

STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS
P.O. BOX 2000
SACRAMENTO, CA 95812-2000

**INITIAL STUDY /
MITIGATED NEGATIVE DECLARATION**

I. BACKGROUND

PROJECT TITLE: Anderson Vineyards, Inc. (Clark-Perkins Ranch)
Petition for Change In Place of Use

PERMIT: 20295 (Application 27758)

PETITIONER: Anderson Vineyards, Inc.
c/o Robert Gibson
P.O. Box 67
Philo, CA 95466

PETITIONER'S CONTACT PERSON: Drew L. Aspegren, P.E.
Napa Valley Vineyard Engineering
176 Main St. Suite B
St. Helena, CA 94574

GENERAL PLAN DESIGNATION: Agricultural Lands and Rangelands

ZONING: Agricultural/Rangeland (Type II Preserve)

Introduction

The project is located in Anderson Valley, approximately five miles northeast of the community of Philo in Mendocino County, California (**Figure 1**). This location can be found within Township 14 and 15 North, Range 15 West, of the "Cold Spring, California" and the "Philo, California" U.S. Geological Survey (USGS) 7.5-minute topographic quadrangles (**Figure 2**). Permit 20295 (Application 27758) was issued December 29, 1988 by the State Water Resources Control Board (State Water Board), Division of Water Rights (Division). Permit 20295 allows for the diversion of 75 acre-feet (af) of water to storage in an existing offstream reservoir for the purposes of irrigation, frost protection, and heat control of 210 acres (place of use; POU). A Petition for Change in POU for Permit 20295 was originally filed with the Division on July 24, 1996. On July 1, 1997, the Petition for Change was cancelled by request of the Petitioner. A Petition for Change in POU for Permit 20295 was resubmitted to the Division on August 29, 2000 to increase the POU by 75 acres. The additional POU requested under the petition was reduced to 36 acres, for a total POU of 246 acres. No changes to the water diversion authorized by Permit 20295 are proposed.

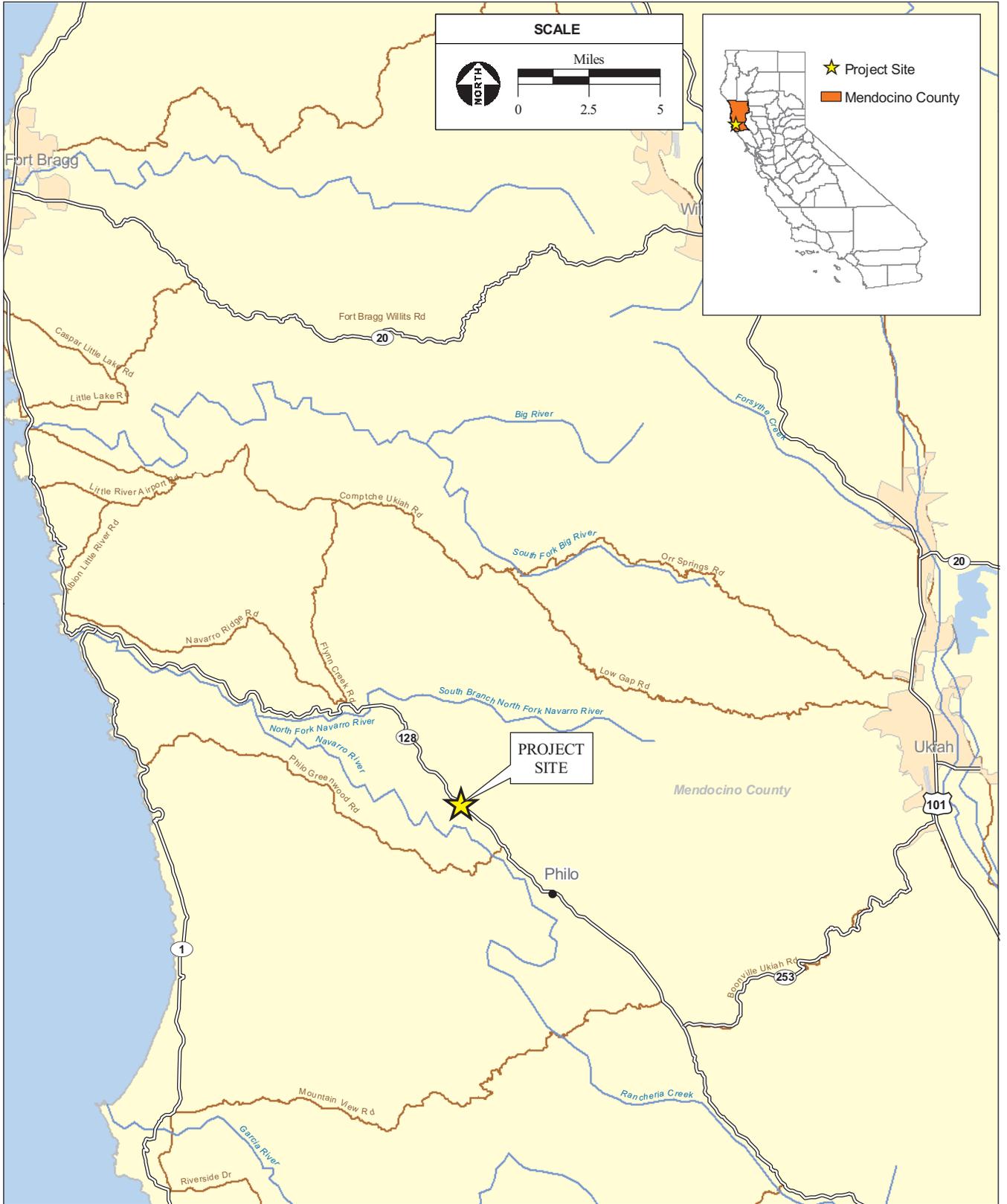
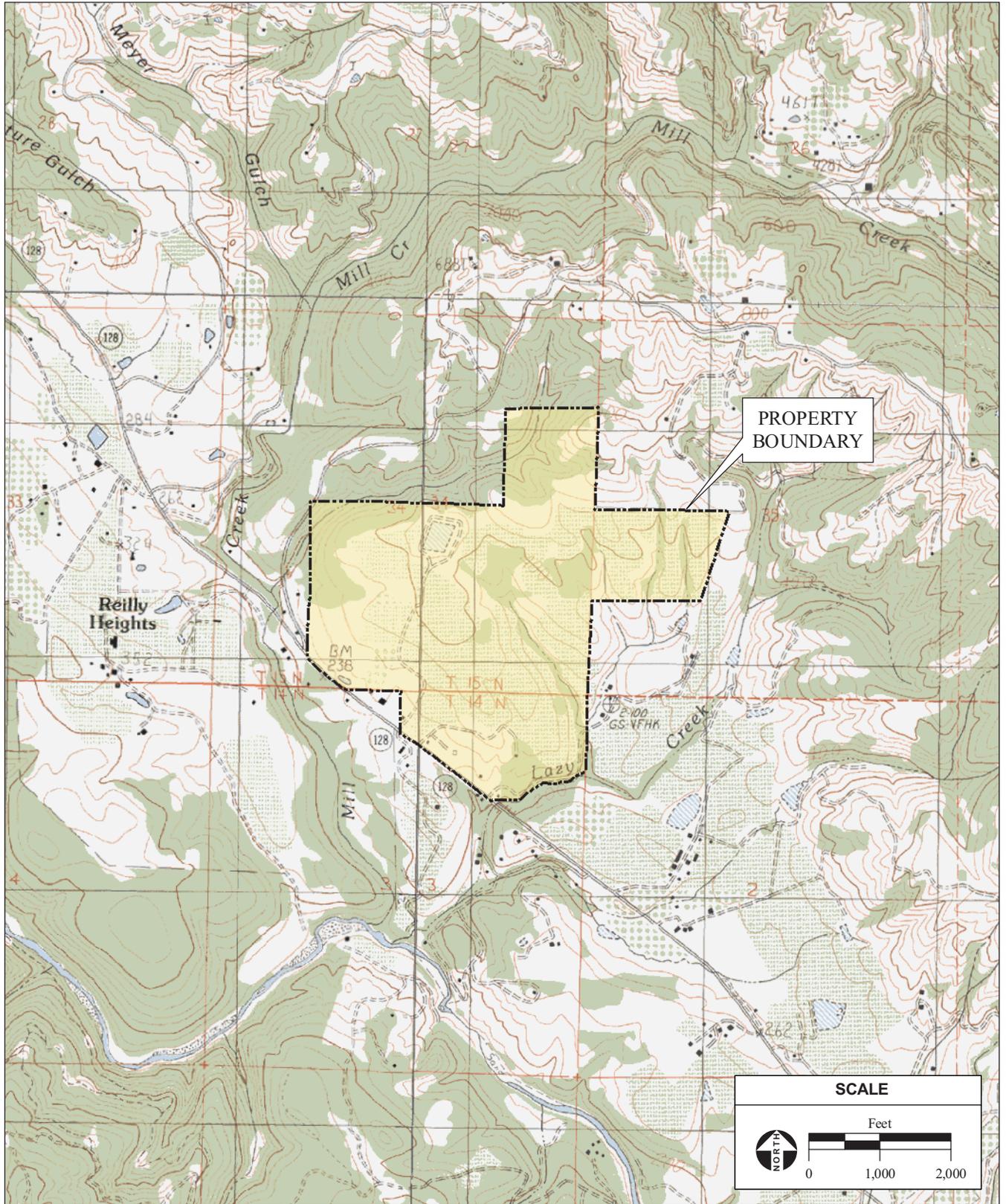


Figure 1
Regional Location



SOURCE: "Cold Spring, CA" & "Philo, CA" USGS 7.5 Minute Topographic Quadrangles, T14N & T15N R15W, Sections 2,3,34 & 35; Mt. Diablo Baseline & Meridian; California Natural Diversity Database, 2007; AES, 2010

Anderson Vineyards, Inc. Water Right Project IS/MND / 205550 ■

Figure 2
Site and Vicinity

Project Description

Permit 20295 allows for the diversion of 75 af of water, at a maximum diversion rate of one cubic foot per second (cfs), to storage in an existing offstream reservoir. The reservoir was constructed in 1983 with a capacity of 75 af and has a surface area of approximately 4.9 acres.¹ Water is diverted from an Unnamed Stream tributary to Mill Creek thence the Navarro River and is transferred approximately 1,350 feet to the reservoir via an existing six-inch diameter pipeline. The point of diversion (POD) is located on a parcel adjacent to the property which the Petitioner is leasing (Assessor's Parcel Number (APN) 26-280-40). Water is authorized for diversion from November 1 to June 1 for the irrigation, frost protection, and heat control of a 210-acre POU (**Table 1**).

