaius tricolor*) was found to have a moderate probability of occurring within the Project Area. The habitat preference of the tricolored blackbird includes freshwater, marshlands, and wetlands. The holding ponds provide habitat which could draw this species to the Project Area; however, it is considered suboptimal habitat. Additionally, the location of the Project Area is outside of the known range of this species, further reducing the likelihood of this bird utilizing the Project Area for habitat.

The grasshopper sparrow (*Ammodramus savannarum*) was found to have a "moderate" likelihood of occupying the Project Area. This species prefers thick grassy prairies in valleys and foothills, which was present within the parcels, but this bird species also prefers native grasses. The botanical survey concluded that this area was primarily populated by invasive grasses; therefore, it would be less desirable for the grasshopper sparrow.

Northern spotted owls (*Strix occidentalis*) are dependent on both foraging and nesting habitats to survive and reproduce successfully. Foraging habitat contains over 40% canopy cover of trees that are 11 inches or greater in diameter and have a basal area that is greater than or equal to 75 square feet per acre of trees. Nesting and roosting habitat has over 60% canopy cover and an average basal area greater than or equal to 100 square feet per acre of trees. This species has

been determined to be "unlikely" to occur given the absence of habitat within and surrounding the Project Area.

6.3.2 Mammals

All five mammal species on the scoping list were found to be "unlikely" to occur within or adjacent to the Project Area. Most of the listed mammal species have a strong preference for forest or woodland habitats, and the subject property is predominantly grassland prairie. Listed bat species could utilize habitat within the Project Area but likely for foraging only. Adequate coverage for roosting did not appear to exist within the property, as there are only a couple of large trees in the area. Mesocarnivores occupy the Project Area, as racoon (*Procyon lotor*) tracks were observed during the survey within the dry holding pond (Photo 3). Raccoons are considered a species of least concern.

Photo 3: Racoon tracks in a dry holding pool.

6.3.3 Reptiles and Amphibians

Three reptile and amphibian species were observed during the wildlife survey, gopher snake (*Pituophis catenifer*; see Photo 4), pacific tree frog (*Pseudacris regilla*), and western fence lizard (*Sceloporus occidentalis*). None of these are considered SSC. The scoping list includes three reptile and amphibian species within the vicinity of the Project Area. Two were deemed as having a "moderate" chance of occurring, while one was considered "unlikely". The red-bellied newt (*Taricha rivularis*) was deemed to be "unlikely" given that they prefer coastal drainages with dense, shady canopy cover.

The property has several holding ponds as well as a man-made watercourse that was established for agricultural use. All were dry during the June survey. These water sources could potentially attract foothill yellow-legged frog (*Rana boylii*) and western pond turtles (*Emys marmorata*). Because the property exists near areas of industrial and agricultural land usage, and the suboptimal wetland areas were completely dry in early June, there is a "moderate" potential for these species to occur.

The foothill yellow-legged frog (FYLF) is a medium-sized frog (1.5 in. – 3.2 in.) that has been observed nearby and thrives in quiet, permanent watercourses; damp woods; and meadows with rocky substrate. The population range of the FYLF extends from western Oregon to southern California. The FYLF is a watercourse breeder, requiring dense vegetation, and some shading close to the water source. Breeding generally takes place between April and early July, within permanent streams and rivers. Egg clusters are attached to gravel or rocks near stream margins. During wet weather, the FYLF disperses from water. During dry weather, the FYLF estivates in small burrows, leaf litter, and moist sites near riparian areas.

The western pond turtle (WPT) is a medium-sized turtle (6 in. – 8 in.) that occupies streams, lakes, ponds, and wetlands. Their population range extends from British Columbia to Baja California. They typically spend most of their lives in water but require land for nesting. Nesting generally occurs in dry soil with little vegetation from May to mid-July. Their nests are created by the female digging a hole in the soil and depositing a clutch of up to 13 eggs. WPT's life span can last up to 50 years while reaching sexual maturity at 10 years.

Photo 4. A gopher snake observed during the site visit.

6.3.4 Fish

The Project Area is located within the Northern California Evolutionary Significant Unit (ESU) for coho salmon (*Oncorhynchus kisutch*), chinook salmon (*Oncorhynchus tshawytscha*), and steelhead (*Oncorhynchus mykiss irideus*). The coho and steelhead ESUs are listed as endangered and threatened under both the ESA and the CESA. The Russian River is located approximately 0.4 miles to the east of the Project Area. This portion of the river is not considered a Critical Habitat for these species by the National Marine Fisheries Service (NMFS 2021) and USFWS (1997). Due to the location of the Project Area in proximity to the river, it was determined that no sensitive fish species would occur within the work footprint.

6.3.5 Invertebrates

The one mollusk species identified on our scoping list was the western ridged mussel (*Gonidea angulata*) which has no chance of occurring within the work site due to a lack of available habitat. The Russian River, a year-round source of water, is located approximately 0.2 miles east of the Project Area, and it is the only potential habitat identified for the western ridged mussel.

Obscure bumble bees (*Bombus caliginosus*) prefer coastal range prairie habitat, whereas, western bubble bees (*Bombus occidentalis*) are more of a generalist species, preferring a range of habitats, including grasslands and open prairies. There have been no recorded detections of this species within a 50-mile radius of the Project Area since 1984. Therefore, it is "unlikely" that either species would occupy a habitat within the Project Area. The monarch butterfly (*Danaus plexippus*) is a milkweed-dependent species. With no milkweed or suitable habitat within the Project Area, it is also "unlikely" to occur.

7.0 Discussion

7.1 Plants

During the early and late season surveys, 82 plant species were observed (Appendix D). Approximately 66% of these species were identified as non-native, while 33% of those were classified as invasive (Calflora 2024). The surveyed areas exhibited a high level of disturbance and poor-quality habitat, which significantly reduces the likelihood of encountering special-status species within the project footprint. Furthermore, no special-status species or high-quality habitats were found in the project vicinity. Based on these findings, the risk of impacting SSS is considered minimal.

7.2 Wildlife

Because very little habitat alteration will occur outside of the project footprint, it can be concluded that temporary or even permanent impacts to sensitive wildlife species is unlikely. Ground nesting birds and terrestrial animals inhabiting the worksite would have the highest likelihood of occurring, but a biological monitor surveying the site before operations could mitigate this possibility.

7.3 Recommendations

Given that potential impacts to plant and wildlife species are primarily confined to existing construction worksite footprints, it is unlikely that any sensitive or special-status species present in the Project Area will be significantly affected by this project.

To mitigate excessive impacts, we recommend the following avoidance and minimization measures:

- All construction vehicles should utilize existing roadways when possible and minimize any unnecessary disturbance around the project footprint.
- A biological monitor should survey the worksite for SSC no sooner than one week before work begins.
    - If a FYLF or WPT were to be detected, the biologist would relocate the individual from the worksite to a safe location.
    - If a WPT nest were to be detected, a 300-ft no disturbance buffer would be installed until the hatchlings have departed or the nest was determined to be inactive by a biologist.
- If operations occur during the nesting bird season (February 15th -August 15th), a nesting bird survey should take place at the work site. The pre-construction surveys for nesting birds should take place no sooner than one week before work begins.

8.0 References

Baldwin, B.G., Goldman, D.H., Keil, D.J., Patterson, R., Rosatti, T.J., Wilken, D.H. 2012. The Jepson Manual Vascular Plants of California. University of California Press, Berkeley, CA.

Calflora: Information on California plants for education, research, and conservation. 2024. Berkeley, California: The Calflora Database. Accessed online at https://www.calflora.org/.

California Natural Diversity Database (CNDDB) 2024a. California Department of Fish and Wildlife, Biogeographic Data Branch. RareFind Version 5.3.0.

CNDDB 2024b. California Department of Fish and Wildlife, Biogeographic Data Branch. BIOS6 Version 6.24.0604.

California Department of Fish and Wildlife (CDFW). 2018. Protocols for Surveying and Evaluating Impacts to Special-status Native Plant Populations and Sensitive Natural Communities. The Resource Agency, Sacramento, CA.

California Native Plant Society, Rare Plant Program. 2024. Rare Plant Inventory (online edition, v9.5). Website https://www.rareplants.cnps.org [accessed 1 April 2024].

CalPhotos Database. 2007. University of California, Berkeley. Accessed online at https://calphotos.berkeley.edu/flora/.

iNaturalist. Available from https://www.inaturalist.org

Jepson Flora Project (eds.). 2024. Jepson eFlora. Accessed online at https://ucjeps.berkeley.edu/eflora/.

National Wetlands Inventory (NWI) – Surface Waters and Wetlands. US Fish and Wildlife Service (USFWS) – Accessed online in 2024 at https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper

Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at the following link: http://websoilsurvey.sc.egov.usda.gov/. Accessed 04/01/2024.

United States Fish and Wildlife Service. 2024. Information of Planning and Consultation. https://ipac.ecosphere.fws.gov/.

Appendix A. Special-Status Plant Species and Communities with Potential for Occurrence

Scientific Name Common Name	Fed List	State List	Global Rank	State Rank	CA Rare Plant Rank	Associated Habitat	Blooming Period	Potential to Occur
Allium peninsulare subsp. *franciscanum* Franciscan onion	None	None	G4G5 T2	S2	1B.2	Cismontane woodland, valley and foothill grassland. Clay, serpentine (often), volcanic. 52-305 meters in elevation.	(Apr) May-Jun	**Unlikely**, the range does not extend this far north. The closest occurrence was reported north of the confluence of Edwards Creek and Russian River, west of Highway 101 at Geysers Rd exit, in 1999. Most observations are made in the Central Coast and San Joaquin Valley. Additionally, this species is threatened by development and non-native plants, which are components of the Project Area.
Arctostaphylos stanfordiana subsp. *raichei* Raiche's manzanita	None	None	G3T2	S2	1B.1	Chaparral, lower montane coniferous forest (openings). Rocky, serpentine (often). 450-1035 meters in elevation.	Feb-Apr	**None**, outside of Project Area elevational range.
Astragalus breweri Brewer's milk-vetch	None	None	G3	S3	4.2	Chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland (openings, often gravelly). Serpentine (often), volcanic. 90-730 meters in elevation.	Apr-Jun	**Unlikely**, gravelly openings in valley grassland habitat are present in the Project Area, and the closest observation was made less than 5 miles southeast of the Project Area in 2023 on serpentine seeps about 1 mile east of Old River Rd on the Twining Ranch southeast of Talmage. However, this species is threatened by development and non-native plants, which are components of the Project Area.

Scientific Name Common Name	Fed List	State List	Global Rank	State Rank	CA Rare Plant Rank	Associated Habitat	Blooming Period	Potential to Occur
Blennosperma bakeri Sonoma sunshine	Endangered	Endangered	G1	S1	1B.1	Valley and foothill grassland (mesic), vernal pools. 10-110 meters in elevation.	Mar-May	**None**, outside of Project Area elevational range.
Brasenia schreberi watershield	None	None	G5	S3	2B.3	Marshes and swamps (freshwater). 0-2200 meters in elevation.	Jun-Sep	**Unlikely**, although man-made water bodies are present in the Project Area, no occurrences have been reported in the Ukiah area. The closest observation was reported in the Laughlin Range quad. Additionally, this species is threatened by development and non-native plants, which are components of the Project Area.
Carex comosa bristly sedge	None	None	G5	S2	2B.1	Coastal prairie, marshes and swamps (lake margins), valley and foothill grassland. 0-625 meters in elevation.	May-Sep	**Unlikely**, although habitat is present in the form of man-made water bodies and grassland, the closest observations were reported near Blue Lakes in 1892 and at the Hopland Research Center in 1999. Additionally, this species is threatened by marsh drainage, which could be a component of the Project Area.
Ceanothus confusus Rincon Ridge ceanothus	None	None	G1	S1	1B.1	Chaparral, cismontane woodland, closed-cone coniferous forest. Serpentine (sometimes), volcanic (sometimes). 75-1065 meters in elevation.	Feb-Jun	**None**, no suitable habitat present in the Project Area.

Scientific Name Common Name	Fed List	State List	Global Rank	State Rank	CA Rare Plant Rank	Associated Habitat	Blooming Period	Potential to Occur
Cypripedium californicum California lady's-slipper	None	None	G3	S4	4.2	Bogs and fens, lower montane coniferous forest. Seeps, serpentine (usually), streambanks. 30-2750 meters in elevation.	Apr-Aug (Sep)	**None**, no suitable habitat present in the Project Area.
Cypripedium montanum mountain lady's-slipper	None	None	G4G5	S4	4.2	Broadleaved upland forest, cismontane woodland, lower montane coniferous forest, North Coast coniferous forest. 185-2225 meters in elevation.	Mar-Aug	**None**, no suitable habitat present in the Project Area.
Entosthodon kochii Koch's cord moss	None	None	G1	S1	1B.3	Cismontane woodland (soil). 180-1000 meters in elevation.	NA	**None**, no suitable habitat present in the Project Area.
Erythranthe nudata bare monkeyflower	None	None	G4	S4	4.3	Chaparral, cismontane woodland. Seeps, serpentine. 200-700 meters in elevation.	May-Jun	**None**, outside of Project Area elevational range.
Fritillaria agrestis stinkbells	None	None	G3	S3	4.2	Chaparral, cismontane woodland, pinyon and juniper woodland, valley and foothill grassland. Clay, serpentine (sometimes). 10-1555 meters in elevation.	Mar-Jun	**Unlikely**, this species has a wide distribution however it generally spans from the Sacramento Valley, south to the San Joaquin Valley. Occurrences reported in Ukiah, or this far northwest of its range, are all historical. Additionally, this species is threatened by development, which is a component of the Project Area.

Scientific Name Common Name	Fed List	State List	Global Rank	State Rank	CA Rare Plant Rank	Associated Habitat	Blooming Period	Potential to Occur
Fritillaria purdyi Purdy's fritillary	None	None	G4	S4	4.3	Chaparral, cismontane woodland, lower montane coniferous forest. Serpentine (usually). 175-2255 meters in elevation.	Mar-Jun	**None**, no suitable habitat present in the Project Area.
Fritillaria roderickii Roderick's fritillary	None	Endangered	G1Q	S1	1B.1	Coastal bluff scrub, coastal prairie, valley and foothill grassland. 15-400 meters in elevation.	Mar-May	**Moderate**, grassy habitat is present in the Project Area and numerous observations have been reported to iNaturalist in southeast Mendocino County (exact locations are obscured).
Gratiola heterosepala Boggs Lake hedge-hyssop	None	Endangered	G2	S2	1B.2	Marshes and swamps (lake margins), vernal pools. Clay. 10-2375 meters in elevation.	Apr-Aug	**Unlikely**, man-made water bodies and seasonally wet habitats are present in the Project Area; however, all reported observations have occurred within and east of the South Cow Mountain BLM Area, spanning northeast to the Modoc Plateau. Additionally, species is threatened by development, which is a component of the Project Area.
Grimmia torenii Toren's grimmia	None	None	G2	S2	1B.3	Chaparral, cismontane woodland, lower montane coniferous forest. boulder and rock walls. Carbonate, openings, rocky, volcanic. 325-1160 meters in elevation.	NA	**None**, outside of Project Area elevational range.

Scientific Name Common Name	Fed List	State List	Global Rank	State Rank	CA Rare Plant Rank	Associated Habitat	Blooming Period	Potential to Occur
Hemizonia congesta subsp. *calyculata* Mendocino tarplant	None	None	G5T4	S4	4.3	Cismontane woodland, valley and foothill grassland. Serpentine (sometimes). 225-1400 m in elevation.	Jul-Nov	**None**, outside of Project Area elevational range.
Hemizonia congesta subsp. *tracyi* Tracy's tarplant	None	None	G5T4	S4	4.3	Coastal prairie, lower montane coniferous forest, North Coast coniferous forest. Openings, serpentine (sometimes). 120-1200 m in elevation.	(Mar-Apr) May-Oct	**None**, no suitable habitat present in the Project Area.
Hesperolinon adenophyllum glandular western flax	None	None	G2G3	S2S3	1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Serpentine (usually). 150-1315 m in elevation.	May-Aug	**Unlikely**, chaparral habitat and serpentine substrates are not present within the Project Area, and population trends are concentrated east of Ukiah in Lake County. Few occurrences were reported north of Ukiah near Potter Vally, Willits, and Hearst; however, these reports are historical. Additionally, this species is threatened by development, which is a component of the Project Area.
Horkelia bolanderi Bolander's horkelia	None	None	G1	S1	1B.2	Chaparral, lower montane coniferous forest, meadows and seeps, valley and foothill grassland. Edges, vernally mesic. 450-1100 meters in elevation.	(May) Jun-Aug	**None**, outside of Project Area elevational range.

Scientific Name Common Name	Fed List	State List	Global Rank	State Rank	CA Rare Plant Rank	Associated Habitat	Blooming Period	Potential to Occur
Kopsiopsis hookeri small groundcone	None	None	G4?	S1S2	2B.3	Lower montane coniferous forest, North Coast coniferous forest, upper montane coniferous forest. 90-885 meters in elevation.	Apr-Aug	**None**, no suitable habitat present in the Project Area.
Lasthenia burkei Burke's goldfields	Endangered	Endangered	G1	S1	1B.1	Meadows and seeps (mesic), vernal pools. 15-600 meters in elevation.	Apr-Jun	**None**, no suitable habitat present in the Project Area.
Layia septentrionalis Colusa layia	None	None	G2	S2	1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Sandy, serpentine. 100-1095 meters in elevation.	Apr-May	**Unlikely**, most occurrences were reported around and east of Hopland. Additionally, this species is threatened by development, which is a component of the Project Area.
Leptosiphon aureus bristly leptosiphon	None	None	G4?	S4?	4.2	Chaparral, cismontane woodland, coastal prairie, valley and foothill grassland. 55-1500 meters in elevation.	Apr-Jul	**Moderate**, observations were reported near Montgomery Woods in 2023 and grassy habitat is present within the Project Area, however, most observations in the Ukiah area are historical.
Leptosiphon latisectus broad-lobed leptosiphon	None	None	G4	S4	4.3	Broadleaved upland forest, cismontane woodland. 170-1500 meters in elevation.	Apr-Jun	**None**, no suitable habitat present in the Project Area.

Scientific Name Common Name	Fed List	State List	Global Rank	State Rank	CA Rare Plant Rank	Associated Habitat	Blooming Period	Potential to Occur
Lessingia hololeuca woolly-headed lessingia	None	None	G2G3	S2S3	3	Broadleaved upland forest, coastal scrub, lower montane coniferous forest, valley and foothill grassland. Clay, serpentine. 15-305 meters in elevation.	Jun-Oct	**Unlikely**, observations are concentrated south of Santa Rosa to Monterey Bay area. No occurrence data reported in CNDDB; it is unclear where or whether observations have been reported in Mendocino Co. Additionally, species is threatened by non-native plants and the Project Area is highly affected by invasive and non-native plants.
Lilium rubescens redwood lily	None	None	G3	S3	4.2	Broadleaved upland forest, chaparral, lower montane coniferous forest, North Coast coniferous forest, upper montane coniferous forest. Roadsides (sometimes), serpentine (sometimes). 30-1910 meters in elevation.	(Mar)Apr -Aug (Sep)	**None**, no suitable habitat present in the Project Area.
Limnanthes bakeri Baker's meadowfoam	None	Rare	G1	S1	1B.1	Marshes and swamps (freshwater), meadows and seeps, valley and foothill grassland (vernally mesic), vernal pools. 175-910 meters in elevation.	Apr-May	**None**, no suitable habitat present in the Project Area.

Scientific Name Common Name	Fed List	State List	Global Rank	State Rank	CA Rare Plant Rank	Associated Habitat	Blooming Period	Potential to Occur
Malacothamnus mendocinensis Mendocino bush-mallow	None	None	G1Q	S1	1B.1	Chaparral, cismontane woodland. Roadsides, rocky. 215-230 m in elevation.	Jun-Aug	**None**, outside of Project Area elevational range.
Monardella viridis green monardella	None	None	G3	S3	4.3	Broadleaved upland forest, chaparral, cismontane woodland. 100-1010 m in elevation.	Jun-Sep	**None**, no suitable habitat present in the Project Area.
Navarretia leucocephala subsp. *bakeri* Baker's navarretia	None	None	G4T2	S2	1B.1	Cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grassland, vernal pools. Mesic. 5-1740 meters in elevation.	Apr-Jul	**Unlikely**, although vernally wet areas are present in the Project Area, threats to this species include development, habitat alteration, and potentially, non-native plants. The Project Area is highly affected by invasive and non-native plants.
Perideridia gairdneri subsp. *gairdneri* Gairdner's yampah	None	None	G5T3 T4	S3S4	4.2	Broadleaved upland forest, chaparral, coastal prairie, valley and foothill grassland, vernal pools. Vernally mesic. 0-610 meters in elevation.	Jun-Oct	**Unlikely**, although vernally wet areas are present in the Project Area this species is threatened by non-native plants, and the Project Area is highly affected by invasive and non-native plants.
Piperia candida white-flowered rein orchid	None	None	G3?	S3	1B.2	Broadleaved upland forest, lower montane coniferous forest, North Coast coniferous forest. Serpentine (sometimes). 30-1310 meters in elevation.	(Mar-Apr) May-Sep	**None**, no suitable habitat present in the Project Area.
Plagiobothrys lithocaryus Mayacamas popcornflower	None	None	GX	SX	1A	Chaparral, cismontane woodland, valley and foothill grassland. Mesic. 300-450 meters in elevation.	Apr-May	**None**, outside of Project Area elevational range.

Scientific Name Common Name	Fed List	State List	Global Rank	State Rank	CA Rare Plant Rank	Associated Habitat	Blooming Period	Potential to Occur
Pleuropogon hooverianus North Coast semaphore grass	None	Threatened	G2	S2	1B.1	Broadleaved upland forest, meadows and seeps, North Coast coniferous forest. Mesic, openings. 10-671 meters in elevation.	Apr-Jun	**None**, no suitable habitat present in the Project Area.
Ramalina thrausta angel's hair lichen	None	None	G5?	S2S3	2B.1	North Coast coniferous forest. On dead twigs and other lichens. 75-430 meters in elevation.		**None**, no suitable habitat present in the Project Area.
Ranunculus lobbii Lobb's aquatic buttercup	None	None	G4	S3	4.2	Cismontane woodland, North Coast coniferous forest, valley and foothill grassland, vernal pools. Mesic. 15-470 meters in elevation.	Feb-May	**Moderate**, pond habitat is present within the Project Area. Observations have been reported as close as Lake Mendocino in 2011; however, species is threatened by habitat alteration and development, which are components of the Project Area.
Silene bolanderi Bolander's catchfly	None	None	G2	S2	1B.2	Chaparral (edges), cismontane woodland, lower montane coniferous forest, meadows and seeps, North Coast coniferous forest. Usually grassy openings, sometimes dry rocky slopes, canyons, or roadsides. Openings (usually), sometimes roadsides rocky substrates, serpentine. 420-1150 meters in elevation.	May-Jun	**None**, outside of Project Area elevational range.

Scientific Name Common Name	Fed List	State List	Global Rank	State Rank	CA Rare Plant Rank	Associated Habitat	Blooming Period	Potential to Occur
Streptanthus glandulosus subsp. *hoffmanii* Hoffman's bristly jewelflower	None	None	G4T2	S2	1B.3	Chaparral, cismontane woodland, valley and foothill grassland (often serpentinite). Rocky. 120-475 meters in elevation.	Mar-Jul	**None**, no suitable habitat present in the Project Area.
Tracyina rostrata beaked tracyina	None	None	G2	S2	1B.2	Chaparral, cismontane woodland, valley and foothill grassland. 90-1270 meters in elevation.	May-Jun	**Unlikely**, although grassy habitat is present in the Project Area, this species is threatened by non-native plants, and the Project Area is highly affected by invasive and non-native plants.
Trifolium buckwestiorum Santa Cruz clover	None	None	G2	S2	1B.1	Broadleaved upland forest, cismontane woodland, coastal prairie. Margins. Gravelly. 35-610 meters in elevation.	Apr-Oct	**None**, no suitable habitat present in the Project Area.
Usnea longissima Methuselah's beard lichen	None	None	G4	S4	4.2	Broadleaved upland forest, North Coast coniferous forest. On tree branches; usually on old-growth hardwoods and conifers. 50-1460 meters in elevation.	NA	**None**, no suitable habitat present in the Project Area.
Viburnum ellipticum oval-leaved viburnum	None	None	G4G5	S3	2B.3	Chaparral, cismontane woodland, lower montane coniferous forest. 215-1400 meters in elevation.	May-Jun	**None**, outside of Project Area elevational range.

Plants addressed in the rare plant assessment are cataloged on the following lists:

a) Species listed or proposed for listing as threatened or endangered under the FESA
b) Species that are candidates for possible future listing as threatened or endangered under the FESA
c) Species listed or proposed for listing by the State of California as threatened or endangered under the CESA
d) CNPS list 1A species (plants presumed extinct in California)
e) CNPS list 1B (plants rare, threatened, or endangered in California)
f) CNPS list 2 species (plants rare, threatened, or endangered in California but more common elsewhere)
g) CNPS list 3 and list 4 species (plants with limited distribution, more information needed, on review list); plants that are not on a specific list but have recognized regional or local interests and qualify for protection.

The CNPS New Threat Code extensions and their meanings:

The classification system created by the CNPS helps distinguish between rarity, endangerment, and distribution:

.1 – Seriously endangered in California
.2 – Fairly endangered in California
.3 – Not very endangered in California

Global Ranking

The Global rank (G-rank) reflects the overall condition of a plant species or community throughout its global range.

Species or Community Level

G1 – Less than 6 viable element occurrences (Eos) OR less than 1,000 individuals OR less than 2,000 acres
G2 – 6-20 Eos OR 1,000-3,000 individuals OR 2,000-10,000 acres
G3 – 21-80 Eos OR 3,000-10,000 individuals OR 10,000-50,000 acres
G4 – Apparently secure; this rank is lower than G3, but factors exist to cause some concern (i.e., there is some threat or somewhat rare habitat)
G5 – Population or stand demonstrably secure to ineradicable due to being commonly found in the world.

Subspecies Level

Subspecies receive a T-rank attached to the G-rank. With the subspecies, the G-rank reflects the condition of the entire species, whereas the T-rank reflects the global situation of the subspecies or variety.

State Ranking

The state rank (S-rank) is assigned much the same way as the global rank, except state ranks in California often also contain a threat designation attached to the S-rank:

S1 – Less than 6 Eos OR less than 1,000 individuals OR less than 2,000 acres
S1.1 – very threatened
S1.2 – threatened
S1.3 – No current threats known
S2 – 6-20 Eos OR 1,000-3,000 individuals OR 2,000-10,000 acres
S2.1 – very threatened
S2.2 – threatened
S2.3 – No current threats known
S3 – 21-80 Eos or 3,000-10,000 individuals OR 10,000-50,000 acres
S3.1 – very threatened
S3.2 – threatened
S3.3 – No current threats known
S4 – Apparently secure within California; this rank is lower than S3 but factors exist to cause some concern (i.e., there is some threat or somewhat rare habitat)
S5 = Demonstrably secure to ineradicable in California. NO THREAT RANK.

Appendix B. Special-Status Wildlife with Potential for Occurrence.

COMMON NAME	*SCIENTIFIC NAME*	STATUS	BREEDING SEASON	HABITATS	GENERAL HABITAT	MICROHABITAT	RANGE	POTENTIAL TO OCCUR
Amphibians and Reptiles								
Foothill yellow-legged frog – north coast DPS	*Rana boylii* pop. 1	G3TNRQ, S4 – BLM | CSSC | USFS	Mating & egg-laying in streams & rivers (not ponds or lakes), April- early July, after streams slow from winter runoff.	Aquatic | Klamath/North coast flowing waters | Riparian forest | Riparian scrub | Riparian woodland	Partly shaded shallow streams and riffles with a rocky substrate in a variety of habitats.	Needs at least some cobble-sized substrate for egg-laying and at least 15 weeks to attain metamorphosis.	North Coast Ranges of the SF Bay Estuary, Klamath Mtns., and Cascade Range. Includes watershed subbasins (HU 8) Lower Pit, Battle Cr., Thomes Cr., and Big Chico Cr. In Lassen, Shasta, Tehama, and Butte counties.	**Moderate**, potential habitat is present, but not ideal. The closest documented detection was about 1.5-miles away.
Red-bellied newt	*Taricha rivularis*	G2, S2 – CSSC | ILC	Breeding takes place from late February to May, peaking in March.	Broadleaved upland forest | North coast coniferous forest | Redwood | Riparian forest | Riparian woodland	Coastal drainages. Will migrate over 1 km to breed, typically in streams with moderate flow and clean, rocky substrate.	Terrestrial habitats, juveniles generally underground, adults active at surface in moist environments.	Humboldt Co. south to Sonoma Co., inland to Lake Co. Isolated pop. Of uncertain origin in Santa Clara Co.	**Unlikely**, habitat is suboptimal for species within Project Area. The closest documented detection was less than 1 mile away.
Western pond turtle	Emys marmorata	G3G4, S3 - BLM | CSSC | IVU | USFS	Mating in April-May.	Aquatic | Artificial flowing waters | Klamath/North coast flowing waters | Klamath/North coast standing waters | Marsh & swamp | Sacramento/San Joaquin flowing waters | Sacramento/San Joaquin standing waters | South coast	Ponds, marshes, rivers, streams, and irrigation ditches, usually with aquatic vegetation, below 6,000 ft elevation.	Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	N. CA to British Columbia (west of Cascades/ Sierra crest).	**Moderate**, potential habitat is present, but not ideal. The closest documented detection was about 0.75-miles away.