TABLE 1: EXISTING PLACE OF USE²

Use Within	Section	Township	Range	B & M
E ½ of SW ¼	34	15N	15W	MD
SE ¼	34	15N	15W	MD
NW ¼ of SW ¼	35	15N	15W	MD
N ½ of NE ¼	3	14N	15W	MD
Total:				210 acres

The pending Petition for Change for Permit 20295 would add 36 acres to the POU, for a total of 246 acres (**Table 2** and **Figure 3**). A portion of the proposed POU is located on a parcel adjacent to the property which the Petitioner is leasing. As shown in **Figure 3**, the entire 246-acre POU is currently developed in vineyard and includes vineyard avenues and turnspaces. No additional development would occur with the petition. No changes to the water diversion authorized by Permit 20295 are proposed. Water would continue to be used for the purposes of irrigation, frost protection, and heat control of the POU.

TABLE 2: EXISTING AND PROPOSED PLACE OF USE³

Use Within	Section	Township	Range	B & M	Acres
NE ¼ of SW ¼	34	15N	15W	MD	14
SE ¼ of SW ¼	34	15N	15W	MD	26
NW ¼ of SE ¼	34	15N	15W	MD	22
NE ¼ of SE ¼	34	15N	15W	MD	24
SW ¼ of SE ¼	34	15N	15W	MD	38
SE ¼ of SE ¼	34	15N	15W	MD	36
SE ¼ of NE ¼	34	15N	15W	MD	10
NW ¼ of SW ¼	35	15N	15W	MD	27
NE ¼ of SW ¼	35	15N	15W	MD	9
NW ¼ of NE ¼	3	14N	15W	MD	22
NE ¼ of NE ¼	3	14N	15W	MD	18
Total:					246

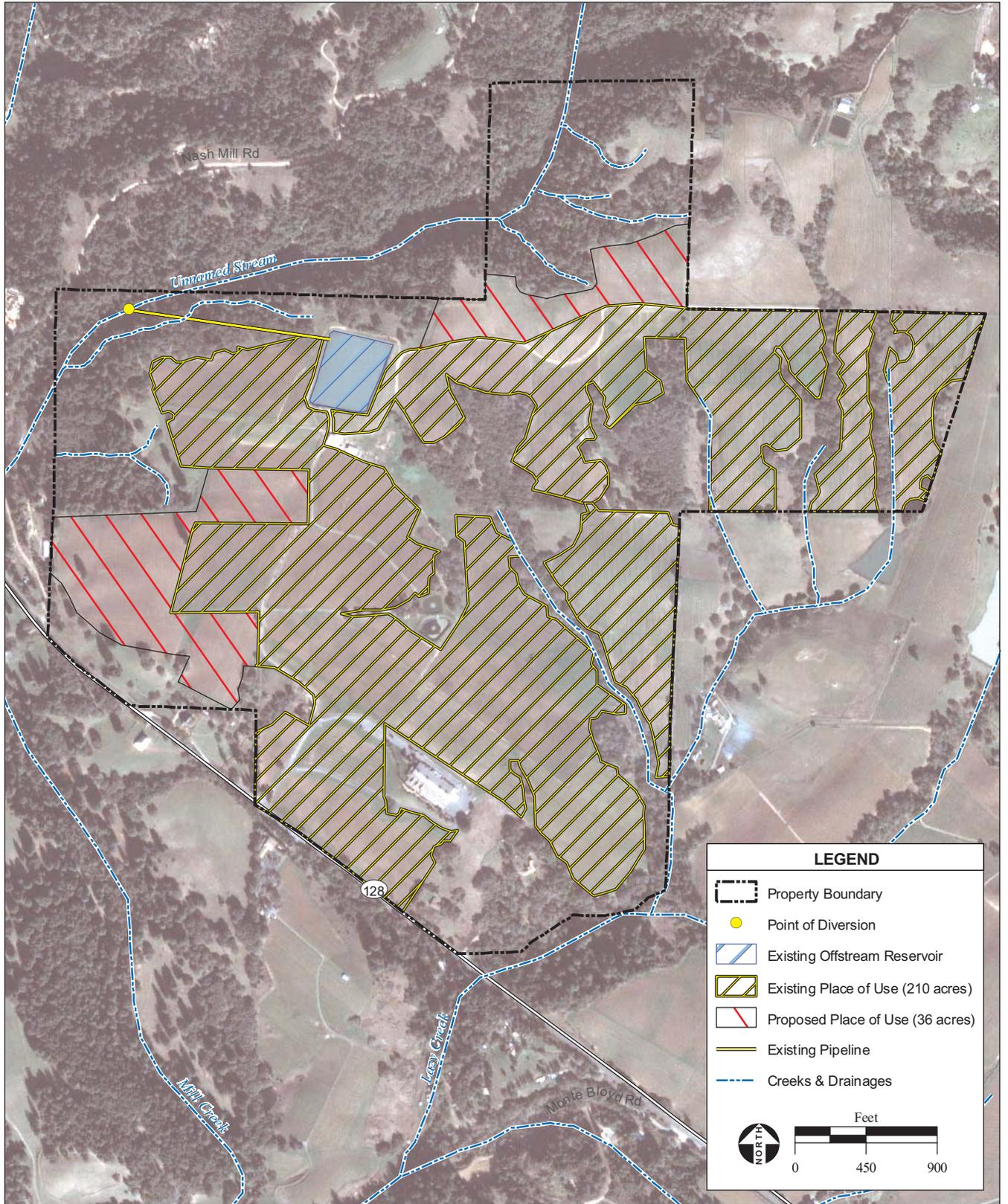


Figure 3
Project Features

Project Background

Permit 20295 was issued by the State Water Board on December 29, 1988. On July 24, 1996, a Petition for Extension of Time and a Petition for Change in POU were filed for Permit 20295. Both petitions were noticed for public review on September 16, 1996. No protests on the petitions were received by the Division. The Petition for Extension of Time was approved by the Division in a letter dated April 5, 2000.⁴ Complete application of the water authorized under Permit 20295 must be made by December 31, 2010.⁵ The 1996 Petition for Change was filed with the Division to expand the POU by 75 acres in order to apply water diverted under Permit 20295 to land being leased adjacent to the property, for a total POU of 285 acres. On July 1, 1997, the Petition for Change was cancelled by request of the Petitioner.

Division staff conducted compliance inspections for Permit 20295 on March 19, 1999 and September 12, 2000. In the 1999 compliance inspection report, the Division noted that the Petitioner must resubmit a Petition for Change in the POU for Permit 20295 in order to cover the additional POU being irrigated with water diverted under the permit outside of the authorized 210-acre POU.⁶

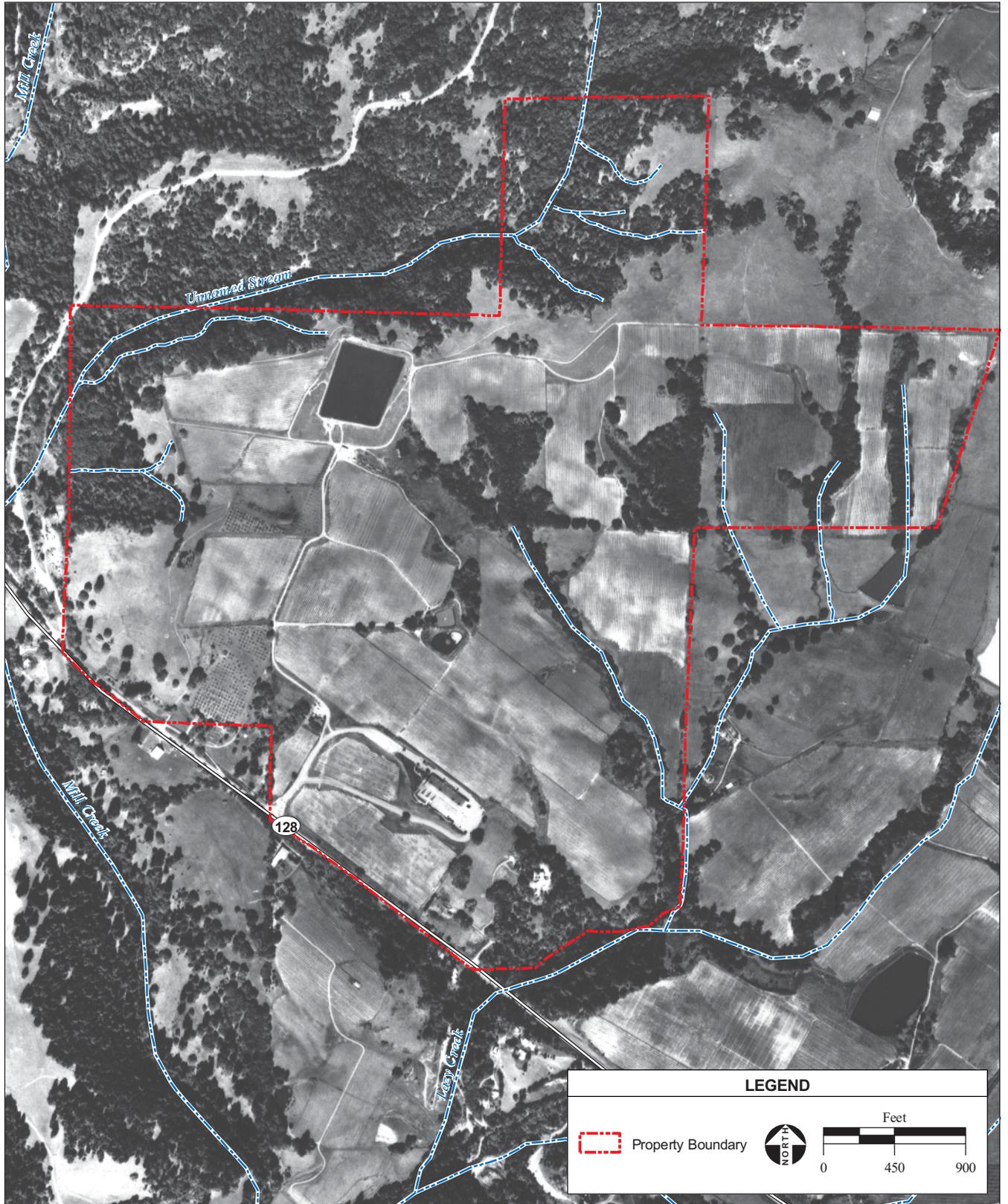
The requested Petition for Change for Permit 20295 was resubmitted to the Division on August 29, 2000 to increase the POU by 75 acres for a total POU of 285 acres.⁷ The resubmitted Petition for Change was noticed for public review on May 24, 2002. The Division received one protest from the National Marine Fisheries Service (NMFS) on July 25, 2002. However, as noted in a letter from the Division dated August 19, 2002, the protest was not accepted because it was received after the Division's deadline of June 24, 2002 and a request for extension of time was not submitted. The additional POU requested under the petition was further reduced to 36 acres, as noted in the Attachment and Map to Accompany the Petition for Change dated August 26, 2008, for a total POU of 246. Copies of the Water Right Permit, the approved Petition for Extension of Time, and the original and amended Petitions for Change are on file with the Division.