COMMON NAME	*SCIENTIFIC NAME*	STATUS	BREEDING SEASON	HABITATS	GENERAL HABITAT	MICROHABITAT	RANGE	POTENTIAL TO OCCUR
				flowing waters | South coast standing waters | Wetland				
Birds								
American goshawk	*Accipiter gentilis*	G5, S3 – BLM | CDF | CSSC | ILC | USFS	Nests typically in densest part of a stand; in trees greater than 12-in. diameter and nest generally built below the canopy in fork of large branch.	North coast coniferous forest | Subalpine coniferous forest | Upper montane coniferous forest	Within, and in the vicinity of, coniferous forest. Uses old nests and maintains alternate sites.	Usually nests on north slopes, near water. Red fir, lodgepole pine, Jeffrey pine, and aspens are typical nest trees.	Year-round resident on northern 1/3 of CA.	**Unlikely**, habitat not present and nearest known detection is over 130-miles away.
Osprey	*Pandion haliaetus*	G5, S4 – CDF | CWL | ILC	Most are migratory, breeding starts in March and migrate south for the winter.	Riparian forest | Ocean shore, bays, freshwater lakes, and larger streams.	Associated strictly with large, fish-bearing waters, including rivers, lakes, bays, estuaries, and surf zones, primarily in ponderosa pine through mixed conifer habitats. Preys mostly on fish.	Large nests built in treetops within 15 miles of a good fish-producing body of water.	Statewide.	**Unlikely**, habitat not present and nearest known detection is about 4.5-miles away.
Northern spotted owl	*Strix occidentalis caurina*	FT | CT | CSSC | BLM | CDF | USFS	February-August.	Mature multi-layered mixed conifer, redwood and Douglas fir forests with a permanent water source and suitable nesting sites.	Prey mostly on small mammals. Nests in cavities or broken tops of large trees or snags. A pair may use the same breeding site for 5 to 10 years, although not breed every year. Sensitive to habitat destruction and fragmentation.	Prefer narrow, steep canyons with north-facing slopes.	Northern CA to WA.	**Unlikely**, habitat not present and nearest known detection is about 5-miles away.

COMMON NAME	*SCIENTIFIC NAME*	STATUS	BREEDING SEASON	HABITATS	GENERAL HABITAT	MICROHABITAT	RANGE	POTENTIAL TO OCCUR
Tricolored blackbird	*Agelaius tricolor*	G1G2, S1S2 - BLM | CSSC | IUCN | NRWL | UBCC	Males typically arrive in late March in S. CA.	Freshwater marsh | Marsh & swamp | Swamp | Wetland	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to CA.	Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Limited to the coastal areas of the Pacific coast, from Northern CA to upper Baja California, MX.	**Moderate**, potential habitat is present, but not ideal. The closest documented detection was about 9-miles away.
Grasshopper sparrow	*Ammodramus savannarum*	G5, S3 - CSSC | ILC	Late May-early June.	Valley & foothill grassland	Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes.	Favors native grasslands with a mix of grasses, forbs, and scattered shrubs. Loosely colonial when nesting.	A summer resident from Mendocino, Trinity, and Tehama counties south, west of the Cascade–Sierra Nevada axis and south- eastern deserts, to San Diego Co.	**Moderate**,suitable habitat is present, but not ideal. The closest documented detection was about 12-miles away.
Fish								
Clear Lake tule perch	*Hysterocarpus traskii lagunae*	G5T3, S3 - CSSC	Late winter.	Aquatic | Lakes	In lakes Tule Perch favor deep water and areas where a slight flow might exist from water entering and exiting the basin. In addition, these fish are found near tules in areas where the lake floor is made up of gravel and or sand.	Clear Lake tule require cover, especially for pregnant females and small juveniles. They may be found in small shoals in deep tule beds, among rocks, or among the branches of fallen trees.	Confined to Clear Lake and to Upper and Lower Blue Lakes, in Lake County.	**None**, suitable habitat is absent in Project Area. The closest documented detection was about 10-miles away.
Steelhead- northern California DPS summer-run	*Oncorhynchus mykiss irideus,* pop.48	G5TNRQ, S2, FT, SE, ATH	Return to freshwaters between May and October.	Aquatic | North Coast flowing waters	Migrating adults require a 7-inch depth minimum for migration. Water velocities of 10-13 ft/s begin to hinder the swimming ability of adult steelhead. Optimum temperature requirements fall in the range of 39 -52°F.	Cool, swift, shallow water and clean loose gravel for spawning, and suitably large pools in which to spend the summer.	Mattole River, Eel River, Trinity River, Mad River, Redwood Creek, Klamath River, Smith River, Salmon River, and Scott River.	**None**, suitable habitat is absent in Project Area. The closest documented detection was about 15-miles away.

COMMON NAME	*SCIENTIFIC NAME*	STATUS	BREEDING SEASON	HABITATS	GENERAL HABITAT	MICROHABITAT	RANGE	POTENTIAL TO OCCUR
Steelhead- northern California DPS winter-run	*Oncorhynchus mykiss irideus,* pop.49	G5TNRQ, S3, FT, ATH	Return to freshwaters between November and April.	Aquatic | Klamath/North coast flowing waters | Sacramento/San Joaquin flowing waters	Migrating adults require a 7-inch depth minimum for migration. Water velocities of 10-13 ft/s begin to hinder the swimming ability of adult steelhead. Optimum temperature requirements fall in the range of 39 to 52˚F.	Cool, swift, shallow water and clean loose gravel for spawning, and suitably large pools in which to spend the summer.	DPS includes all naturally spawning populations in California coastal river basins below upstream barriers to migration from Redwood Creek (Humboldt Co.) to just south of the Gualala River (Mendocino Co.).	**None**, suitable habitat is absent in Project Area. The closest documented detection was about 7-miles away.
Coho salmon - central California coast ESU	*Oncorhynchus kisutch* pop. 4	G5T2Q, S2 - AED | FE | CE	Adults enter freshwater November-January to spawn. In the short coastal streams of CA, migration usually begins between mid-November-mid- January.	Aquatic | Coastal watershed Streams	In fresh water, they like relatively slow-moving water with fine gravel. In the ocean, coho tend to live closer to shores than in the open ocean.	Require beds of loose, silt-free, coarse gravel for spawning. Also need cover, cool water and sufficient dissolved oxygen.	Federally listed populations occur between Punta Gorda and San Lorenzo River. State listed populations occur south of Punta Gorda.	**None**, suitable habitat is absent in the Project Area. The closest documented detection was about 29-miles away.
Chinook salmon - California coastal ESU	*Oncorhynchus tshawytscha* pop. 17	G5T2Q, S2 - ATH | FT	Adults return to freshwater to spawn after 3-5 years in the ocean. Adults typically enter freshwater streams between late August and late fall. Spawning occurs from October - January.	Aquatic | Sacramento/San Joaquin flowing waters	Eggs develop in the gravel for 50- 60 days, depending on water temperature. Embryo survival declines when the amount of substrate smaller than 6.35mm exceeds 20%. Hatchlings remain in the gravel for 2-4 weeks, emerging when the yolk sack is absorbed.	Shallow riffle areas of main rivers for spawning.	Rivers and streams south of the Klamath River/Redwood Cr. to the Russian River.	**None**, suitable habitat is absent in the Project Area. The closest documented detection was about 100-miles away.
Insects								

COMMON NAME	*SCIENTIFIC NAME*	STATUS	BREEDING SEASON	HABITATS	GENERAL HABITAT	MICROHABITAT	RANGE	POTENTIAL TO OCCUR
Obscure bumble bee	*Bombus caliginosus*	G2G3, S1S2 – IVU	Active February-November.	Open grassy coastal prairies and coast range meadows.	Coastal areas.	Food plant genera include *Baccharis, Cirsium, Lupinus, Lotus, Grindelia,* and *Phacelia.*	Santa Barbara Co. north to WA, with scattered records from the east side of the Central Valley.	**Unlikely**, the closest documented detection was about 12-miles away. No detection has been made within 50 miles since 1990.
Western bumble bee	*Bombus occidentalis*	G2G3, S1 – IVU | USFS	Active from February to November.	Found in a range of habitats.	Mixed woodlands, farmlands, urban areas, montane meadows and into the western edge of the prairie grasslands.	Once common and widespread, species has declined precipitously, perhaps from disease.	Central CA to southern B.C.	**Unlikely**, the closest documented detection was about 20-miles away. No detection has been made within 50 miles since 1984.
Monarch butterfly - California overwintering population	*Danaus plexippus plexippus* pop. 1	G4T1T2, S2 - IUCN | USFS | FC	As temperatures warm at over-wintering sites in the spring, they begin to breed and lay eggs on milkweed throughout migration. The following generations breed and lay eggs throughout the summer.	Closed-cone coniferous forest	Winter roost sites extend along the coast from northern Mendocino Co. to Baja California, MX.	Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	North and South America but have spread to many other locations where milkweed and suitable temperatures exist.	**Unlikely**, the species is milkweed dependent, and no milkweed was observed in the area. The closest documented detection was about 32-miles away.
Mammals								
Pacific fisher	*Pekania pennanti*	G5, S2S3 – BLM | CSSC | ILC | USFS	Reproduction peaks in late March, and breeding may	North coast coniferous forest | Old growth | Riparian forest	Intermediate to large-tree stages of coniferous forests and deciduous-riparian areas with high	Uses cavities, snags, logs and rocky areas for cover and denning. Needs large	Northern Coastal Range, Klamath Mtns, southern Cascades, and	**Unlikely**, no suitable habitat in Project Area. The closest documented

COMMON NAME	*SCIENTIFIC NAME*	STATUS	BREEDING SEASON	HABITATS	GENERAL HABITAT	MICROHABITAT	RANGE	POTENTIAL TO OCCUR
			occur as late as May.		percent canopy closure.	areas of mature, dense forest.	Sierra Nevada mtn. ranges.	detection was about 20-miles away.
North American porcupine	*Erethizon dorsatum*	G5, S3 – ILC	Breeding occurs in fall and early winter with young born in the spring/early summer	Broadleaved upland forest | Cismontane woodland | Closed-cone coniferous forest | Lower montane coniferous forest | North coast coniferous forest | Upper montane coniferous forest	Forested habitats in the Sierra Nevada, Cascade, and Coast ranges, with scattered observations from forested areas in the Transverse Ranges.	Wide variety of coniferous and mixed woodland habitat.	Canada to northern MX.	**Unlikely**, no suitable habitat in Project Area. The closest documented detection was about 2-miles away, in 2002.
Sonoma tree vole	*Arborimus pomo*	G3, S3 – CSSC | INT	Breeds year-round, but mostly from February - September.	North coast coniferous forest | Old growth | Redwood	North coast fog belt from Oregon border to Sonoma County. In Douglas-fir, redwood, and montane hardwood-conifer forests.	Feeds almost exclusively on Douglas-fir needles. Will occasionally take needles of grand fir, hemlock, or spruce.	Distributed along coast from Sonoma Co. to OR border, restricted to fog belt.	**Unlikely**, no suitable habitat in Project Area. The closest documented detection was about 10-miles away.
Pallid bat	*Antrozous pallidus*	G4, S3 - BLM | CSSC | ILC | USFS	Mating occurs between late October and February. Young are born from April - July with peak birthing in May and June.	Chaparral | Coastal scrub | Riparian woodland | Sonoran desert scrub | Upper montane coniferous forest | Valley & foothill grassland	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting.	Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Statewide; once common now uncommon in CA.	**Unlikely**, no suitable roosting locations in Project Area. The closest documented detection was about 7-miles away, in 1947.
Townsend's big-eared bat	*Corynorhinus townsendii*	G4, S2 – BLM | CSSC |	Mating occurs Nov.- Feb. Young born	Broadleaved upland forest | Chaparral |	Wide variety of habitats. Most	Roosts in the open, hanging from walls and ceilings. Roosting	Statewide; once common now uncommon.	**Unlikely**, no suitable roosting locations in

COMMON NAME	*SCIENTIFIC NAME*	STATUS	BREEDING SEASON	HABITATS	GENERAL HABITAT	MICROHABITAT	RANGE	POTENTIAL TO OCCUR
		ILC | USFS	May-June, peak birthing in late May. Young are capable of flight in 2-3 weeks and weaned after six weeks.	Lower montane coniferous forest | Meadow & seep | | Riparian forest | Riparian woodland | Upper montane coniferous forest | Valley & foothill grassland	common in mesic sites.	sites limiting. Extremely sensitive to human disturbance.		Project Area. The closest documented detection was about 8-miles away, in 1969.
Mollusks								
Western ridged mussel	*Gonidea angulata*	G3, S1S2 - IVU	Reproduction begins in spring.	Aquatic	Primarily creeks and rivers and less often lakes.	Prefer constant flow with low gradient, found on a wide variety substrate.	Originally in most of state, now extirpated from Central and Southern CA.	**None**, no habitat present. The closest documented detection was about 17-miles away, in 1947.

Potential to Occur:	
None	No habitat components meeting the species requirements are present.
Unlikely	Few to none of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
Moderate	Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
High	All the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
Present	Species were observed on the site or have been recorded (database observation) on the site in the recent past.

Acronym	Status:
AED	American Fisheries Society (AFS) – **Endangered**
AVU	American Fisheries Society (AFS) – **Vulnerable**
ATH	American Fisheries Society (AFS) – **Threatened**
BLM	Bureau of Land Management (BLM) – **Sensitive**
CDF	CA Dept. of Forestry – **Sensitive**
CC	California – **Candidate**
CD	California – **Delisted**
CE	California – **Endangered**
CFP	California – **Fully Protected**
CP	California – **Protected**
CT	California – **Threatened**
CSSC	CDFW – **Species of Special Concern**
CWL	CDFW – **Watch List**
FC	Federal – **Candidate**
FD	Federal – **Delisted**
FE	Federal – **Endangered**
FT	Federal – **Threatened**
IUCN	International Union for the Conservation of Nature (IUCN) – **Sensitive or Near Endangered**
ICE	IUCN – **Critically Endangered**
IDD	IUCN – **Data Deficient**
ILC	IUCN – **Least Concern**
INT	IUCN – **Near Threatened**
IVU	IUCN – **Vulnerable**
MSSC	Marine Mammal Commission (MMC) – **Species of Special Concern**
NRWL	North American Bird Conservation Initiative (NABCI) – **Red Watch List**
NYWL	NABCI – **Yellow Watch List**
UBCC	U.S. Fish & Wildlife Service (USFWS) – **Birds of Conservation Concern**
USFS	U.S. Forest Service (USFS) – **Sensitive**

G1	Global Conservation Status Rank: **Critically Imperiled** – At very high risk of extinction due to extreme rarity (five or fewer populations).
G2	Global Conservation Status Rank: **Imperiled** – at risk of extinction or elimination (6-20 extant populations).
G3	Global Conservation Status Rank: **Vulnerable** – at moderate risk of extinction or elimination (21-100 extant populations).
G4	Global Conservation Status Rank: **Apparently secure** – at fairly low risk of extinction or elimination (100-1,000 extant populations).
G5	Global Conservation Status Rank: **Secure** – Common; widespread and abundant (1,000+ extant populations).
S1	Subnational Conservation Status Rank: **Critically Imperiled** – at very high risk of extirpation in the state/province due to extreme rarity.
S2	Subnational Conservation Status Rank: **Imperiled** – at high risk of extirpation in the state/province.
S3	Subnational Conservation Status Rank: **Vulnerable** – moderate risk of extirpation in the state/province.
S4	Subnational Conservation Status Rank: **Apparently secure** – at fairly low risk of extirpation in the state/province.
S5	Subnational Conservation Status Rank: **Secure** – at very low risk of extirpation in the state/province.
T#	Infraspecific (Subspecies) Taxon Conservation Status Rank

Appendix C. Wildlife Species Observed

Western meadowlark (*Sturnella neglecta*)
Gopher snake (*Pituophis catenifer*)
Northern mockingbird (*Mimus polyglottos*)
House finch (*Haemorhous mexicanus*)
Black-tailed jackrabbit (*Lepus californicus*)
American goldfinch (*Spinus tristis*)
Western honeybee (*Apis mellifera*)
Song sparrow (*Melospiza melodia)*
Red-winged blackbird (*Agelaius phoeniceus*)
California towhee (*Melozone crissalis*)
Spotted towhee (*Pipilo maculatus*)
Bewick's wren (*Thryomanes bewickii*)
Canadian goose (*Branta canadensis*)
Racoon (*Procyon lotor*)
Pacific tree frog (*Pseudacris regilla*)
Western fence lizard (*Sceloporus occidentalis*)
Coyote (*Canis latrans*)
Lazuli bunting (*Passerina amoena*)
Eurasian collared dove (*Streptopelia decaocto*)
California quail (*Callipepla californica*)
Golden crowned sparrow (*Zonotrichia atricapilla)*
American robin (*Turdus migratorius*)
Lark sparrow (*Chondestes grammacus*)
Common raven (*Corvus corax*)
Western bluebird (*Sialia mexicana*)
Green heron (*Butorides virescens*)
Cattle egret (*Ardeidae bubulcus*)
Mallard (*Anas platyrhynchos*)
Hermit thrush (*Catharus guttatus*)
Violet-green swallow (*Tachycineta thalassina*)

Appendix D. Plant Species Observed

* Denotes that the species is invasive

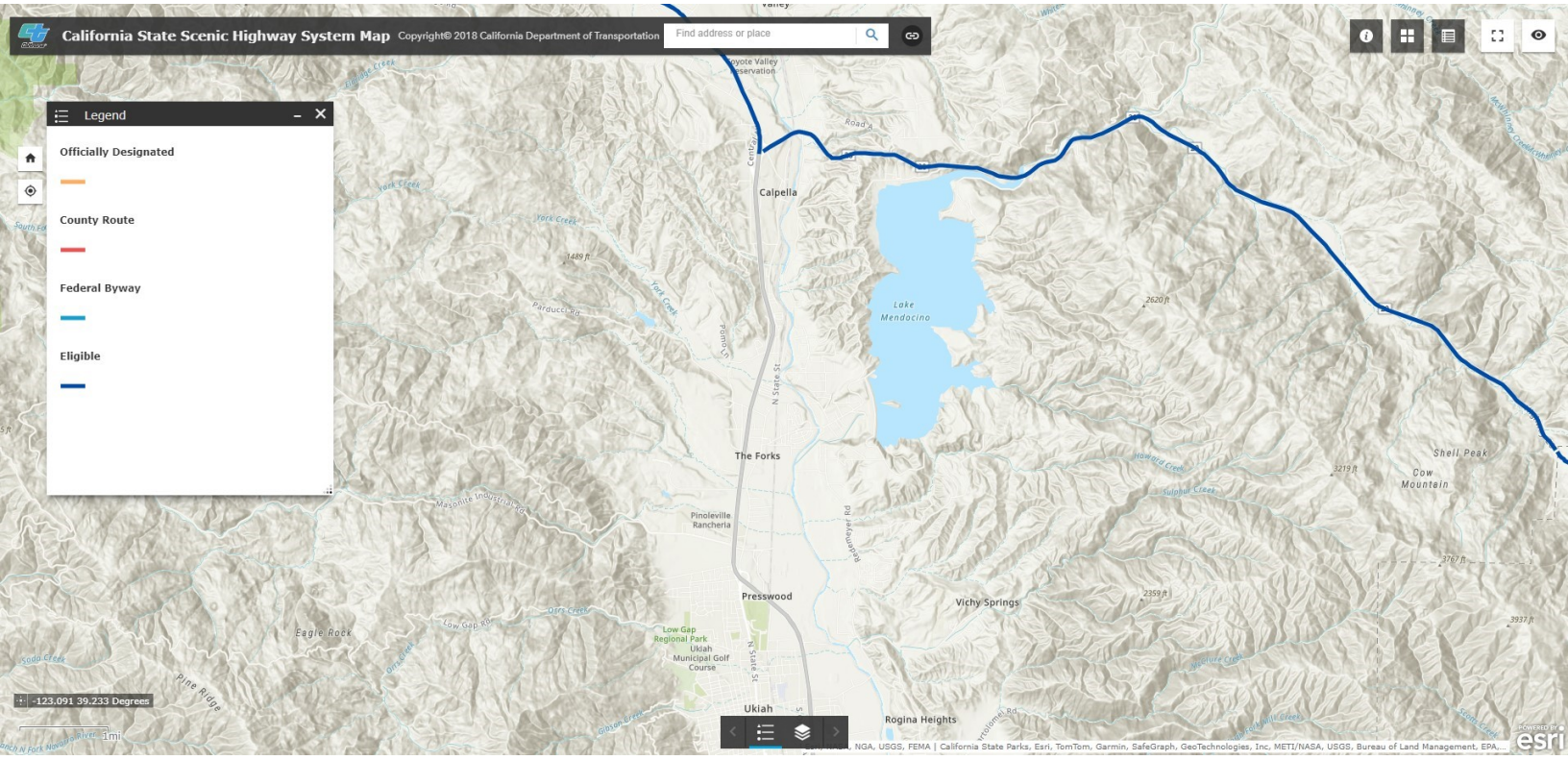
Family	*Scientific Name*	Common Name	Exotic
GYMNOSPERMS			
Cupressaceae - Cypress Family			
	Juniperus sp.	juniper	
EUDICOTS			
Adoxaceae - Muskroot Family			
	Sambucus mexicana	blue elderberry	
Apiaceae - Carrot Family			
	Anthriscus caucalis	bur-chervil	x
	Conium maculatum	poison hemlock	x*
	Foeniculum vulgare	fennel	x*
Apocynaceae - Dogbane Family			
	Vinca major	greater periwinkle	x*
Asteraceae - Aster Family			
	Baccharis pilularis	coyote brush	
	Carduus pycnocephalus	Italian thistle	x*
	Centaurea solstitialis	yellow star-thistle	x*
	Cichorium intybus	chicory	x
	Cirsium vulgare	bull thistle	x*
	Gamochaeta ustulata	featherweed	
	Logfia gallica		x
	Matricaria discoidea	pineapple weed	
	Psilocarphus tenellus		
	Sonchus asper	prickly sow thistle	x
	Taraxacum officinale	common dandelion	x
	Tolpis barbata		x
	Xanthium strumarium	cocklebur	
Boraginaceae - Borage Family			
	Amsinckia intermedia	common fiddleneck	
Brassicaceae - Mustard Family			
	Capsella bursa-pastoris	shepherd's purse	x
	Draba verna	whitlow-grass	x
	Lepidium strictum	upright pepperweed	
	Raphanus sativus	radish	x*
Caryophyllaceae - Pink Family			
	Cerastium glomeratum	mouse-ear chickweed	x
	Petrorhagia dubia	hairypink	x
Convolvulaceae - Morning-Glory Family			
	Convolvulus arvensis	field bindweed	x

Fabaceae - Pea Family			
	Acmispon americanus	Spanish lotus	
	Acmispon brachycarpus	deervetch	
	Lupinus bicolor	miniature lupine	
	Lupinus latifolius	broadleaf lupine	
	Medicago polymorpha	California burclover	x*
	Trifolium albopurpureum	Indian clover	
	Trifolium arvense	rabbitfoot clover	x
	Trifolium dubium	little hop clover	x
	Trifolium glomeratum	clustered clover	x
	Trifolium hirtum	rose clover	x*
	Trifolium incarnatum	crimson clover	x
	Vicia hirsuta	hairy vetch	x
	Vicia villosa	hairy vetch	x
Fagaceae - Beech Family			
	Quercus lobata	valley oak	
Gentianaceae - Gentian Family			
	Zeltnera muehlenbergii	Muehlenberg's centaury	
Geraniaceae - Geranium Family			
	Erodium botrys	broadleaf filaree	x
	Erodium cicutarium	red-stemmed filaree	x*
	Geranium dissectum	cut-leaf geranium	x*
Hypericaceae - St. John's Wort Family			
	Hypericum perforatum	Klamath weed	x*
Lamiaceae - Mint Family			
	Lamium purpureum	henbit	x
	Mentha pulegium	penny royal	x*
Linaceae - Flax Family			
	Linum bienne	common flax	x
Lythraceae - Loosestrife Family			
	Lythrum hyssopifolium	loosestrife	x*
Myrsinaceae - Myrsine Family			
	Lysimachia arvensis	scarlet pimpernel	x
Onagraceae - Evening Primrose Family			
	Epilobium densiflorum		
Orobanchaceae - Broomrape Family			
	Castilleja attenuata	valley tassels	
Plantaginaceae - Plantain Family			
	Plantago elongata	coastal plantain	
	Plantago erecta	California plantain	
	Plantago coronopus	cut-leaf plantain	x
	Plantago lanceolata	English plantain	x*

	Veronica peregrina subsp. *xalapensis*	hairy purslane speedwell	
Polemoniaceae - Phlox Family			
	Navarretia intertexta subsp. *intertexta*	needle-leaved navarretia	
Polygonaceae - Buckwheat Family			
	Polygonum avivulare	knotweed	x
	Rumex acetosella	sheep sorrel	x*
	Rumex crispus	curly dock	x*
	Rumex sp.	dock	
Rosaceae - Rose Family			
	Rubus armeniacus	Himalayan blackberry	x*
Rubiaceae - Madder Family			
	Galium sp.	bedstraw	
Salicaceae - Willow Family			
	Populus fremontii subsp. *fremontii*	Fremont cottonwood	
Scrophulariaceae - Figwort Family			
	Verbascum blattaria	moth mullein	x
	Verbascum thapsus	woolly mullein	x*
Solanaceae - Nightshade Family			
	Solanum xanti	nightshade	
MONOCOTS			
Cyperaceae - Sedge Family			
	Eleocharis macrostachya	spikerush	
Poaceae - Grass Family			
	Aira caryophyllea	silver European hairgrass	x
	Avena barbata	slender wild oat	x*
	Bromus catharticus	rescue grass	x
	Bromus diandrus	ripgut brome	x*
	Bromus hordeaceus	soft chess	x*
	Bromus japonicus		x*
	Dactylis glomerata	orchard grass	x*
	Festuca myuros	rattail fescue	x*
	Festuca perennis	Italian ryegrass	x*
	Hordeum murinum subsp. *leporinum*	hare barley	x*
	Polypogon australis	Chilean beardgrass	x
Themidaceae - Brodiaea Family			
	Dipterostemma capitata	blue dicks	

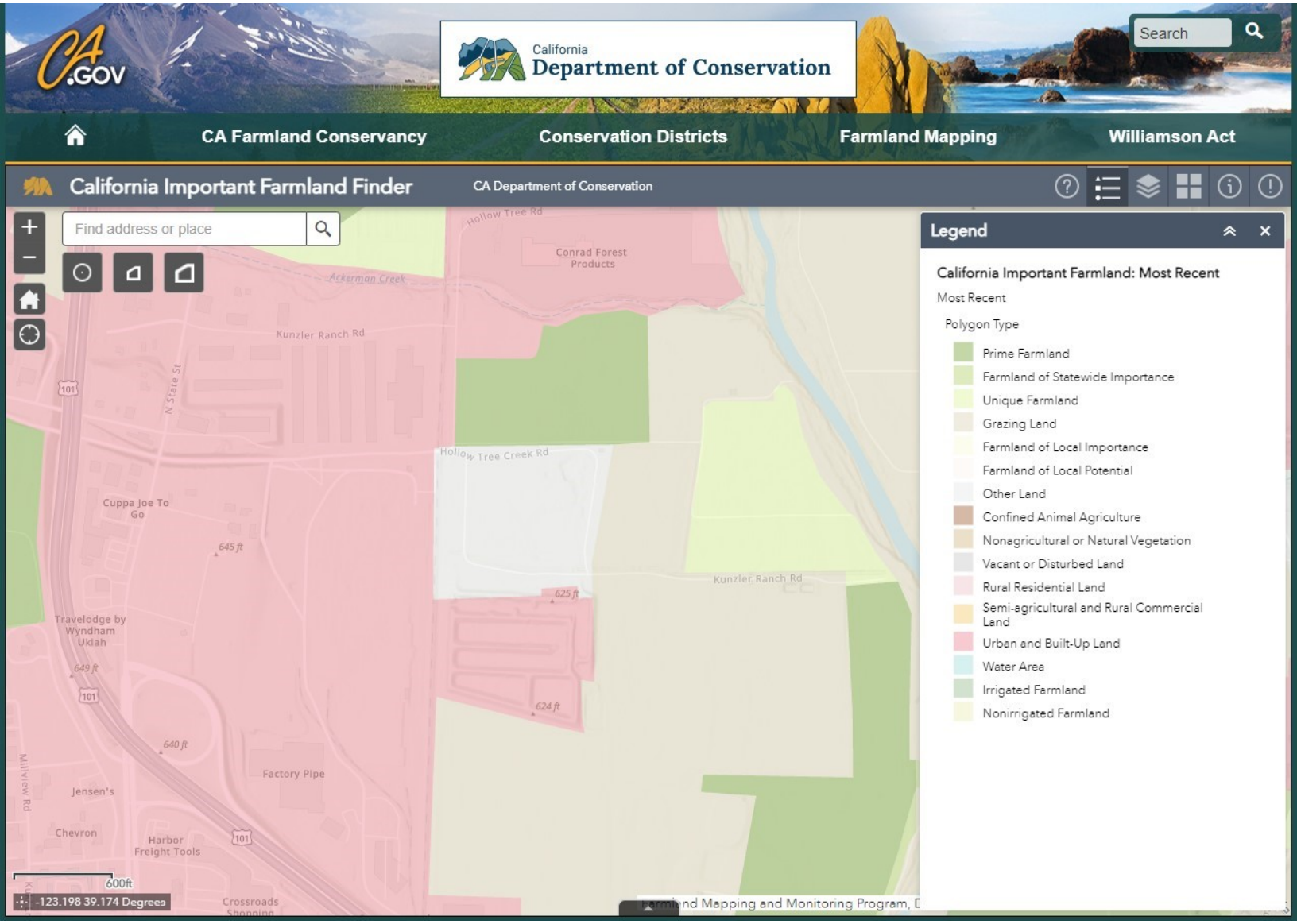
APPENDIX 5

California State Scenic Highway Mapper


California State Scenic Highway System Map
Copyright© 2018 California Department of Transportation
Find address or place
Legend
Officially Designated
County Route
Federal Byway
Eligible
Calpella
Lake Mendocino
The Forks
Pinoleville Rancheria
Presswood
Ukiah
Vichy Springs
Rogina Heights
Eagle Rock
Shell Peak
Cow Mountain
Low Gap Regional Park
Ukiah Municipal Golf Course
-123.091 39.233 Degrees
1mi
esri