Environmental Setting

The California Environmental Quality Act (CEQA) baseline for the proposed project is July 24, 1996, the date the original Petition for Change in POU for Permit 20295 was filed with the Division.

Figures 4 and 5 illustrate an aerial photograph of the project site in March 1996. As seen in **Figure 5**, all of the 210 acres of the existing (permitted) POU had been developed, including approximately 0.2 acres of orchard (which has since been abandoned) and approximately 210 gross acres of vineyard, prior to the CEQA baseline date of July 1996. Additionally, approximately six acres of the proposed POU were developed in orchard prior to the baseline date. The 75 af capacity reservoir was developed, and according to the Petition for Extension of Time, between 60 and 70 af of water was put to beneficial use. As indicated by photographs included with the original petition, POD 1 was in place pursuant to Permit 20295 prior to July 24, 1996.

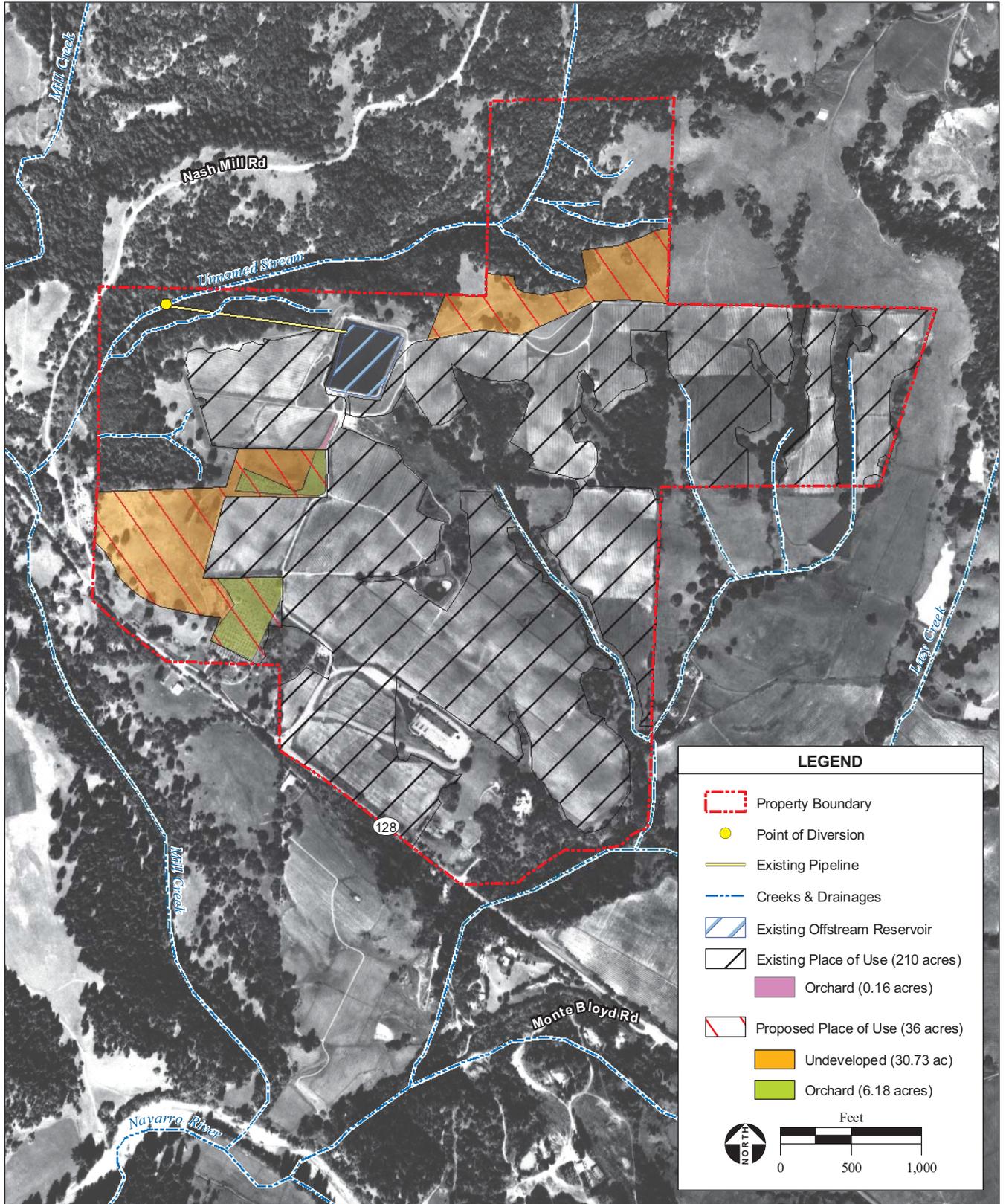
Aspects of the project that are part of the CEQA baseline include 216 acres of the POU (which includes approximately 210 acres of existing POU and six acres of proposed POU), the existing 75 af offstream reservoir and associated pipeline extending to POD 1, diversion of up to 70 acre-feet per annum (afa) from the Unnamed Stream, and use of this water on the POU as authorized by Permit 20295. The project elements not part of the CEQA baseline, which will be



SOURCE: WACORP aerial photograph, 3/16/1996; AES, 2010

Anderson Vineyards, Inc. Water Right Project IS/MND / 205550 ■

Figure 4
1996 Aerial Photograph



SOURCE: WACORP aerial photograph, 3/16/1996; AES, 2010

Anderson Vineyards, Inc. Water Right Project IS/MND / 205550 ■

Figure 5
1996 Aerial Photograph With Project Features

evaluated under CEQA, include the previous development of approximately 36 acres into vineyard (which includes the conversion of approximately six acres of orchard into vineyard) and the use of water on the 36 acres.

Potential impacts from project elements subject to CEQA analysis are evaluated as potential effects from future activities or probable effects from previous activities. **Table 3** provides an overview of project features in relation to the CEQA baseline date.

TABLE 3: CEQA BASELINE AND PROJECT COMPONENTS

Existing Project Components at CEQA Baseline	CEQA Baseline Date	Project Components to be Evaluated under CEQA
<ul style="list-style-type: none"> • 216 acres of developed POU (approximately 210 acres of vineyard and six acres of orchard) • POD 1 • 75 af offshore reservoir and associated pipeline • Diversion of up to 70 afa from the Unnamed Stream • Use of water on the permitted 210-acre POU 	<p>July 24, 1996</p>	<ul style="list-style-type: none"> • Development of approximately 36 acres of land into vineyard, including the conversion of approximately six acres of orchard to vineyard after the baseline date • Use of water on the 36 acres of proposed POU

The project site is characterized by a Mediterranean climate with cool winters and hot, dry summers. It is located within the Inner North Coast Range Mountains and has a strong influence from the coastal environment. The temperature within the City of Ukiah ranges from a low of approximately 36 degrees Fahrenheit (°F) in January to a high of approximately 93° F in July. Ukiah received an average of 37 inches total precipitation from 1893 to 2009 with the majority of rain falling between the months of November through March.⁸ Land use in the vicinity of the project site includes vineyards, rural residential, orchards, grazing lands and open space. According to the Mendocino County Zoning Ordinance, the zoning designation for this property is Agricultural/Rangeland (Type II Preserve).

The project site is located in the California Coast Range geomorphic province. Elevations onsite range from approximately 200 feet to 600 feet above mean sea level. Vegetation within the proposed POU includes vineyard with limited weedy vegetation between the vineyard rows. Other habitat types that characterize the property include annual grassland, mixed evergreen forest, and mixed riparian. Riparian habitat can be found along the Unnamed Stream and other intermittent and ephemeral drainages within the project site. Lazy Creek runs along the southern boundary of the property and the Unnamed Stream on which the POD is located runs along the northwest property boundary.

The project site is located in the Navarro River watershed in south-central Mendocino County. Since the mid 1800's the Navarro River watershed has been exploited for timber production, livestock grazing, and other agriculture activities. The Navarro River is considered by the U.S. Environmental Protection Agency (USEPA) to be impaired from effects of excessive sediment and high temperatures.⁹ Historically, the Navarro River watershed was considered to have high quality and extensive anadromous fish habitat supporting a productive coho salmon and steelhead trout fishery. The sustainability of anadromous fishes in the Navarro River watershed depends upon a variety of factors, including: habitat conditions, water temperature, gravel substrate, water quality, migration corridors, and habitat availability.

Regulatory Environment

The State Water Board is the lead agency under CEQA with the primary authority for project approval. The following responsible agencies, trustee agencies, and agencies with jurisdiction by law may have jurisdiction over some or all of the proposed project:

- U.S. Fish and Wildlife Service (USFWS) – Federal Endangered Species Act (FESA) Compliance
- Department of Fish and Game (DFG) – California Endangered Species Act (CESA) Compliance

II. ENVIRONMENTAL IMPACTS

The environmental factors checked below could be potentially affected by this project. See the checklists below for more details.

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

1. Geology and Soils. Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Rupture of a known earthquake fault, as delineated in 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 & Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Be located on expansive soils, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternate wastewater disposal systems where sewers are not available for the disposal of wastewater? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Mendocino County is located within the California Coast Range geomorphic province. The predominant geologic unit in this area is the Franciscan assemblage, which is highly fractured and deformed by folding, faulting, and metamorphism. This province is one of the more geologically and seismically active portions of the State of California.

According to the Mendocino County Soil Survey,¹⁰ which covers the western portion of the County, the project site contains the following soils and respective characteristics:

<i>Bearwallow-Wolfey complex, 5 to 15 percent slopes (103)</i>	Well-drained, surface runoff is medium, and hazard of erosion is moderate if the surface is left bare
<i>Bearwallow-Wolfey complex 15 to 30 percent slopes (104)</i>	Occurs in hills and mountains. Well-drained, surface runoff is very rapid, and hazard of erosion is severe if the surface is left bare
<i>Wolfey-Bearwallow complex, 30 to 50 percent slopes (229)</i>	Occurs in hills and mountains. Well-drained, surface runoff is rapid, and hazard of erosion is severe if the surface is left bare
<i>Casabonne-Wohly-Pardaloe complex, 50 to 75 percent slopes (121)</i>	Occurs in hills and mountains. Well-drained, surface runoff is very rapid, and hazard of erosion is severe if the surface is left bare
<i>Casabonne-Wohly complex, 30 to 50 percent slopes (120)</i>	Occurs in hills and mountains. Well-drained, surface runoff is very rapid, and hazard of erosion is severe or very severe if the surface is left bare
<i>Ornbaun-Zeni loams, 30 to 50 percent (187)</i>	Occurs on toe slopes of hills and mountains. Well-drained, surface runoff is medium or rapid, and hazard of erosion is moderate if the surface is left bare

The San Andreas Fault poses the most serious hazard in Mendocino County from fault rupture along its trace and its potential to generate severe ground shaking throughout many portions of the County. This fault line is capable of an estimated Magnitude 8.3 earthquake.¹¹ The recently discovered Maacama Fault may pose a hazard to Mendocino County as serious as the San

Andreas Fault because of its location along populated centers from Ukiah to Willits. Estimates of the Maacama Fault's earthquake capability range from a low of Magnitude 6.5 to a high of 8.1.¹² The project site is located approximately 20 miles west of the Maacama Fault. The project site is not located within an Alquist-Priolo Earthquake Fault Rupture Hazard Zone.¹³ There are numerous inactive faults throughout the Franciscan Assemblage rocks. Inactive faults typically present no particular geologic or seismic hazards, except for weakened nature of rocks located along these inactive fault traces.¹⁴

Landslides are extremely common in the hills of Mendocino County. While some landslides have resulted from earthquakes, they primarily result from the saturation of the steep unstable slopes of the Franciscan Assemblage. The proposed project is located in an area designated as low hazard potential for landslides.¹⁵

Liquefaction can also increase damage from groundshaking. However, the proposed project is located in an area designated as low hazard potential for liquefaction.¹⁶

Question A

The project site is not located within an Alquist-Priolo Earthquake Fault Rupture Hazard Zone, but could be affected by groundshaking from local active faults. The proposed project involves the addition of 36 acres of developed vineyard to the POU and does not include features that would place people or structures at risk from the effects of groundshaking. Impacts from geologic hazards such as landslides or ground failures would be less than significant.

Question B

Previous construction of the proposed project after the CEQA baseline date involved the conversion of six acres of orchard and development of 30 acres of sparsely vegetated areas on flat to moderate slopes into vineyard. Based on a review of a historic aerial (**Figure 4**), it is estimated that development resulted in the removal of approximately 33 native trees (discussed in the Biological Resources section) and construction would have resulted in temporary soil disturbance. The character of the developed areas after vineyard planting from a geologic perspective is considered similar to the areas before the conversion; it is not likely that soil ripping, removal of vegetation, and planting of vines substantially altered geology and soil characteristics. Conversion to vineyard on moderate slopes is likely to have resulted in some erosion; however, due to the conversion to vineyard from similar land uses erosion is not expected to have been substantial. No further construction activities are required for the proposed project. During operation of the proposed project water would be transported using existing pumps and pipelines. These activities are not expected to alter the current conditions of soils at the project site. This is considered a less than significant impact.

Question C

Because the existing vineyard in the proposed POU was converted from a similar land use, as described in Question B above, it is not expected to have substantially altered the geology at the project site. The project site is located in an area designated with low potential for landsliding and liquefaction. No further construction activities are required for the proposed project. During operation of the proposed project, water would be transported using existing pumps and pipelines. The existing conditions of geology and soils at the project site would not be altered in a manner that would increase the potential for landsliding, lateral spreading, subsidence, liquefaction or collapse. This is considered a less than significant impact.

Question D

The proposed project does not include features that would place people or structures at risk to expansive soils. No impact would occur.

Question E

The construction of septic tanks or alternative wastewater disposal systems are not part of the project description. No impact would occur.

Findings

Impacts to geology and soils as a result of the proposed project are considered less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2. Air Quality and Greenhouse Gas Emissions. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in 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 (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Mendocino County is located within the North Coast Air Basin and is under the jurisdiction of the Mendocino County Air Quality Management District (MCAQMD). Air quality in the project area is a function of the criteria air pollutants emitted locally, the existing regional ambient air quality, and the meteorological and topographic factors that influence the intrusion of pollutants into the area from sources outside the immediate vicinity. The climate of the region may be considered transitional, made up of climates varying from those found in the coastal and interior areas. The climate may be coastal in character part of the day, or week or month, but may also be dominated for various periods by air masses characteristic of the interior areas, including dry and warm summers.¹⁷

Regulations

The 1977 federal Clean Air Act (CAA) required the United States Environmental Protection Agency (EPA) to identify National Ambient Air Quality Standards (NAAQS) to protect public health and welfare. NAAQS have been established for six “criteria” air pollutants: ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO_x), sulfur dioxide (SO_x), respirable particulate matter (PM₁₀), and lead. Pursuant to the 1990 CAA Amendments, the EPA has classified air basins (or portions thereof) as either “attainment” or “non-attainment” for each criteria air pollutant, based on whether or not the NAAQS have been achieved. Mendocino County is designated as either attainment or unclassified for all criteria air pollutants.¹⁸ **Table 5** shows national standards for O₃ and PM₁₀.

The California Air Resources Board (CARB) regulates mobile emissions sources and oversees the activities of County Air Pollution Control Districts and regional Air Quality Management Districts. CARB regulates local air quality indirectly by State Ambient Air Quality Standards (SAAQS) and vehicle emission standards by conducting research activities, and through its planning and coordinating activities. California has adopted ambient standards that are more stringent than the federal standards for the criteria air pollutants. Under the California Clean Air Act (CCAA), patterned after the federal CAA, areas have been designated as attainment or non-attainment with respect to SAAQS. Mendocino County is designated as nonattainment for PM₁₀, and attainment or unclassified for O₃, CO, NO_x, SO_x, and lead.¹⁹ **Table 4** shows state standards for O₃ and PM₁₀.

TABLE 4: STATE AND NATIONAL AMBIENT AIR QUALITY STANDARDS²⁰

Pollutant	Averaging Time	SAAQS ¹	NAAQS ²
Ozone (O ₃)	1 hour	-	0.12 ppm
Respirable Particulate Matter (PM ₁₀)	24 hour	50 µg/m ³	150 µg/m ³
	Annual	20 µg/m ³	50 µg/m ³

¹ SAAQS (i.e., California standards) for ozone and respirable particulate matter are values that are not to be exceeded.

² NAAQS (i.e., national standards) - The ozone standard is attained when the fourth highest eight-hour concentration in a year, averaged over three years, is equal to or less than the standard.

ppm = parts per million by volume

µg/m³ = micrograms per cubic meter of air

Ozone (O₃)

O₃ is not emitted directly into the atmosphere, but is a secondary air pollutant produced in the atmosphere. Through a complex series of photochemical reactions, in the presence of strong sunlight and ozone precursors (nitrogen oxides [NO_x] and reactive organic gases [ROG]), O₃ is created. Motor vehicles are a major source of O₃ precursors. O₃ causes eye and respiratory irritation, reduces resistance to lung infection, and may aggravate pulmonary conditions in persons with lung disease.

Carbon Monoxide (CO)

CO is an odorless, invisible gas usually formed as the result of incomplete combustion of organic substances and is primarily a winter pollution problem. CO concentrations are influenced by the spatial and temporal distributions of vehicular traffic, wind speed, and atmospheric mixing. High levels of CO can impair the transport of oxygen in the bloodstream, thereby aggravating cardiovascular disease and causing fatigue, headaches, and dizziness.

Respirable Particulate Matter (PM₁₀)

Respirable particulate matter consists of particulate matter 10 microns (one micron is one one-millionth of a meter) or less in diameter, which can be inhaled. Relatively small particles of certain substances (e.g., sulfates and nitrates) can cause lung damage directly, or can contain adsorbed gases (e.g., chlorine or ammonia) that may be injurious to health. The amount of particulate matter and PM₁₀ generated is dependent on the soil type and the soil moisture content. Traffic generates particulate matter and PM₁₀ emissions through entrainment of dust and dirt particles that settle onto roadways and parking lots. Other sources of PM₁₀ include burning of wood in residential wood stoves and fireplaces and open agricultural burning.