APPENDIX 6

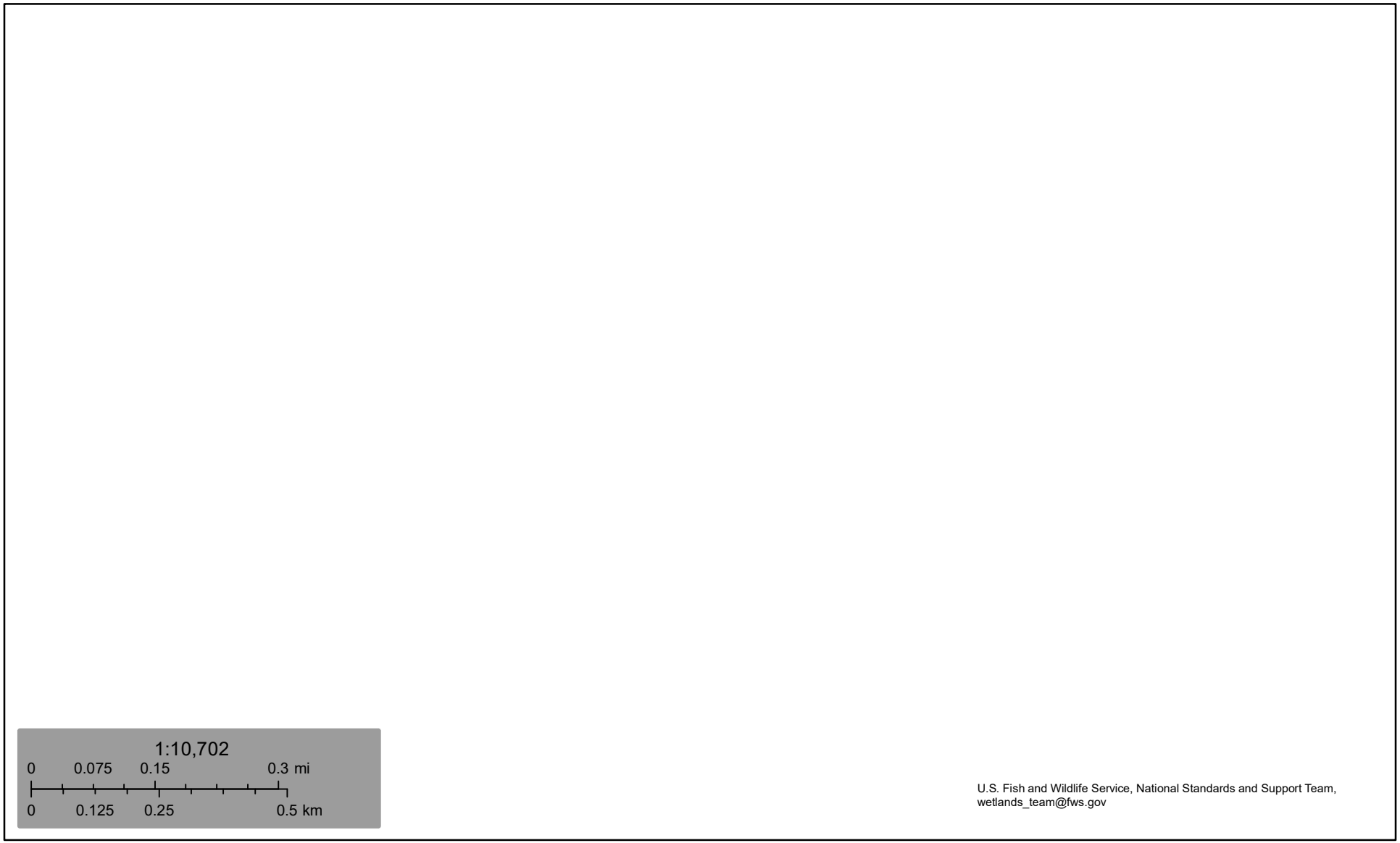
California Important Farmland Finder


CA.GOV
California
Department of Conservation
Search
CA Farmland Conservancy
Conservation Districts
Farmland Mapping
Williamson Act
California Important Farmland Finder
CA Department of Conservation
Find address or place
Legend
California Important Farmland: Most Recent
Most Recent
Polygon Type
Prime Farmland
Farmland of Statewide Importance
Unique Farmland
Grazing Land
Farmland of Local Importance
Farmland of Local Potential
Other Land
Confined Animal Agriculture
Nonagricultural or Natural Vegetation
Vacant or Disturbed Land
Rural Residential Land
Semi-agricultural and Rural Commercial Land
Urban and Built-Up Land
Water Area
Irrigated Farmland
Nonirrigated Farmland
Hollow Tree Rd
Conrad Forest Products
Ackerman Creek
Kunzler Ranch Rd
N State St
101
Hollow Tree Creek Rd
Cuppa Joe To Go
645 ft
625 ft
Travelodge by Wyndham Ukiah
649 ft
624 ft
640 ft
Factory Pipe
Jensen's
Millview Rd
Chevron
Harbor Freight Tools
600ft
-123.198 39.174 Degrees
Crossroads
Shopping
Farmland Mapping and Monitoring Program, D

APPENDIX 7

National Wetlands Inventory

Redwood Valley County Water District



April 19, 2024

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

APPENDIX 8

Native American Tribal Consultation Request Letter

Redwood Valley County Water District
Post Office Box 399 • Redwood Valley, CA 95470 • (707) 485-0679

April 19, 2024

Attention: Native American Tribes with Interests in Mendocino County, California

Subject: Tribal Consultation Request
Redwood Valley County Water District Infrastructure and Water Resiliency Upgrades
Assessor's Parcel Numbers (APNs): 170-170-06 and 170-180-10

Dear Tribal Representative:

This letter serves as an invitation to consult with the Redwood County Valley Water District (RCVWD) regarding the proposed Infrastructure and Water Resiliency Upgrades (Project), pursuant to Public Resources Code (PRC) Section 21080.3.1. The RVCWD is the lead agency under the California Environmental Quality Act (CEQA) and is in the process of preparing a CEQA document for the Project.

The RCVWD is proposing to construct up to two (2) production wells to establish a reliable water source for customers of the RVCWD. The Project is proposed approximately 0.4 mile north of the City of Ukiah within unincorporated Mendocino County on the 31-acre parcel identified by Assessor's Parcel Number (APN): 170-170-06 and an approximately 14-acre portion of APN: 170-180-10 (Site). An Area of Potential Effects (APE) map depicting the Site is enclosed for your reference.

The RVCWD does not have an adequate reliable water source; as such, the RVCWD is proposing to develop up to two (2) new water supply wells that would provide an anticipated minimum capacity of 300 gallons per minute (gpm). The new well(s) would serve the RVCWD through connection to the Millview County Water District (MCWD) water system infrastructure at the Site. If the minimum capacity of 300 gpm can be achieved with one (1) well, a second well would not be developed. The well(s) are proposed for development on the parcels identified by Assessor's Parcel Numbers (APN): 170-170-06 and 170-180-10 (Site), although the exact locations have not yet been identified. Additionally, water lines would be required to connect each well to the MCWD water system infrastructure located along the northeast boundary of the Site. Ground disturbance would be related to drilling the well(s) and trenches for installation of the water lines.

The Site is currently partially developed with several dirt roads, existing MCWD water system infrastructure along the northeastern boundary of the Site, and several dormant infiltration basins in the southeastern portion of the Site. The MCWD infrastructure consists of a fenced area with a production well and distribution equipment. The remainder of the Site consists of grassy vegetation and several tree stands. A cultural resource survey for the Site is in progress.

Tribal Consultation Request
Infrastructure and Water Resiliency Upgrades
Mendocino County, California; APNs: 170-170-06 and 170-180-10
Redwood Valley County Water District
April 19, 2024

The lead agency contact for this consultation is:
Jared Walker, General Manager
151 Laws Avenue
Ukiah, CA 95482
jwalker@willowcwd.org

If you have any questions or would like any additional information on the Project, please do not hesitate to contact me. The RVCWD looks forward to the opportunity to hear from you and consult with you on this Project. Pursuant to PRC § 21080.3.1 (b), you have 30 days from the receipt of this letter to request consultation, in writing, with the RVCWD. Should no response be received within 30 days, the RVCWD will consider consultation to be complete.

Respectfully,

Jared Walker
General Manager
Redwood Valley County Water District

Enclosure (Area of Potential Effects Map; Existing Conditions Map)

APPENDIX 9

National Register of Historic Places

National Register of Historic Places

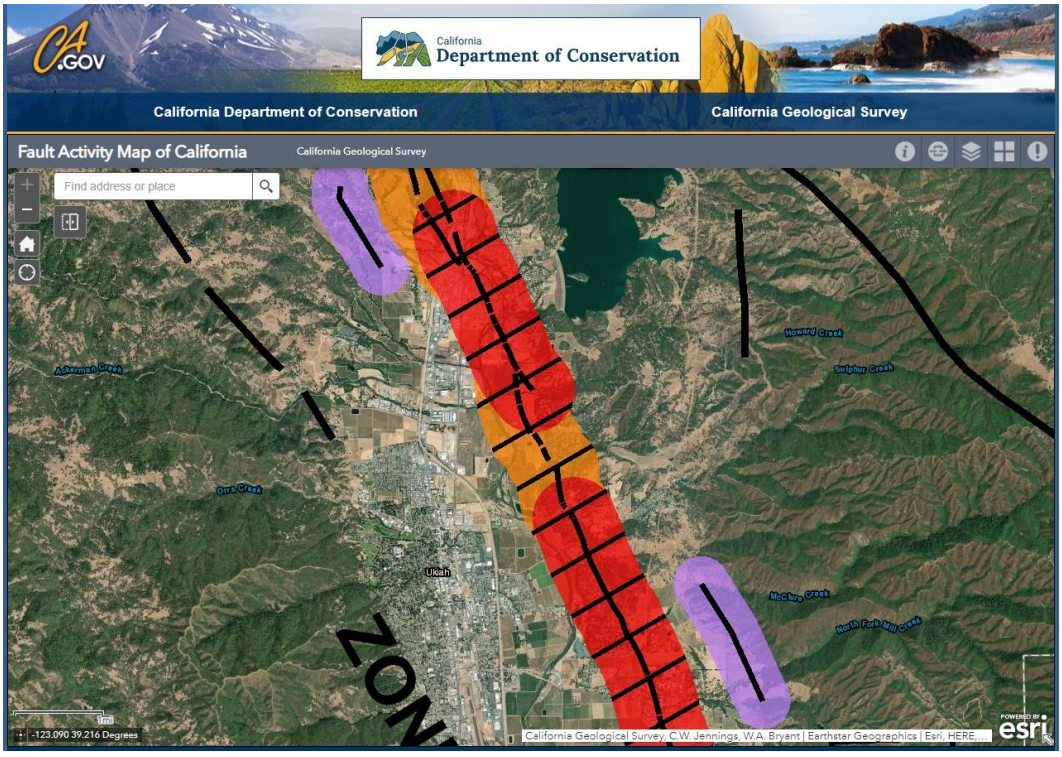
Ref#	Property Name	County	City	Street & Number	Status	Category of Property
100001383	Albion River Bridge	Mendocino	Albion	Mile markers 43.7-44.0 on CA 1	Listed	structure
90001363	Arena Cove Historic District	Mendocino	Point Arena	Arena Cove	Listed	DISTRICT
04000620	Babcock, Dr. Raymond, House	Mendocino	Willits	96 S. Humboldt St.	Listed	BUILDING
100009041	Bear Harbor Landing Historical and Archaeological District	Mendocino	Whitethorn	Address Restricted	Listed	district
90001359	Buckridge Ranch House	Mendocino	Point Arena	On the Garcia River near Buckridge Rd.	Listed	BUILDING
79000498	Con Creek School	Mendocino	Boonville	2 mi. N of Boonville on CA 128	Listed	BUILDING
10000394	Ford, Jerome B., House	Mendocino	Mendocino	735 Main St	Listed	BUILDING
91000565	FROLIC (brig)	Mendocino	Caspar	NE of Pt. Cabrillo	Listed	SITE
80000819	Getchell, O. W., House	Mendocino	Anchor Bay	CA 1	Listed	BUILDING
90001355	Gillmore, E. P. and Clara, House	Mendocino	Point Arena	40 Mill St.	Listed	BUILDING
90001356	Groshon, Sid, House	Mendocino	Point Arena	50 Mill St.	Listed	BUILDING
87002292	Held-Poage House	Mendocino	Ukiah	603 W. Perkins St.	Listed	BUILDING
93001022	Hofman, Charles, House	Mendocino	Ukiah	308 S. School St.	Listed	BUILDING
90001354	Hoyt-Scott House	Mendocino	Point Arena	10 Riverside Dr.	Listed	BUILDING
90001361	Italian Hotel	Mendocino	Point Arena	105 Main St.	Listed	BUILDING
90001353	Iverson House	Mendocino	Point Arena	40 Iverson Ave.	Listed	BUILDING
90001358	Ketchum, Billy, House	Mendocino	Point Arena	10 Scott Pl.	Listed	BUILDING
95001153	Larsen Family House	Mendocino	Willits	84 State St.	Listed	BUILDING
78000719	Lovejoy Homestead	Mendocino	Branscomb	N of Branscomb	Listed	SITE
90001364	Main Street Historic Commercial District	Mendocino	Point Arena	165--265 Main St.	Listed	DISTRICT
79000499	Manchester Schoolhouse	Mendocino	Manchester	19750 CA 1	Listed	BUILDING
71000165	Mendocino and Headlands Historic District	Mendocino	Mendocino	Bounded roughly by the Pacific Ocean on the W and S, Little Lak	Listed	DISTRICT
97001262	Mendocino Woodlands Recreational Demonstration Area	Mendocino	Mendocino	11301 Little Lake Road	Listed	DISTRICT
78000720	Milano Hotel	Mendocino	Gualala	38300 Highway One S	Listed	BUILDING
90001362	Morse, LeGrand, House	Mendocino	Point Arena	365 Main St.	Listed	BUILDING
09001089	Navarro	Mendocino	Albion	Navarro Beach Rd.	Listed	BUILDING
95000995	Olinsky Building	Mendocino	Fort Bragg	401 N. Main St.	Listed	BUILDING
79003458	Palace Hotel	Mendocino	Ukiah	272 N. State St.	Listed	BUILDING
90001357	Palmer, Annie, House	Mendocino	Point Arena	284 Main St.	Listed	BUILDING
90001365	Point Arena High School	Mendocino	Point Arena	200 Lake St.	Listed	BUILDING
90002189	Point Arena Light Station	Mendocino	Point Arena	Lighthouse Rd.	Listed	DISTRICT
90001360	Point Arena Rancheria Roundhouse	Mendocino	Point Arena	On the Garcia River at end of Rancheria Rd.	Listed	BUILDING
91001092	Point Cabrillo Light Station	Mendocino	Caspar	45300 Lighthouse Rd.	Listed	DISTRICT
72000238	Point Cabrillo Site	Mendocino	Pine Grove	Address Restricted	Listed	SITE
80000820	Round Valley Flour Mills	Mendocino	Covelo	Main and Greely Sts.	Listed	BUILDING
13001108	Seabiscuit's Stud Barn	Mendocino	Willits	16200 N. US 101	Listed	BUILDING
07000997	Spotswood House	Mendocino	Potter Valley	11820 West Rd.	Listed	BUILDING
100004919	St. Francis Mission Church	Mendocino	Hopland	Address Restricted	Listed	building
90001366	St. Paul's Methodist Episcopal Church	Mendocino	Point Arena	40 School St.	Listed	BUILDING
81000161	Sun House	Mendocino	Ukiah	431 S. Main St.	Listed	BUILDING
76000498	Town Creek Archeological Site	Mendocino	Covelo	Address Restricted	Listed	SITE
12000266	Ukiah Main Post Office	Mendocino	Ukiah	224 N. Oak St.	Listed	BUILDING
76000499	Weller House	Mendocino	Fort Bragg	524 Stewart St.	Listed	BUILDING
92001756	Willits Carnegie Library	Mendocino	Willits	85 E. Commercial St.	Listed	BUILDING
99001262	Willits Depot	Mendocino	Willits	East Commercial St.	Listed	BUILDING