Greenhouse Gas (GHG) Emissions

California has been a leader among the states in outlining and aggressively implementing a comprehensive climate change strategy that is designed to result in a substantial reduction in total statewide GHG emissions in the future. California's climate change strategy is multifaceted and involves a number of state agencies that are in the process of implementing a variety of state laws and policies. While explicit GHG thresholds have not yet been established at the local level by the MCAQMD, the Mendocino County General Plan identifies energy-reducing policies that, once developed, will aim to lower overall carbon dioxide (CO₂) emissions in the county. A GHG reduction plan has not yet been developed for Mendocino County. No GHG emissions thresholds of significance pertinent to tree loss have been adopted at the state or local level.

Questions A-D

Construction-related emissions associated with the development of 36 acres of vineyard could have resulted in short-term exhaust from construction equipment and fugitive dust from land clearing, earthmoving, movement of vehicles, and wind erosion of exposed soil during construction of the proposed project. No further construction activities are required for the proposed project. Operation of the proposed project is not expected to conflict with or obstruct implementation of any applicable air quality plan, violate any air quality standards, or result in a cumulatively considerable net increase of any criteria pollutants. Sensitive receptors in the vicinity of the project site, including the Unicorn School approximately 1.5 miles from the project site and rural residences within one mile of the project site, would not be exposed to substantial pollution concentrations. Potential impacts are considered less than significant.

Question E

Application of agricultural chemicals during vineyard operations, such as sulfur products, has the potential to result in objectionable odors. Compliance with permit regulations from the Agricultural Commissioner's Office for the use of soil stabilizers, pesticides, herbicides, and other regulated chemicals would minimize the potential for emission of objectionable odors. This is considered a less than significant impact.

Questions F and G

The petition would not require any further construction; therefore, no future impacts would occur from construction emissions. Operational sources of GHG emissions include vehicle travel, energy use, and water transport; however, as the project site currently and historically has operated as a vineyard, these sources would not change significantly with the petition. Past development of the proposed POU resulted in the loss of approximately 33 native trees. No further tree loss would occur under the petition and as 36 acres were developed into vineyard within the proposed POU, it is not expected that significant carbon emissions or sequestration loss occurred. Question E in the Biological Resources section below also discusses tree planting and preservation on the property. Impacts to GHG emissions are considered less than

significant. The proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. Impacts are considered less than significant.

Findings

Impacts to air quality and GHG emissions as a result of the proposed project are considered less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
3. Hydrology and Water Quality. Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site, including through alteration of the course of a stream or river, or substantially increase the rate or volume of surface runoff in a manner that would:				
i) result in flooding on or off site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) create or contribute runoff water that would exceed the capacity of existing or planned stormwater discharge?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) result in substantial erosion or siltation on or off site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Place housing or other structures which would impede or re-direct flood flows within a 100-yr. flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Expose people or structures to a significant risk of loss, injury, or death involving flooding:				
i) as a result of the failure of a dam or levee?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) from inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Change the water volume and/or the pattern of seasonal flows in the affected watercourse and result in:				

- | | | | | | |
|------|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| i) | a significant cumulative reduction in the water supply downstream of the diversion? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| ii) | a significant reduction in water supply, either on an annual or seasonal basis, to senior water right holders downstream of the diversion? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| iii) | a significant reduction in the available aquatic habitat or riparian habitat for native species of plants and animals? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| iv) | a significant change in seasonal water temperatures due to changes in the patterns of water flow in the stream? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| v) | a substantial increase or threat from invasive, non-native plants and wildlife? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

The Navarro River watershed drains an area of about 315 square miles. All drainages within the Navarro River watershed eventually flow to the Navarro River. The Navarro River flows to the south and east of the project site and Highway 128. Lazy Creek runs along the southern boundary of the property and the Unnamed Stream on which the POD is located runs along the northwest property boundary. The project site is not located within an area subject to flooding from a 100-year storm event.²¹

Tsunamis have caused major damage to Mendocino County's harbors and coastline in the past. A tsunami height of 23 feet occurring once every 100 years has been predicted for the Mendocino coast. The proposed project is located in an area designated as low tsunami hazard potential.²²

Questions A and D

As discussed in the Geology and Soils section, it is not expected that substantial erosion occurred from construction of the 36 acres of vineyard after the CEQA baseline date, and there is no indication that substantial sedimentation or effects to the local water quality occurred. The proposed project is not anticipated to impair the water quality at the project site. This is considered a less than significant impact.

Question B

The proposed project does not involve the use of groundwater resources. The proposed project would involve irrigation of existing vineyard areas with appropriated water, which would be expected to slightly increase the amount of water potentially percolating to groundwater. This is considered a less than significant impact.

Question C

Previous construction after the CEQA baseline date involved the development of sparsely vegetated areas on flat to moderate slopes to vineyard. The alteration of drainage patterns associated with the previous development and continued operation of the proposed project would not be expected to result in substantial erosion or siltation, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding. The proposed project would not contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems. No further construction is proposed for the project. Potential impacts are considered less than significant.

Question E

The proposed project does not involve the construction of housing or other structures within a 100-year flood zone. No impact would occur.

Question F

The proposed project would not result risk of flooding or inundation due to a tsunami or a seiche since the project site is not located within a potentially affected coastal area, or located near a large body of water. Impacts are considered less than significant.

Question G

Permit 20295 allows for the diversion to storage of 75 afa for the irrigation, frost protection, and heat control of 210 acres. Water from the existing storage reservoir is also used to serve the 36-acre proposed POU. No additional water beyond the permitted amount is required for the existing 36 acres.

Assuming all 246 acres of the POU are served with the 75 af stored in the reservoir, although this is conservative since the 246 acres also includes vineyard avenues and turnspaces, and assuming the reservoir is emptied each year, the total annual amount of water per acre is approximately 0.3 af and the additional POU requires approximately 11 af per year.

According to the Petition for Extension of Time that was filed in 1996, between 60 and 70 af of water was beneficially used. At that time, all of the 210 acres of the permitted POU had been developed and approximately six acres of the proposed POU were developed in orchard. The Petition for Extension of Time was approved on April 5, 2000 and therefore is not part of the project assessed in this CEQA document. However, based on the information submitted with the Petition for Extension of Time, the 75 af of storage authorized under Permit 20295 would sufficiently serve the total 246-acre POU.

Pursuant to the terms in the permit, a bypass of 0.04 cfs is maintained at the POD during the diversion season for the protection of fish and wildlife. The total streamflow is bypassed during the diversion season whenever flow is less than 0.04 cfs, and all flow is bypassed outside of the diversion season. No changes to this term would occur with approval of the Petition for Change.

The proposed project would not reduce the water volume in the Unnamed Stream from permitted levels under the existing right and the expanded POU would be served with the same amount of water permitted for the existing POU. The proposed project would not change the pattern of seasonal flows in the stream. Refer to Question B in the Biological Resources section for a discussion of riparian habitat protection measures.

The proposed project would involve the continued operation of vineyard on a property that has been subject to historical and current agricultural activities. The proposed project would not result in a substantial increase or threat from invasive, non-native plants and wildlife. Impacts are considered less than significant.

Findings

Impacts to hydrology and water quality as a result of the proposed project are considered less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4. Biological Resources. Would the project:				
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 CDFG or USFWS?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFG or USFWS?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally-protected wetlands as defined by Section 404 of the federal Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Analytical Environmental Services (AES) biologists conducted a comprehensive biological assessment of the study area on April 24 and July 1, 2008. The purposes of these surveys were to determine the presence/absence of special-status species within the project site, to classify the vegetation communities onsite, and to assess the presence of any aquatic features within the property. The results of these surveys are summarized below and can be found in the Biological Resources Assessment (BRA) Report²³ for the proposed project and the Supplemental Memorandum to the BRA,²⁴ which are on file with the Division.

Habitat Types

Five terrestrial habitats were identified onsite, including annual grassland, mixed evergreen forest, mixed riparian, vineyard, and ruderal/developed areas. Three aquatic habitat types were observed onsite, including intermittent drainage (i.e., the Unnamed Stream), ephemeral drainage, and reservoir. A drainage ditch was also observed adjacent to the project site along Highway 128 and is discussed below. A map that illustrates the habitats identified onsite is presented as **Figure 6** and representative photographs of each habitat type are shown in **Figures 7a** and **7b**.

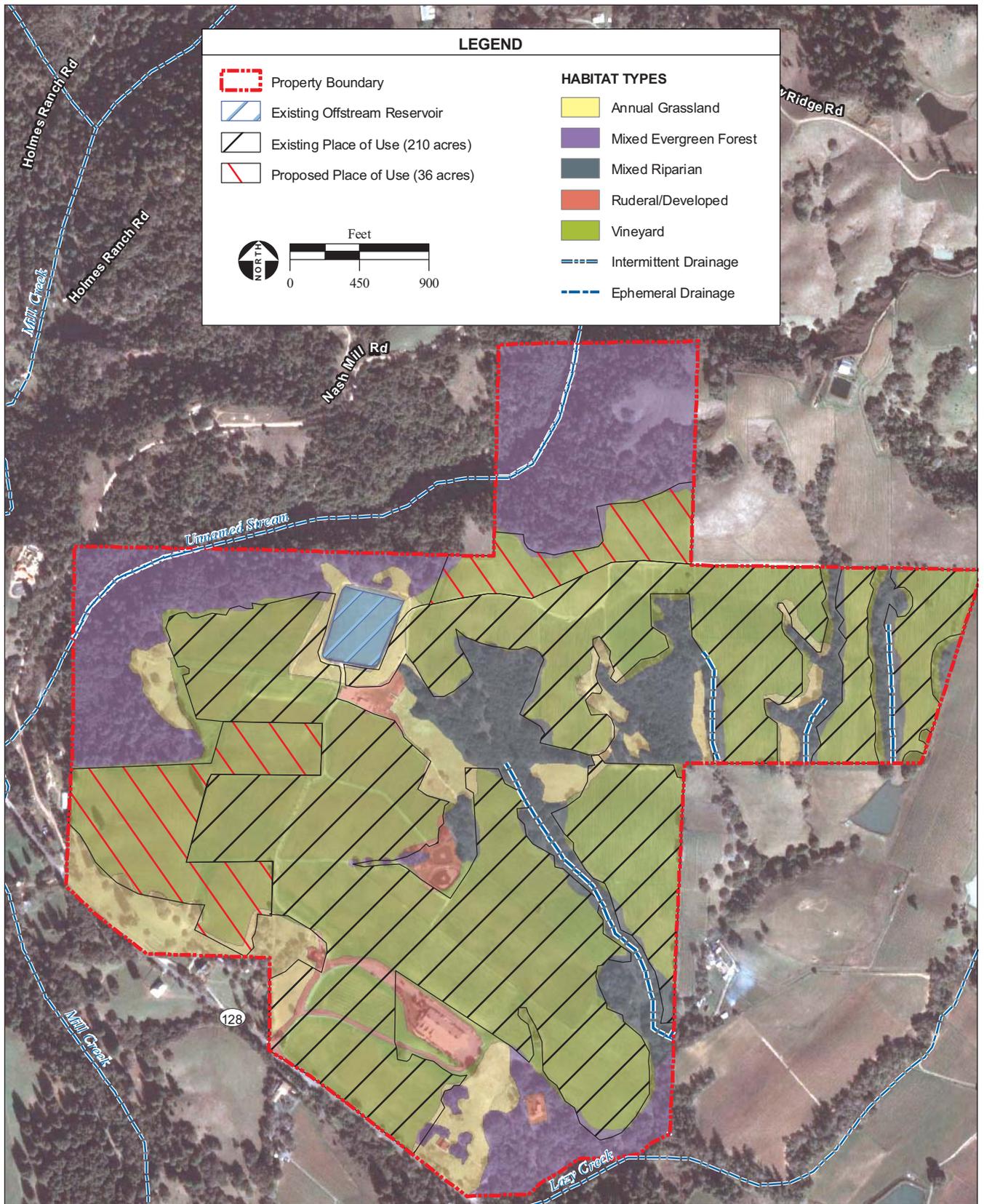




PHOTO 1
Mixed Evergreen Forest



PHOTO 2
Mixed Riparian



PHOTO 3
Vineyard



PHOTO 4
Ruderal/Developed



PHOTO 5
Intermittent Drainage



PHOTO 6
Ephemeral Drainage



PHOTO 7
Drainage Ditch



PHOTO 8
Reservoir

Annual Grassland

Annual grassland habitat occurs to varying degrees throughout the project site. Based on historic aerial review, it is estimated that much of the 36-acre proposed POU was composed of this habitat type. Trees and shrubs are largely absent within this community and annual non-native grasses and forbs dominate the species composition. Several of the grasses observed within this community include ripgut brome (*Bromus diandrus*), soft brome (*Bromus hordeaceus*), barley (*Hordeum murinum*), foxtail fescue (*Vulpia myuros*), medusahead grass (*Taeniatherum caput-medusae*), and big quaking grass (*Briza maxima*). Other species observed within this community include bristly oxtongue (*Picris echioides*), English plantain (*Plantago lanceolata*), buttercup (*Ranunculus californicus*), shortpod mustard (*Hirschfeldia incana*), sheep sorrel (*Rumex acetosella*), sun cup (*Camissonia ovata*), California poppy (*Eschscholzia californica*), and filaree (*Erodium botrys*).

Mixed Evergreen Forest

Mixed evergreen forest occurs along the northern, western, and southern edges of the project site. The over-story within this community is well developed and composed of mature evergreen trees including Pacific madrone (*Arbutus menziesii*), tan oak (*Lithocarpus densiflorus*), coast live oak (*Quercus agrifolia*), Douglas-fir (*Pseudotsuga menziesii*), and redwood (*Sequoia sempervirens*). Black oak (*Quercus kelloggii*) was also observed within this community. The shrub/vine layer within this habitat type is generally sparse because little sunlight is able to filter down below the dense tree canopy. Species observed within this stratum include poison oak (*Toxicodendron diversilobum*), honeysuckle (*Lonicera hispidula*), toyon (*Heteromeles arbutifolia*), coffeeberry (*Rhamnus californica*), oceanspray (*Heteromeles arbutifolia*), snowberry (*Symphoricarpos albus*), and coyote brush (*Baccharis pilularis*). The herbaceous layer of this habitat type is highly variable. In some areas it is well developed, and in other areas with the densest canopy it is poorly developed to non-existent. A variety of plant species were observed within this stratum including trail plant (*Adenocaulon bicolor*), western sword fern (*Polystichum munitum*), false Solomon seal (*Smilacina racemosa*), modesty (*Whipplea modesta*), star flower (*Trientalis latifolia*), California maiden-hair (*Adiantum jordanii*), and miner's lettuce (*Claytonia perfoliata*).

Mixed Riparian

Mixed riparian vegetation is associated with several of the intermittent and ephemeral drainages within the project site. This habitat type occurs in corridors around most of the drainages onsite. Tree species observed within this community include big leaf maple (*Acer macrophyllum*), red willow (*Salix laevigata*), California buckeye (*Aesculus californica*), California bay (*Umbellularia californica*), and Oregon ash (*Fraxinus latifolia*). Species observed within the shrub/vine layer of this community include poison oak, coyote bush, blue elderberry (*Sambucus mexicana*), wild rose (*Rosa californica*), Himalayan blackberry (*Rubus armeniacus*), and wild cucumber (*Marah fabaceus*). The herbaceous layer within this community is dominated by grasses and forbs. Several species observed within the herbaceous stratum include blue wild-rye (*Elymus glaucus*), Harding grass (*Phalaris aquatica*), velvet grass (*Holcus lanatus*), torilis (*Torilis arvensis*), tall flatsedge (*Cyperus eragrostis*), clustered field sedge (*Carex praegracilis*), spreading rush (*Juncus patens*), cut-leaved geranium (*Geranium dissectum*), hedge-nettle (*Stachys ajugoides*), pennyroyal (*Mentha pulegium*), hairy willow herb (*Epilobium ciliatum*), spiny-fruit buttercup (*Ranunculus muricatus*), curly dock (*Rumex crispus*), field horsetail (*Equisetum arvense*), and annual rabbit-foot grass (*Polypogon monspeliensis*).

Vineyard

The areas classified as vineyard consist of a single species (cultivated grape) planted in rows, supported on wood and wire trellises. In addition to the vines, some weedy vegetation occurs

between the vineyard rows. However, the vineyard areas are maintained on a regular basis and the weedy vegetation is clipped and sprayed. Plant species observed between the rows of vines include ryegrass (*Lolium multiflorum*), yellow wild radish, bur clover, rose clover (*Trifolium hirtum*), mouse-ear chickweed (*Cerastium glomeratum*), morning glory (*Convolvulus arvensis*), cut-leaved geranium, ripgut brome, soft brome, common groundsel (*Senecio vulgaris*), and winter vetch (*Vicia villosa*).

Ruderal/Developed

The areas classified as ruderal/developed habitat within the project site include all existing buildings and structures, landscaped areas, pumps and stations, roads and parking areas, and otherwise disturbed areas. Most of the plant species observed within this habitat type are weedy, non-native species including bull thistle (*Cirsium vulgare*), yellow wild radish (*Raphanus raphanistrum*), shortpod mustard, turkey mullein (*Eremocarpus setigerus*), bur clover (*Medicago polymorpha*), morning glory, filaree, English plantain, ripgut brome, wild oat, and Harding grass.

Intermittent Drainage

Intermittent drainages are linear features that exhibit an ordinary high water mark (OHWM) and have a clearly defined bed, bank, and channel. Like ephemeral drainages, these types of features carry surface runoff flows during the rainy season. However, the flows within intermittent drainages are also influenced by groundwater contributions. This typically results in greater flows and a longer period of inundation. Several intermittent drainage features, including the Unnamed Stream tributary to Mill Creek at the north and western edges of the property, were mapped. The channel within these features is well defined and the substrate is predominantly silt, although some cobble and gravel areas were observed. They generally have a well-developed riparian corridor directly adjacent, with mixed evergreen forests dominating upslope of the stream channel. Plant species observed within riparian corridors and mixed evergreen forest were previously discussed above, under their associated habitat type.

The Unnamed Stream is best classified as Class II stream. Class II streams are seasonal or year-round streams in which habitat exists for aquatic non-fish vertebrates and/or aquatic benthic macro-invertebrates.²⁵ In this case, fish species may occur in portions of the Unnamed Stream located further upstream or downstream, as the stream is tributary to Mill Creek and thence the Navarro River. In addition, Class II streams provide suitable habitat for non-fish aquatic vertebrates and/or aquatic macro-invertebrates. AES staff observed water strider (*Gerris* sp.) and bullfrog (*Rana catesbeiana*) within the Unnamed Stream during the field surveys. The presence of these two species, and the fact that the Unnamed Stream is a mapped blue-line stream on the "Cold Spring, CA" USGS 7.5-minute topographic quadrangle, is the basis of the Class II stream characterization of this aquatic feature.

Ephemeral Drainage

Ephemeral drainages are linear features that exhibit an OHWM and have a clearly defined bed, bank, and channel. Unlike intermittent drainages, these features carry surface runoff flows during the rainy season exclusively and typically do not have any groundwater influence. As such, ephemeral drainages are typically dry for some portions of the year and have shorter periods of inundation. Portions of five ephemeral drainages were mapped within the project site. Riparian vegetation associated with the ephemeral drainages is difficult to differentiate from the mixed evergreen forest habitat type, and is generally limited in its distribution. These features have varying depths and widths. The ephemeral drainages onsite are predominantly incised erosional features within upland habitats, are mostly scoured of vegetation, and reflect the steep topography of the project site. No aquatic organisms were observed within any of the ephemeral drainages onsite during the field surveys.