APPENDIX 10

Seismic Resources

Earthquake Zones of Required Investigation (CGS, 2022)

Fault Activity Map of California (CGS, 2015)



APPENDIX 11

NRCS Soil Report

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Mendocino County, Eastern Part and Southwestern Part of Trinity County, California

8049.00 RVCWD

April 15, 2024

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:3,820 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Mendocino County, Eastern Part and Southwestern Part of Trinity County, California
Survey Area Data: Version 19, Aug 28, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 7, 2022—May 31, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

MAP INFORMATION

imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
113	Cole loam, drained, 0 to 2 percent slopes, MLRA 14	37.3	81.1%
125	Feliz clay loam, gravelly substratum, 0 to 2 percent slopes	5.2	11.4%
188	Russian loam, 0 to 2 percent slopes	3.5	7.6%
Totals for Area of Interest		**46.0**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Mendocino County, Eastern Part and Southwestern Part of Trinity County, California

113—Cole loam, drained, 0 to 2 percent slopes, MLRA 14

Map Unit Setting

National map unit symbol: 2xc91
Elevation: 500 to 1,950 feet
Mean annual precipitation: 38 to 73 inches
Mean annual air temperature: 56 to 59 degrees F
Frost-free period: 208 to 289 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Cole and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cole

Setting

Landform: Alluvial fans, flood-plain steps
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Concave, linear
Parent material: Alluvium derived from metamorphic and sedimentary rock

Typical profile

Ap - 0 to 5 inches: loam
A1 - 5 to 15 inches: loam
A2 - 15 to 20 inches: clay loam
Bt1 - 20 to 40 inches: clay loam
Bt2 - 40 to 60 inches: clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.14 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: Rare
Maximum salinity: Nonsaline (0.2 to 0.5 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.8 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: C
Ecological site: R014XG907CA - Loamy Bottom
Hydric soil rating: No

Minor Components

Russian

Percent of map unit: 13 percent
Hydric soil rating: No

Unnamed

Percent of map unit: 2 percent
Landform: Depressions
Hydric soil rating: Yes

125—Feliz clay loam, gravelly substratum, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hgq9
Elevation: 400 to 1,500 feet
Mean annual precipitation: 35 to 40 inches
Mean annual air temperature: 55 degrees F
Frost-free period: 175 to 250 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Feliz and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Feliz

Setting

Landform: Flood plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Typical profile

H1 - 0 to 46 inches: clay loam
H2 - 46 to 63 inches: very gravelly clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

Available water supply, 0 to 60 inches: High (about 9.7 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 3c
Hydrologic Soil Group: B
Ecological site: R014XG907CA - Loamy Bottom
Hydric soil rating: No

Minor Components

Cole

Percent of map unit: 3 percent
Hydric soil rating: No

Pinole

Percent of map unit: 3 percent
Hydric soil rating: No

Russian

Percent of map unit: 3 percent
Hydric soil rating: No

Pinnobie

Percent of map unit: 3 percent
Hydric soil rating: No

Unnamed

Percent of map unit: 3 percent
Landform: Depressions
Hydric soil rating: Yes

188—Russian loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hgsb
Elevation: 500 to 1,500 feet
Mean annual precipitation: 37 inches
Mean annual air temperature: 57 degrees F
Frost-free period: 225 to 250 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Russian and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Russian

Setting

Landform: Flood plains
Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Typical profile

H1 - 0 to 38 inches: loam
H2 - 38 to 60 inches: stratified very fine sandy loam to silt loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 3c
Hydrologic Soil Group: B
Ecological site: R014XG907CA - Loamy Bottom
Hydric soil rating: No

Minor Components

Unnamed

Percent of map unit: 5 percent
Landform: Flood plains
Hydric soil rating: Yes

Feliz

Percent of map unit: 3 percent
Hydric soil rating: No

Cole

Percent of map unit: 3 percent
Hydric soil rating: No

Riverwash

Percent of map unit: 2 percent
Landform: Channels
Hydric soil rating: Yes

Xerofluvents

Percent of map unit: 2 percent
Landform: Fans
Hydric soil rating: Yes

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

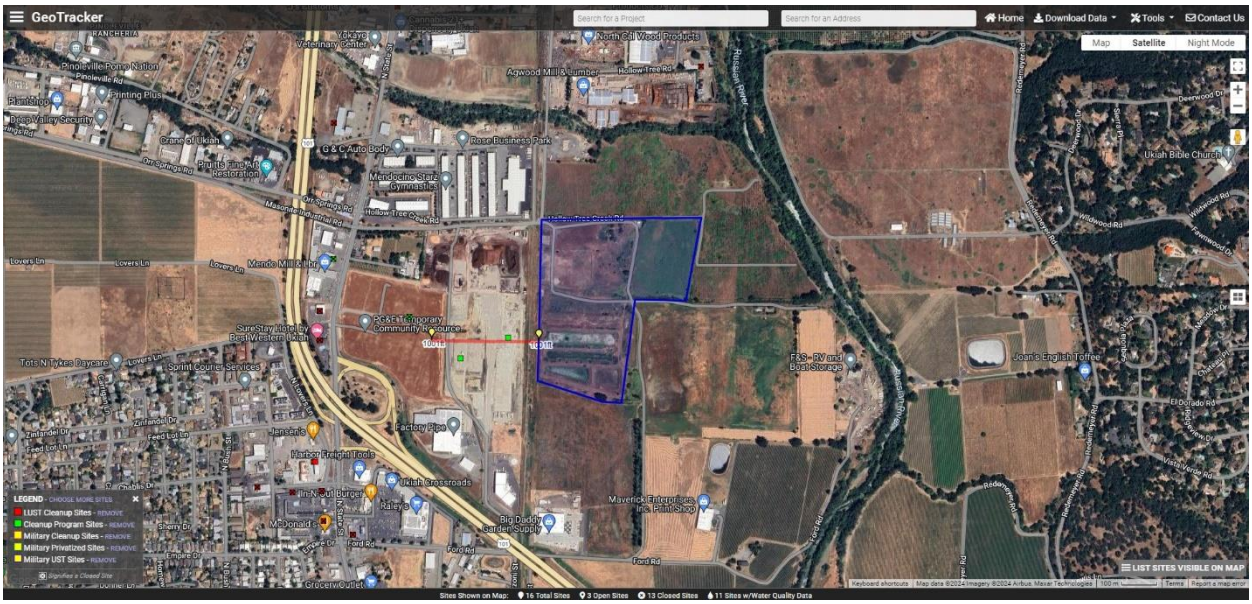
United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

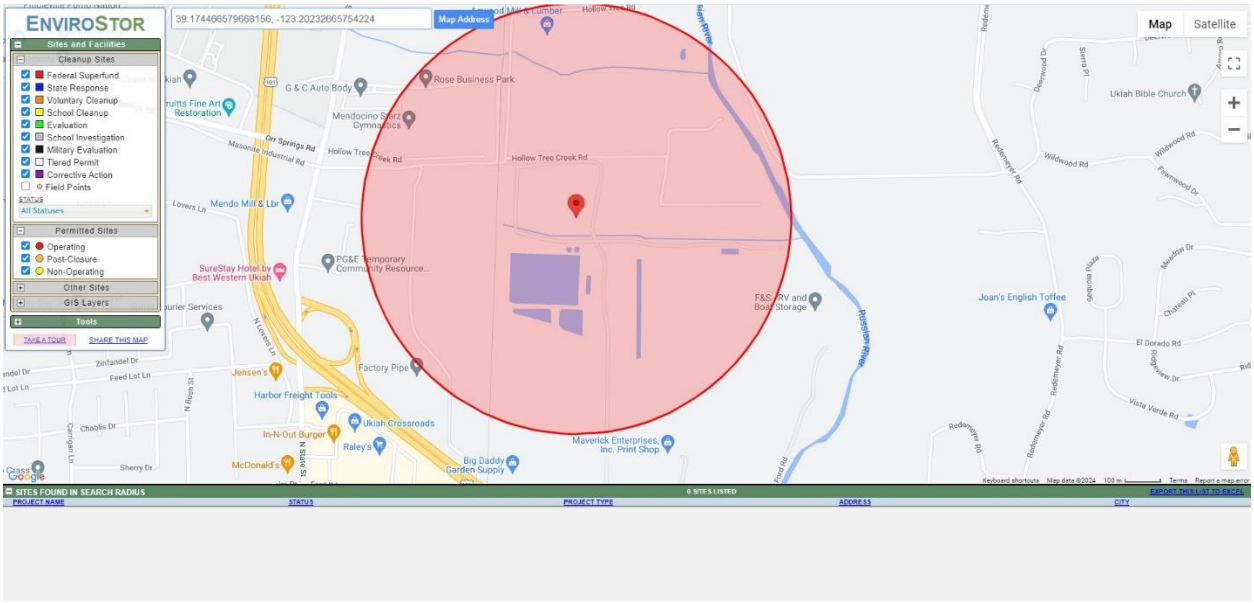
APPENDIX 12

Hazardous Material Databases

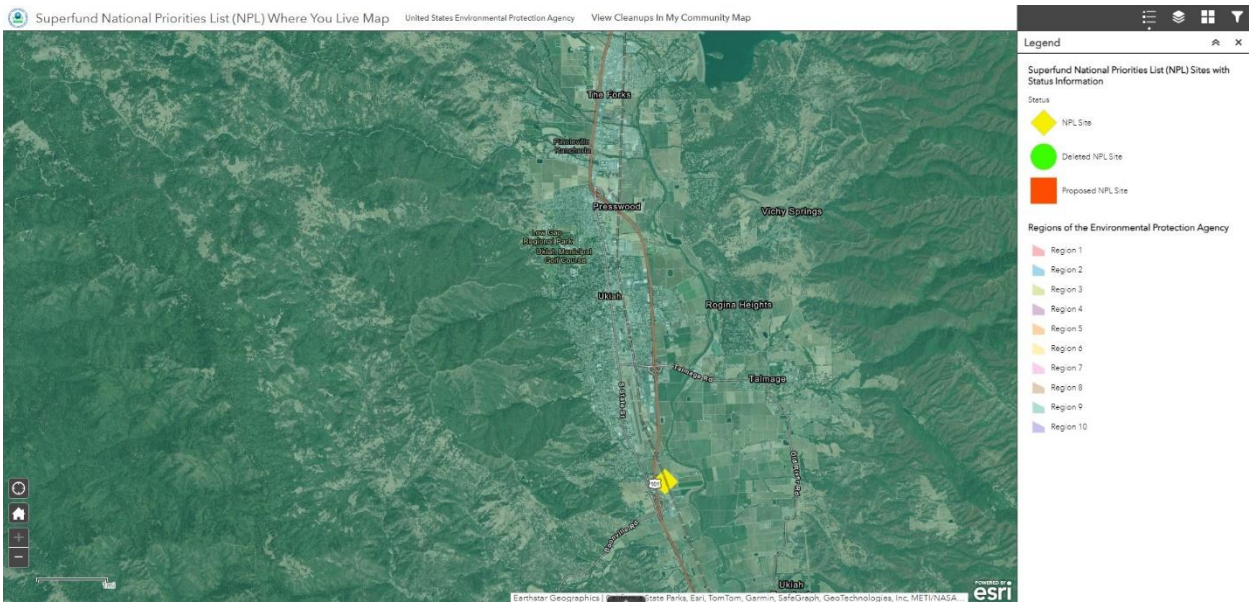
GeoTracker (SWRCB, 2024)



EnviroStor (DTSC, 2024)



Superfund (EPA, 2023)



APPENDIX 13

Work Plan dated July 18, 2023, and NCRWQCB Approval dated July 19, 2023

LACO

July 18, 2023

8049.03

North Coast Regional Water Quality Control Board
5550 Skylane Boulevard, Suite A
Santa Rosa, California 95403

Attention: Mr. Tom Magney

Subject: Hydrogeology Services Workplan for Infrastructure and Water Resiliency Upgrades
Redwood Valley County Water District
555 Kunzler Ranch Road, Ukiah, California
Assessor's Parcel Number 170-170-06

Dear Mr. Magney:

LACO Associates (LACO) presents this Hydrogeology Services Workplan (Workplan) on behalf of the Redwood Valley County Water District (District), for installing one test well and three temporary observation wells in the search for an additional viable community water supply well for the customers of the District (Figure 1). The test well and observation wells will be located on APN 170-170-06. While this location is outside the jurisdiction of the District, we have received an access agreement from Millview Water District (Millview), the property owners. This Workplan presents proposed test well and temporary observation well locations, construction details, waste disposal, groundwater analytical suite, and sampling schedule. A Location Map is included as Figure 1 and a Site Map with proposed well locations is included as Figure 2.

BACKGROUND AND SITE SETTING

The District received $1.81 million in funding from the California Department of Water Resources (DWR) Small Community Drought Relief Program (SCDR) to support water system infrastructure improvements, the development of a new water supply source, and a feasibility analysis to explore lowering the elevation of the intake structure within Lake Mendocino.

This workplan covers tasks related to performing a hydrogeological assessment using one proposed test well and three proposed observation wells to gain an understanding of aquifer conditions at the Site. The District will evaluate the yield and water quality that the test well can produce, while utilizing the temporary observation wells to monitor how the test well influences groundwater in the surrounding area and to evaluate aquifer properties. These data will help the District to determine whether the test well could be converted to a viable potable water production well to augment District water supply.

The proposed test well will be located south of an existing public well that serves Millview. The existing Well No. 6 that serves Millview is screened from 82 feet below ground surface (bgs) to 147 feet bgs and from 172 feet bgs to 222 feet bgs. Geophysical data presented in a Geophysical Report by NORCAL Geophysical Consultants Inc., dated January 17, 2023, indicates there is a semi-confined aquifer at approximately 75 feet below ground surface, therefore the proposed well and observation wells will be screened between approximately 100 and 200 feet bgs, and sealed from 95 feet bgs to 5 feet below ground surface. The annular space will be gravel packed over the well screen.

The Site is situated on a relatively flat 31-acre parcel that slopes gently to the east, and is accessed via a gate at the eastern end of Masonite Industrial Road. Masonite Corporation is located on the adjoining parcel west of the Site and is an open cleanup program site on Geotracker (T0604500036) that is eligible for closure. Studies indicate a High Volatility Organic Compound (HVOC) plume is located south of the Site. However, monitoring of the existing well that serves Millview indicates that the plume has not impacted groundwater resources at the Site. Potential contaminants of concern that are monitored include 1,1,1 – Trichloroethane (TCA), diesel, gasoline, heating oil/ fuel oil, polynuclear aromatic hydrocarbons (PAHs) and tetrachloroethylene (PCE).

Based on a preliminary review, the Site was formerly the location of a pump house, cooling tower and lab for the wastewater treatment ponds. Two large clarifiers were located to the west of the lab and a transformer was formerly located on a 5 by 14 foot concrete pad immediately north of the pump house and lab building. These installations were reportedly removed in 2008. Currently, the Site is partially developed with a gravel road that is located along the northern, eastern and portions of the western extent of the Site, and palustrine unconsolidated bottom artificially flooded (PUBK) wetlands in its southern extent (National Wetlands Inventory, 2023). A drainage flows from the Site to the Russian River located approximately 1,875 feet to the east. A brief review of well completion reports available on the Department of Water Resources onsite web application show that wells in the nearby vicinity have typically encountered sand, gravel, and cobbles from ground surface to 40 feet bgs, and heterogeneous layers of clay, gravel, and sand between 40 and 200 feet below ground surface. Based on the regional topographic gradient, the inferred direction of local groundwater flow is easterly.