The ephemeral drainages within the project site are best classified as Class III streams. Class III streams have defined channels and banks that show evidence of periodic scour and sediment transport.²⁶ Class III streams are capable of transporting sediments downstream to Class I or II streams during normal flow conditions, and Class III streams typically do not contain fish and/or other aquatic life forms. As previously mentioned, AES staff did not observe aquatic non-fish vertebrates or aquatic macro-invertebrates within the ephemeral drainages onsite during the field surveys. However, these features are tributary to the other drainages where non-fish aquatic species and/or aquatic macro-invertebrates were observed and/or are likely to occur. The absence of aquatic non-fish vertebrates and/or macro-invertebrates within the ephemeral drainages onsite is the basis for the Class III stream determinations.

Drainage Ditch

Drainage ditches are man-made linear features that typically exhibit an OHWM and have a visible bed, bank, and channel. These features may be solely excavated in uplands and generally function to carry runoff and surface water flows offsite. Drainage ditches may also represent channelized or altered natural drainages and can function to re-route historic natural drainage features. A roadside drainage ditch was noted along Highway 128, but this feature does not fall within the project site boundary. Plant species were absent within the drainage ditch, as the drainage was mostly scoured of vegetation.

Reservoir

An existing offstream reservoir was mapped onsite. The reservoir has hydrophytic vegetation around its edges. Plant species observed along the periphery of the reservoir include broad-leaf water plantain (*Alisma plantago-aquatica*), creeping spikerush (*Eleocharis macrostachya*), tall flatsedge, pennyroyal, and spiny-fruit buttercup. In addition, the areas immediately surrounding the reservoir appear to be trimmed and/or mowed by the vineyard staff.

Waters of the U.S.

The term “waters of the U.S.” is defined as:

- All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- All interstate waters including interstate wetlands; or
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use or degradation of which could affect interstate or foreign commerce including any such waters.

“Wetlands” are defined as:

Waters of the U.S. that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands that meet these criteria during only a portion of the growing season are classified as seasonal wetlands.

AES biologists conducted an informal assessment of the aquatic features within the project site. This assessment was conducted concurrently with the biological surveys. Three aquatic habitat types were observed onsite, including intermittent drainage (i.e., the Unnamed Stream), ephemeral drainage, and reservoir. These features have potential to be considered jurisdictional waters of the U.S. and could be subject to USACE, Regional Water Quality Control

Board, and/or DFG regulation if future development (i.e., fill and/or dredging) within them is proposed under Section 404 and 401 of the Clean Water Act and Section 1600 of the California Fish and Game Code, respectively.

Wildlife

Wildlife species observed within the study area during the field surveys include western scrub-jay (*Aphelocoma californica*), California quail (*Callipepla californica*), turkey vulture (*Cathartes aura*), wild turkey (*Meleagris gallopavo*), jack rabbit (*Lepus californicus*), mule deer (*Odocoileus hemionus*) and American kestrel (*Falco sparverius*).

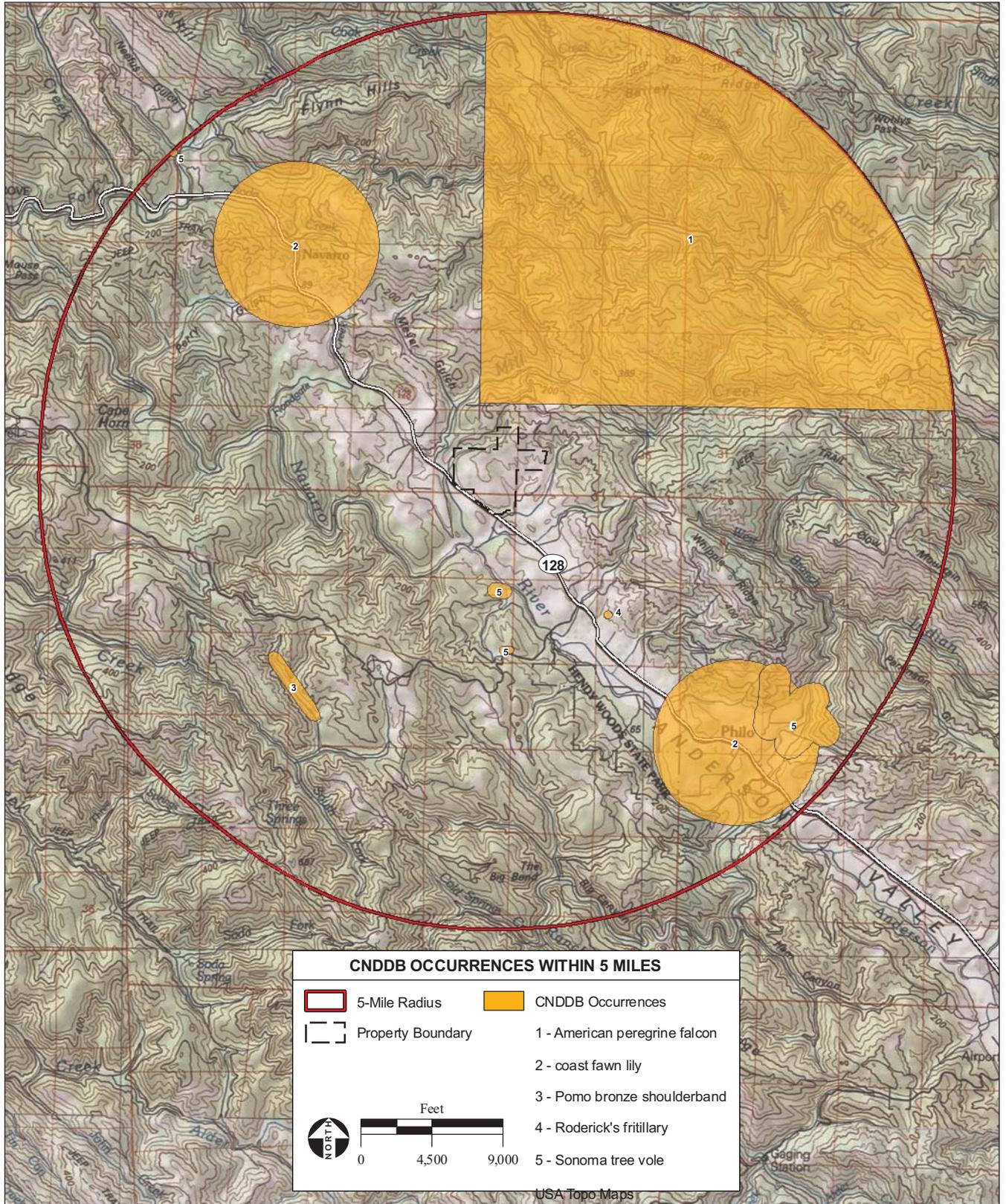
Special-Status Species

For the purposes of this assessment, “special-status species” are defined as species that are of management concern to state and federal resource agencies, and include those species that are:

- Listed as endangered, threatened, or candidate for listing under the FESA;
- Listed as endangered, threatened, rare, or proposed for listing, under the California Endangered Species Act;
- Designated as endangered or rare, pursuant to California Fish and Game Code (Section 1901);
- Designated as fully protected, pursuant to California Fish and Game Code (Section 3511, Section 4700, or Section 5050);
- Designated as species of special concern by DFG;
- Plants or animals that meet the definitions of rare or endangered under CEQA;
- Plants listed as rare under the California Native Plant Protection Act; or
- Plants or animals that meet the definitions of rare, threatened, or endangered under CEQA, including plants listed by California Native Plant Society (CNPS) to be “rare, threatened, or endangered in California” (Lists 1A, 1B, and 2). Local or regional agencies may consider plant species that CNPS believes require additional information (List 3) and plant species that have been placed on a watch list (List 4) by CNPS.

AES biologists compiled a list of regionally occurring special-status plant and wildlife species for the project site.²⁷ This list was generated from the results of scientific database queries including: a USFWS list of federally listed special-status species with potential to occur within the “Philo, CA,” and “Cold Spring, CA,” 7.5-minute topographic quadrangles, and the ten surrounding quadrangles (Elk, Mallo Pass Creek, Point Arena, Navarro, Bailey Ridge, Eureka Hill, Zeni Ridge, Orrs Spring, Boonville, and Ornbaun Valley), as well as the USFWS list for Mendocino County;²⁸ a California Natural Diversity Database (CNDDDB) list of state and federally listed special-status species with potential to occur within the “Philo, CA” and “Cold Spring, CA” 7.5-minute quadrangles and the ten surrounding quadrangles;²⁹ a CNDDDB map of state and federally listed special-status species that have been documented within a five-mile radius of the project site (**Figure 8**);³⁰ and a CNPS list of special-status plant species with potential to occur within the “Philo, CA” and “Cold Spring, CA” 7.5-minute quadrangles and the surrounding ten quadrangles.³¹

AES biologists then analyzed the habitat requirements of the regionally occurring special-status species compared to the habitat types that exist within the project site to determine which special-status species have potential to occur onsite. Based upon the review of regionally occurring special-status species and their habitat requirements, and the results of the field assessment, the property has potential to support 11 special-status plant species and four



SOURCE: "Ukiah, CA" USGS 100K Topographic Quadrangle, Mt. Diablo Baseline & Meridian; California Natural Diversity Database, 2007; AES, 2010

Anderson Vineyards, Inc. Water Right Project IS/MND / 205550 ■

Figure 8
CNDDDB 5-Mile Radius Map

special-status animal species. The name, regulatory status, habitat requirements, and period of identification for these potentially occurring special-status species are identified in **Table 5**.

A record of Pomo bronze shoulderband snail (*Helminthoglypta arrosa pomoensis*) occurs to the southwest of the project site in **Figure 8**; this species is tracked within the CNDDDB but does not have any state or federal status and no suitable habitat for this species occurs on the project site so it is not discussed further.