PRELIMINARY ACTIONS

Field Activities

The geophysical profiling was conducted by NORCAL Geophysics (2022) that was intended to provide a visualization of the subsurface and preliminary identification of potential water bearing zones. These results informed the proposed test zones and the test well locations. The geophysical site map and profile are included as Figures 3 and 4.

Prior to beginning onsite work, a drilling permit will be obtained from Mendocino County Division of Environmental Health. Underground Services Alert will be notified no less than 72 hours prior to implementation of the approved Workplan. We will also coordinate with Millview on the locations of their infrastructure. LACO will also update the Site-specific Health and Safety Plan for use by its employees and subcontractors in the field.

Public Notification

As required by the County of Mendocino, Property owners within ¼ mile (a total of 47 properties) of the pumped well will be notified by mail of the date, time, location, and purpose of the pumping test, and will be provided with a contact name, phone number and address in the event that their well(s) appear to be affected by the test. The notice will emphasize that it is important for neighboring well owners to respond as soon as any effects on their well are observed. Subsequent letters and written responses to the letters should be submitted with the hydrological study report. If, during pumping, there is evidence that an adjoining property well(s) is being seriously depleted, the pump test should be interrupted until the situation can be investigated and resolved.

TEST WELL AND OBSERVATION WELL INSTALLATION AND TESTING

LACO proposes to install one test well and three temporary observation wells (Obs-1 through Obs-3) by a C-57-licensed driller using a mud rotary drill rig in a multi-phase approach.

Phase 1 – Test well installation and feasibility testing

The test well will be installed in an 8-inch borehole to a depth of 200 feet bgs. A temporary well will be constructed using 4-inch diameter Schedule 40 PVC with 60 slot (0.060 inch) factory slotted screen from 100 to 200 feet bgs. Downhole electronic logging (e-logging) will be deployed to determine changes in lithology and presence of groundwater. The annular space will be filled with number 3 Monterey sand or the equivalent to 95 feet bgs, bentonite from 95 feet to 5 feet bgs and Portland cement to grade.

Feasibility testing of the test well will be conducted at a discharge rate of approximately 100 gallons per minute, and the water extracted will be discharged to the infiltration basins in an adjacent parcel also owned the Millview Water District (Figure 2). The pumping test will continue for 24 hours or until changes in water level stabilize to within 10 percent over 1 hour. The pumping test will be conducted by the well driller. Water levels will be monitored in the pumping well and Millview's Well #6 using downhole pressure transducers with inboard data loggers or equivalent. Water discharge will be measured periodically with a flow totalizer. These results will be used to design the specifications for the final production well.

Phase 2 – Observation well installation

Following design of the well and ordering of the materials, we will install three test wells at the locations illustrated on Figure 2. The temporary observation wells will be constructed with the same specifications as the temporary test well.

Phase 3 – Final test well installation and testing

Following receipt of the well materials and installation of the observation wells, a new 16 inches borehole to allow for installing a 10-inch well casing will be completed near the test well. The casing will be constructed of PVC or low carbon steel with a wire wrapped screen interval. The final depth(s) of the screened interval and annular space backfill will be determined following the initial testing.

Feasibility testing of the well design will be conducted at a rate of approximately 400 to 500 gallons per minute, and the water extracted will be discharged to the adjacent infiltration basins (Figure 2). The pumping test will continue for 24 hours or until changes in water level stabilize to within 10 percent over 1 hour. The pumping test will be conducted by the well driller. Water levels will be monitored in the pumping well and Millview's Well #6 and the three observation wells using downhole pressure transducers with inboard data loggers. Water discharge will be measured periodically with a flow totalizer.

Groundwater Sampling

During the pumping test, LACO will collect and submit one water sample to a California-state certified analytical facility for testing. The water sample will be stored in an ice-filled cooler and submitted to a state-certified laboratory for the following Title 22 public water supply analytes as well as those associated with the Masonite groundwater plume:

- Primary inorganics by EPA Method 200.8 and 245.1 that includes: aluminum, arsenic, barium, beryllium, cadmium, chromium, fluoride, nickel, selenium, and thallium

- Asbestos by EPA method 100.1
- Nitrate/Nitrite by EPA Method 300.0
- Secondary standards that include: color by SM2120B, odor by EPA method 140.1, turbidity by SM2130B, pH by SM4500-H+B, surfactants (MBAS) by SM5540C, iron, magnesium, sodium, calcium by EPA method 200.7; copper, manganese, silver, zinc by EPA method 200.8, aggressive index by AWWA, chloride and sulfate by EPA method 300.0, specific conductance by SM2510B, total dissolved solids by SM2540C; total hardness by SM2340B, and total alkalinity by SM2320B
- Gross Alpha by EPA method 900.0
- Volatile organic compounds, which include methyl tert butyl ether, by EPA method 524.2
- Perchlorate by EPA Method 314.0
- Boron by EPA Method 200.71,2-Dibromethane (EDB) and 1,2-Dibromo-3-chloropropane (DBCP) by EPA method 504.1
- DDW Regulated Pesticides by EPA Method 507
- DDW Regulated Pesticides by EPA Method 508
- DDW Regulated Herbicides by EPA Method 515.1
- Carbonates by EPA method 531.1
- Endothall by EPA method 548
- Diquot by EPA method 549.2
- Total coliforms and E-Coli by SM9223
- 1,1,1 – Trichloroethane (TCA), polynuclear aromatic hydrocarbons (PAHs) and tetrachloroethylene (PCE)

LACO will measure the intrinsic parameters pH, temperature, oxidation-reduction potential, dissolved oxygen, and electrical conductivity during water sample collection using calibrated meters.

Well Development

The proposed wells will be developed by the drilling subcontractor either prior to setting the sanitary seal or no sooner than 72 hours following well installation. Water produced during development will be discharged in the adjacent infiltration basin.

Well Destruction

All test wells will be destroyed by removing any PVC casing installed and filling with bentonite grout to within 5 feet grade and neat cement to surface. Holes will be finished to match the existing surface.

Waste Disposal

Soil cuttings generated during well installation will be either reused onsite or stockpiled. Stockpiles shall be protected with an appropriate perimeter control (i.e., fiber rolls). If a stockpile will not be used or disposed for 14 days or more, it should be covered with 10 mil plastic to prevent dust migration or discharge of sediment laden stormwater. Stockpiled soil that is intended for offsite disposal will be sampled for laboratory analysis in order to determine the appropriate disposal facility. Soil encountered during this project is anticipated to be classified as non-hazardous waste, defined as follows and appropriate for disposal at a Class III landfill.

Stockpiles shall be sampled at the following interval, or as required by the disposal facility: one four-point composite sample, to be composited by the laboratory, per 250 cubic yards where the total volume of soil does not exceed 2,499 cubic yards. Samples shall be analyzed for:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (EPA) Method 8260B.
- Semi-volatile organic compounds (SVOCs) and polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270C.
- Total petroleum hydrocarbons – diesel-range organics (TPH-DRO) by EPA Method 8015B
- Total petroleum hydrocarbons – oil-range organics (TPH-ORO) by EPA Method 8015B
- Total petroleum hydrocarbons – gasoline-range organics (TPH-GRO) by EPA Method 8015B
- California Title 22 metals – EPA Method 6010B/7470.,

Reporting

A Report of Findings for the installation of the test well and observation following implementation and monitoring. California Department of Water Resources (DWR) Well Completion Reports (DWR-188) will be prepared and submitted within 30 days of completion of well installation.

Schedule of Implementation

Following NCRWQCB approval, LACO will coordinate field work with a drilling contractor. We anticipate conducting the testing in July or August, with results likely available in September or October.

Please email me at manhartc@lacoassociates.com or call (707) 443-5054 if you have any questions.

Sincerely,
LACO Associates

Christine Manhart, CHG
Lic. No. 1082, Exp. 3/31/25

Jennifer Genetti, GIT
Assistant Geologist

JRG/CSM:jrg

P:\8000\8049 Redwood Valley County Water District\8049.03 DWR Grant Project Management\02 Service Agreements\Subconsultant Agreements\Bid Docs\8049.03 test well DRAFT workplan.doc

Figures

Figure 1	Location Map
Figure 2	Site Map
Figure 3	NORCAL Geophysics Plate 1 Site Map
Figure 4	NORCAL Electrical Resistivity Profiles Plate 2 ER-1 ER-2

References

NORCAL Geophysical Consultants, Inc. 2023. Geophysical Investigation, Redwood Valley County Water District. Submitted to LACO Associates January 17, 2023.

FIGURES

FIGURES

LACO
EUREKA UKIAH SANTA ROSA
1-800-515-5054 www.lacoassociates.com

PROJECT	Hydrogeological Water Supply Assessment	BY CSM	FIGURE 1
CLIENT	RVCWD	DATE 4/25/23	
LOCATION	Ukiah , CA	CHECK	JOB NO. 8049.03
	Vicinity Map	SCALE As Shown	

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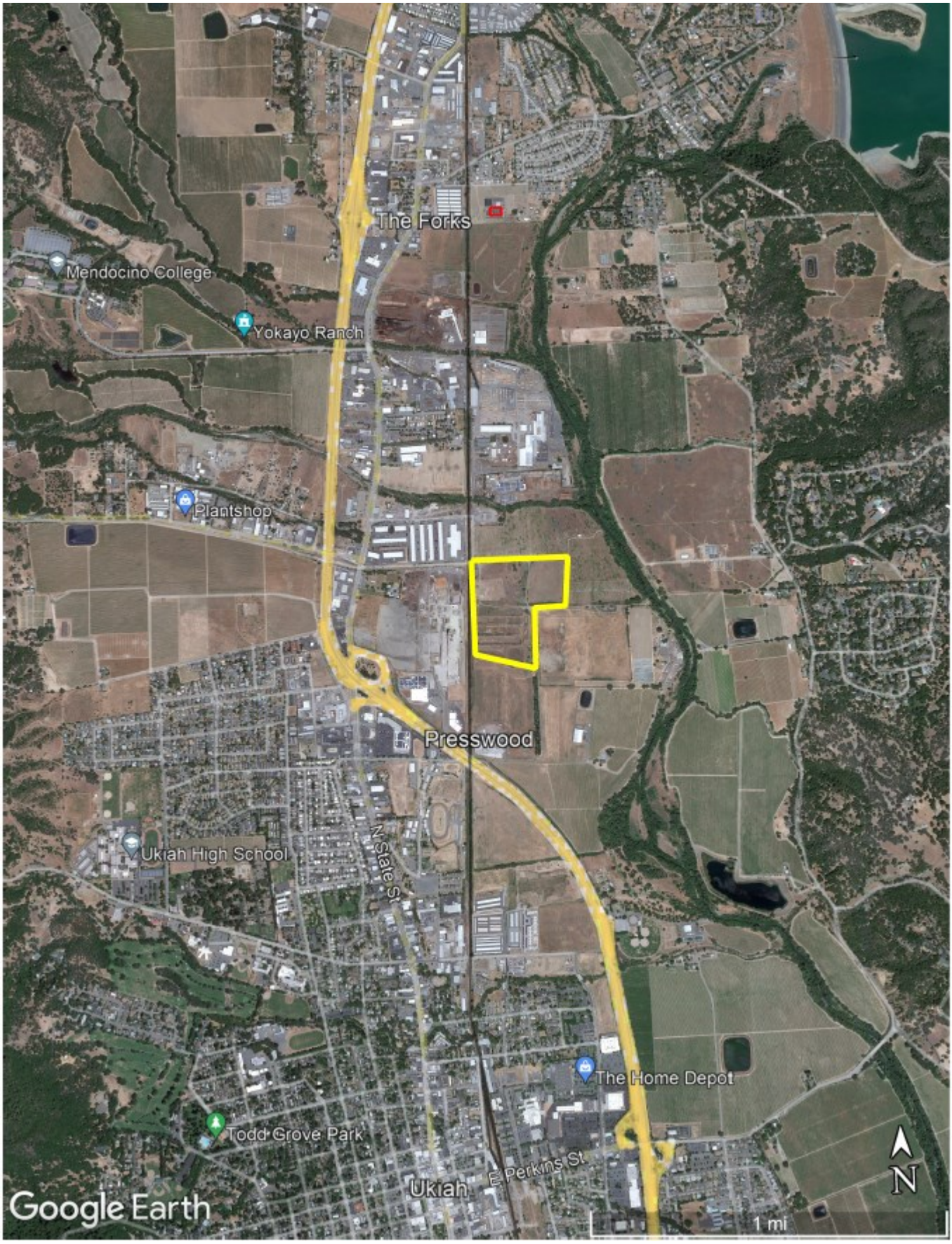
OF



LACO
EUREKA UKIAH SANTA ROSA
1-800-515-5054 www.lacoassociates.com

PROJECT	Hydrogeological Water Supply Assessment	BY CSM	FIGURE 2
CLIENT	RVCWD	DATE 4/25/23	
LOCATION	Ukiah , CA	CHECK	JOB NO. 8049.03
	Site Map	SCALE As Shown	

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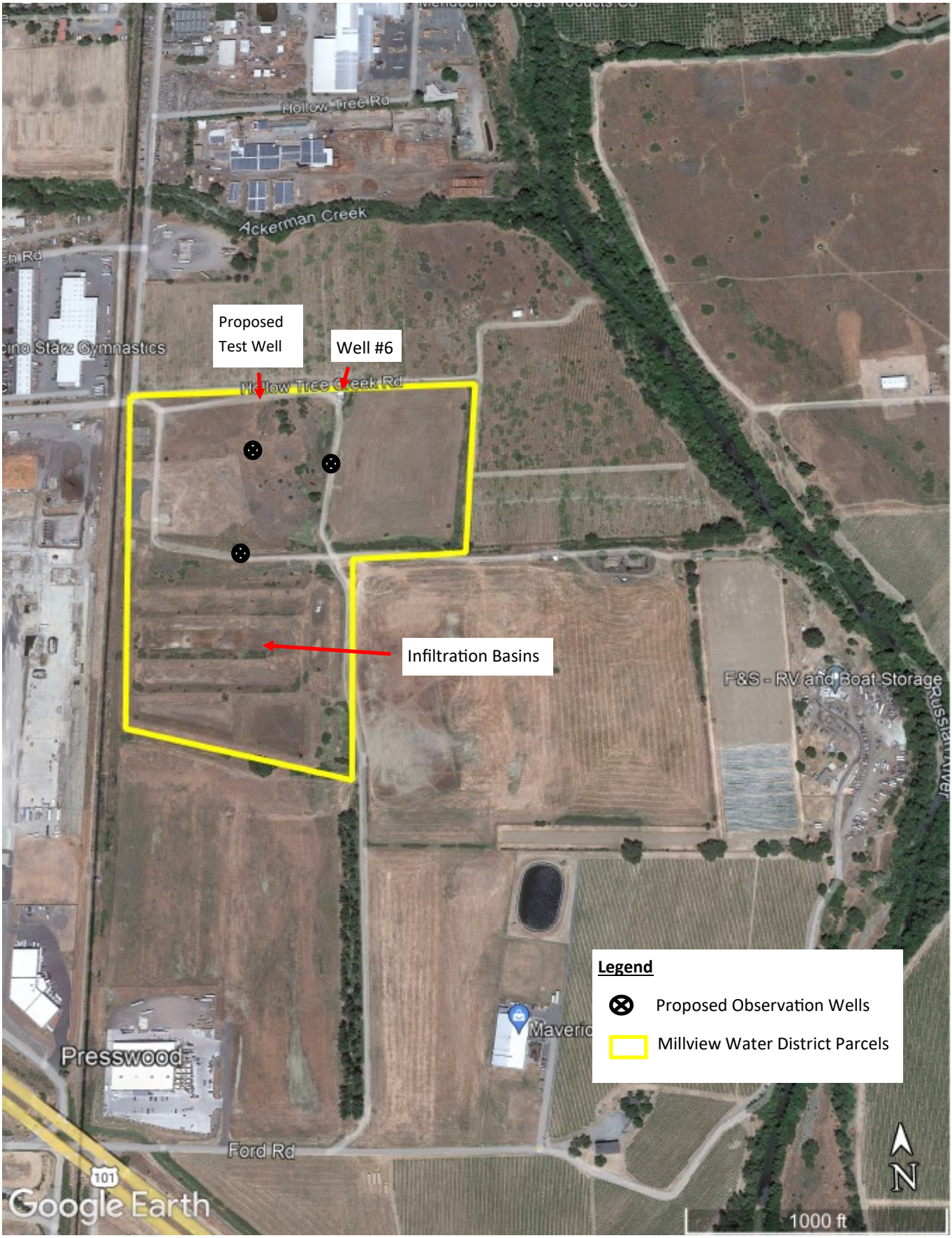

VICINITY MAP

SCALE
0 125 250 500
(1 inch = 250 feet)

LEGEND

	ELECTRICAL RESISTIVITY PROFILING LINE
	HIGH RESISTIVITY ZONE LIKELY REPRESENTING COARSER GRAINED SEDIMENTS

NORCAL GEOPHYSICAL CONSULTANTS INC.
A Terracon COMPANY
321A BLODGETT STREET
COTATI, CA 94931
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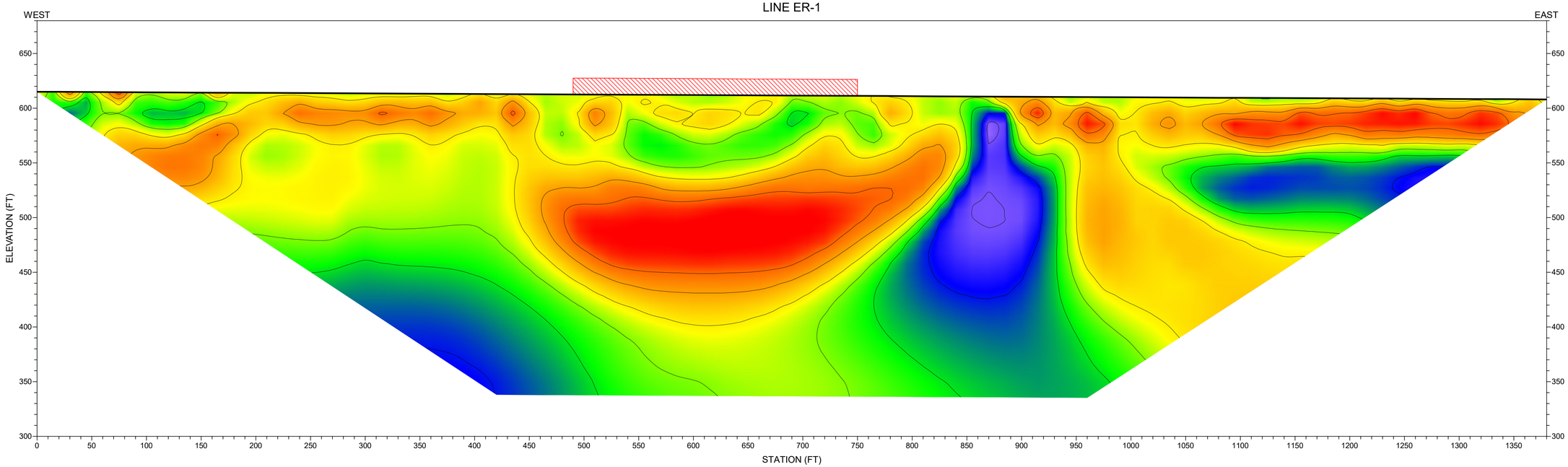
PROFESSIONAL GEOPHYSICIST
DAVID T HAGIN
No. 1033
STATE OF CALIFORNIA

SITE LOCATION MAP
ELECTRICAL RESISTIVITY PROFILING SURVEY
REDWOOD VALLEY COUNTY WATER DISTRICT — DWR GRANT PROJECT MANAGEMENT

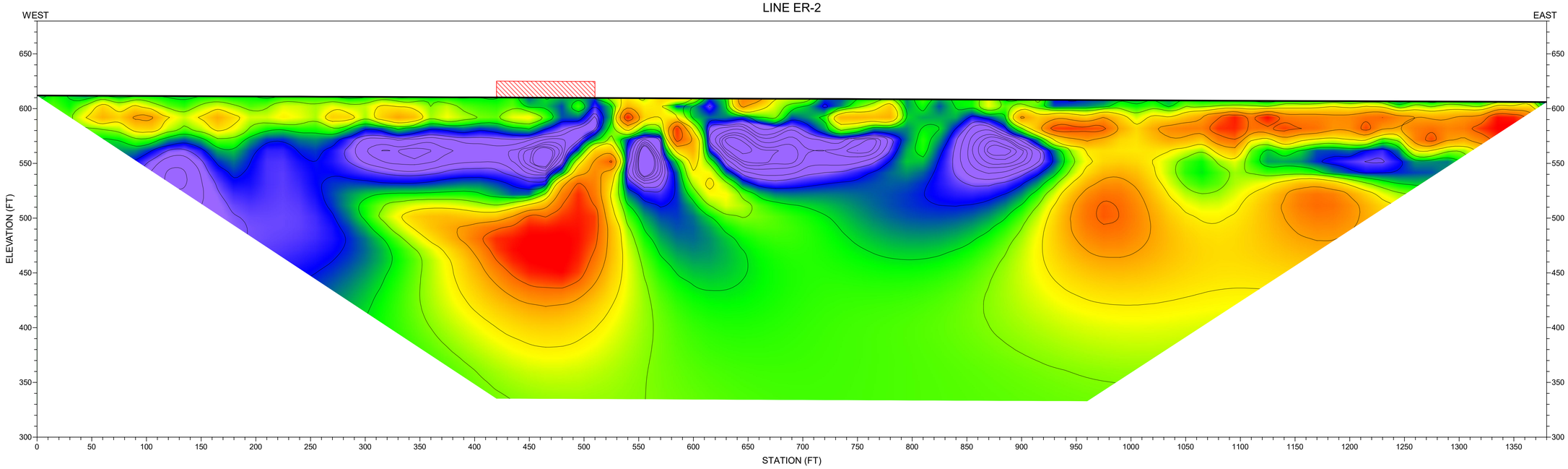
LOCATION: UKIAH, CALIFORNIA
CLIENT: LACO
JOB #. NS225134 | DATE: JANUARY 2023 | PLATE 1
DRAWN BY: H.PHILSON | APPROVED BY: DTH
12/29/2022

LACO Figure 3

LINE ER-1



LINE ER-2



LEGEND	
	HIGH RESISTIVITY ZONE LIKELY REPRESENTING COARSER GRAINED SEDIMENTS

SCALE
0 25 50 100
(1 inch = 50 feet)

ELECTRICAL RESISITIVITY (OHM-M)
20 40 60 80 100 200

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ELECTRICAL RESISTIVITY PROFILES
LINES ER-1 & ER-2
REDWOOD VALLEY COUNTY WATER DISTRICT —
DWR GRANT PROJECT MANAGEMENT

LOCATION: UKIAH, CALIFORNIA		
CLIENT: LACO		
JOB #: NS225134	DATE: JANUARY 2023	PLATE 2
DRAWN BY: H.PHILSON	APPROVED BY: DTH	

12/29/2022

LACO Figure 4

July 19, 2023

Jared Walker, General Manager
Willow County Water District
151 Laws Avenue
Ukiah, CA 95482
JWalker@willowcwd.org

Dear Mr. Walker:

Site: Redwood Valley Water District, District Well #6 Location
555 Kunzler Ranch Road, Ukiah, California
Adjacent to Former Masonite Corporation Site
Case No. 1NMC042; Geotracker ID T060456559

Subject: Workplan for Infrastructure and Water Resiliency Upgrades

North Coast Regional Water Quality Control Board (Regional Water Board) staff reviewed the referenced document ("Workplan") prepared by LACO Associates (LACO). The Workplan is approved as written.

The Workplan scope was discussed during a March 2, 2023, teleconference between LACO, Regional Water Board, Department of Drinking Water (DDW), and Redwood Valley County Water District (Redwood Valley) representatives (Redwood Valley operates under Willow County Water District management).

The Workplan proposes installing a test well and three temporary observation wells on a parcel adjoining the former Masonite Corporation property, an open Regional Water Board site with known solvent contamination. The test and observation wells will be used to assess deeper aquifer properties and determine if the location is appropriate for a new Redwood Valley municipal well. In addition to the required Title 22 public water supply analytes, samples from the test well will be analyzed for 1,1,1–Trichloroethane (TCA), polynuclear aromatic hydrocarbons (PAHs) and tetrachloroethylene (PCE).

Please notify our office at least 5 working days prior to the start of drilling activities so that we may observe the work.

Sincerely,

Tom Magney
Engineering Geologist

cc: Zachary Rounds, DDW, Zachary.Rounds@waterboards.ca.gov
Jared Walker, General Manager, Willow County Water District
JWalker@willowcwd.org
Christine Manhart, LACO manhartc@lacoassociates.com
Jordan Blough, LACO, bloughj@lacoassociates.com

APPENDIX 14

Groundwater Basin Boundary Tool Assessment

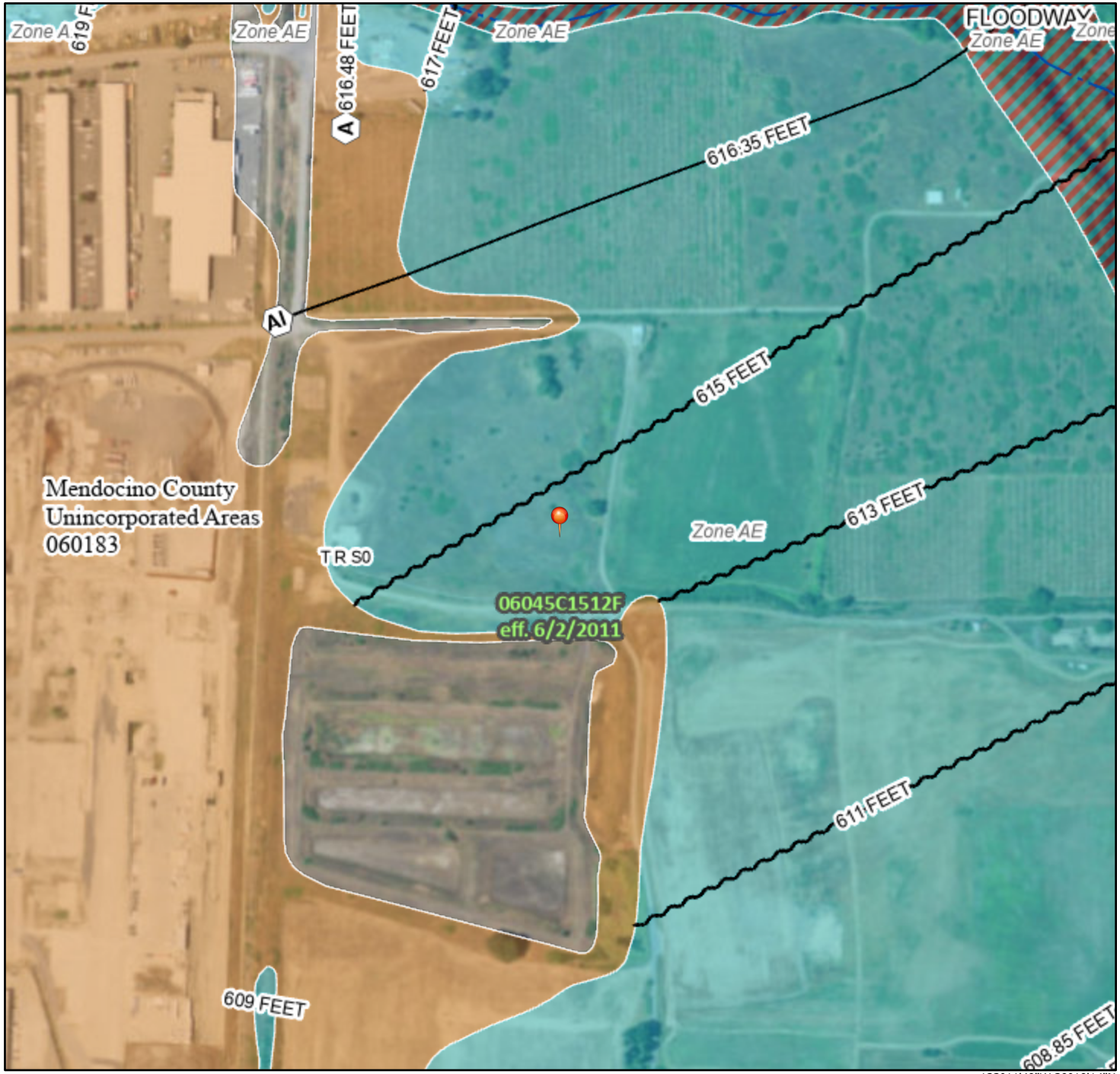
APPENDIX 15

FEMA National Flood Hazard Layer FIRMette

National Flood Hazard Layer FIRMette

FEMA

123°12'27"W 39°10'42"N



123°11'49"W 39°10'14"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/19/2024 at 6:36 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX 16

Correspondence with Mendocino County Staff Regarding Development Permits

From: Mark Cliser <cliserm@mendocinocounty.gov>
Sent: Thursday, June 6, 2024 4:18 PM
To: Rebecca M. Clark <Clarkr@lacoassociates.com>
Subject: RE: Floodplain Development Permit for Well Drilling

Hi Rebecca,

No permit required but all building permits need to demonstrate that construction is occurring in a floodplain and need to be two(?) feet above the floodplain.

Mark

From: Rebecca M. Clark <Clarkr@lacoassociates.com>
Sent: Monday, June 3, 2024 2:28 PM
To: Mark Cliser <cliserm@mendocinocounty.gov>
Subject: Floodplain Development Permit for Well Drilling

> **Caution:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Mark,

When a new well is proposed on a property located within the floodplain, is a Floodplain Development Permit required? I was unable to find an exemption for wells in the Floodplain Ordinance, but since they're mainly below-ground improvements, I thought I'd check if I missed something.

Thank you!
Becky

LACO

Becky Clark, AICP
Senior Planner / Project Manager
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Native Owned | Community Partners | Trusted Advisors