TABLE 5: POTENTIALLY OCCURRING SPECIAL-STATUS SPECIES³²

SCIENTIFIC NAME COMMON NAME	FEDERAL/ STATE/ CNPS- OTHER STATUS	DISTRIBUTION	HABITAT REQUIREMENTS	PERIOD OF IDENTIFICATION
Plants				
<i>Astragalus agnicidus</i> Humboldt milk-vetch	--/CE/1B	Known to occur in Humboldt and Mendocino counties.	Occurs in broadleaf upland forest and North Coast coniferous forest/openings, disturbed areas, sometimes roadsides. Elevations: 180-800 meters.	April-August
<i>Erigeron bioletti</i> streamside daisy	--/--/3	Known to occur in Humboldt, Marin, Mendocino, Napa, Solano, and Sonoma counties.	Occurs in broadleaf upland forest, cismontane woodland, and North Coast coniferous forest/rocky, mesic. Elevations: 30 to 1,100 meters.	June-October
<i>Erythronium revolutum</i> coast fawn lily	--/--/2	Known to occur in Del Norte, Humboldt, Mendocino, Siskiyou, Sonoma, and Tehama counties. Also occurs in Oregon and Washington.	Occurs in bogs and fens, broadleaf upland forest, and North Coast coniferous forest/mesic, streambanks. Elevations: 0-1,325 meters.	March-July (August)
<i>Fritillaria roderickii</i> Roderick's fritillary	--/CE/1B	Known to occur in Mendocino and Sonoma counties.	Occurs in coastal bluff scrub, coastal prairie, and valley and foothill grasslands. Elevations: 15-400 meters.	March-May
<i>Hemizonia congesta</i> ssp. <i>Leucocephala</i> hayfield tarplant	--/--/3	Known to occur in Mendocino, Marin, and Sonoma counties.	Occurs in coastal scrub and valley and foothill grassland/sometimes roadsides. Elevations: 25-455 meters.	April-October
<i>Horkelia tenuiloba</i> thin-lobed horkelia	--/--/1B	Known to occur in Mendocino, Marin, and Sonoma counties.	Broadleaf upland forest, Chaparral, and Valley and foothill grassland/mesic openings, sandy. Elevations: 50-500 meters.	May-July
<i>Mitella caulescens</i> Leafy-stemmed mitrewort	--/--/4	Known to occur in Del Norte, Humboldt, Madera, Mendocino, Siskiyou, Tehama, and Trinity counties. Also occurs in Idaho, Oregon, and elsewhere	Found in broadleaf upland forest, lower montane coniferous forest, meadows and seeps, and north coast coniferous forest. Elevations: 5-1,700 meters.	April-October

SCIENTIFIC NAME COMMON NAME	FEDERAL/ STATE/ CNPS- OTHER STATUS	DISTRIBUTION	HABITAT REQUIREMENTS	PERIOD OF IDENTIFICATION
<i>Pleuropogon hooverianus</i> North Coast semaphore grass	--/CT/1B	Known to occur in Mendocino, Marin, and Sonoma counties.	Occurs in broadleaf upland forest, meadows and seeps, and North Coast coniferous forest/open areas, mesic. Elevations: 10-671 meters.	April-August
<i>Sanguisorba officinalis</i> Great burnet	--/--/2	Known from Del Norte, Mendocino, and Humboldt counties; and Oregon and Washington states and elsewhere.	Occurs in bogs, fens, broadleaf upland forest, Meadows and seeps, Marshes and swamps, North Coast coniferous forest, Riparian forest (often serpentine soils). Elevations: 60-1,400 meters.	July-October
<i>Sidalcea malviflora</i> ssp. <i>purpurea</i> purple-stemmed checkerbloom	--/--/1B	Known to occur in Mendocino, Marin, and Sonoma counties.	Occurs in broadleaf upland forest and coastal prairie. Elevations: 15-85 meters.	May-June
<i>Usnea longissima</i> Long-beard lichen	--/--/--	Known to occur in most mesic woodlands throughout northern California to Alaska.	Found in old-growth forest, conifer, riparian and hardwood stands near coastal climates. Elevations vary between occurrences, but generally between 90 and 520 meters.	N/A
Fishes				
<i>Lavinia symmetricus navarroensis</i> Navarro roach	--/CSC/--	Known to occur throughout the Russian and Navarro River watersheds.	Generally found in small, warm, intermittent streams or isolated pools in the Russian and Navarro River watersheds.	Consult Agency
Birds				
<i>Falco peregrinus anatum</i> American peregrine falcon	FD/--/FP	Active nesting sites known along the coast north of Santa Barbara and other mountains in northern California.	Breeds mostly in woodland, forest, and coastal habitats. Breeds near water on high cliffs or banks and will nest on human- made structures.	All Year
<i>Pandion haliaetus</i> osprey	--/--/--	Breeds from Cascade Ranges south to Lake Tahoe, and along the North Coast Ranges south to Marin County. Regular breeding sites include Shasta Lake, Eagle Lake, Lake Almanor, other inland lakes and reservoirs, and northwest river systems.	Associated strictly with large, fish-bearing waters, primarily in ponderosa pine through mixed conifer habitats. Uses large trees, snags, and dead-topped trees in open forest habitats for cover and nesting. Requires open, clear waters for foraging such as rivers, lakes, reservoirs, bays, estuaries, and surf zones.	All year
Mammals				
<i>Arborimus pomo</i> Sonoma tree vole	--/CSC/--	Distributed along the North Coast from Sonoma County north to the Oregon border, being more or less restricted to the fog belt.	Occurs in old-growth and other forests, mainly Douglas-fir, redwood, and montane hardwood-conifer habitats.	All Year (nocturnal)

STATUS CODES

FEDERAL: U.S. Fish and Wildlife Service and Marine Fisheries Service

FD Federally Delisted

STATE: California Department of Fish and Game

CE Listed as Endangered by the State of California

CSC California Species of Special Concern

CNPS: California Native Plant Society

List 1B Plants rare or endangered in California and elsewhere

List 2 Plants rare or endangered in California, but more common elsewhere

List 3 Plant about which more information is needed

List 4 Plants of Limited Distribution- A Watch List

Special-Status Plants

AES staff timed the field surveys so that they would correspond with the bloom periods of those special-status plant species determined to have potential to occur within the project site. None of the potentially occurring special-status plant species were observed onsite during the field surveys.

HUMBOLDT MILK-VETCH (ASTRAGALUS AGNICIDUS)

Fabaceae Family

Federal Status – None

State Status – Endangered

Other – CNPS List 1B

Humboldt milk-vetch is a perennial herb that occurs in broadleaf upland forest and North Coast coniferous forest habitats. It has an affinity for openings, disturbed areas, and roadsides. This species occurs at elevations that range from 180 to 800 meters above mean sea level (msl). Humboldt milk-vetch blooms from April through September. The range of this species includes Humboldt and Mendocino counties. This species is noted for have green and more or less glabrous herbage, a banner that is often less than 14 millimeters (mm) long, calyx lobes that are between three and five mm long, and fruits that are between 11 and 15 mm long. There are no occurrences of Humboldt milk-vetch within five miles of the project site.³³ While the mixed evergreen forest within the project site is suitable habitat for this species, it was not observed within the study area during the field surveys, which were conducted within the appropriate identification period.

STREAMSIDE DAISY (ERIGERON BIOLETTI)

Asteraceae Family

Federal Status – None

State Status – None

Other – CNPS List 3

Streamside daisy is a perennial herb that occurs in broadleaf upland forest, cismontane woodland, and North Coast coniferous forest habitats within rocky or mesic areas at elevations that range from 30 to 1,100 meters above msl. This species blooms from June through October. The range of streamside daisy includes Humboldt, Mendocino, Marin, Napa, Solano, and Sonoma counties. This species is noted for having densely glandular phyllaries and herbage, narrowly oblanceolate leaves, and flat-topped discoid heads that are approximately 12 to 15 mm in diameter. This species is not documented within the CNDDDB because it is not listed pursuant to the CEQA review process. However, other local and/or regional ordinances or constraints may consider this species. The mixed evergreen forest onsite is suitable habitat for this streamside daisy. It was not observed within the study area during the July 2008 field surveys, which were conducted within the appropriate identification period.

COAST FAWN LILY (ERYTHRONIUM REVOLUTUM)

Liliaceae Family

Federal Status – None

State Status – None

Other – CNPS List 2

Coast fawn lily is a bulbous perennial that occurs in bogs and fens, broadleaf upland forest, and North Coast coniferous forest habitats. It has an affinity for mesic areas and streambanks. This species occurs at elevations that range from zero to 1,350 meters above msl. Coast fawn lily blooms from March through July and the bloom period can extend into August. The range of this species includes Del Norte, Humboldt, Mendocino, Siskiyou, Sonoma, Tehama, and Trinity counties. It also occurs in Oregon and Washington. Coast fawn lily is known for having brown and white irregularly mottled leaves, filaments that are flat at the base and generally greater than 1.5 mm wide, stigma lobes that are between four and six mm long, and pink perianth segments with yellow bases. There are two documented occurrences of this species within five miles of the project site, both within Anderson Valley.³⁴ The mixed evergreen forest and the banks of the drainages within the project site are suitable habitats for this species. Coast fawn lily was not observed within the study area during the field surveys, which were conducted within the appropriate identification period.

RODERICK'S FRITILLARY (FRITILLARIA RODERICKII)

Liliaceae Family

Federal Status – None

State Status – Endangered

Other – CNPS List 1B

Roderick's fritillary is a bulbous perennial that occurs in coastal bluff scrub, coastal prairie, and valley and foothill grassland habitats at elevations that range from 15 to 400 meters above msl. This species is referred to as *Fritillaria biflora* var. *biflora* in the Jepson Manual.³⁵ Roderick's fritillary blooms from March through May. The range of this species includes Mendocino and Sonoma counties. Roderick's fritillary is known for having a dark brown to greenish purple and/or yellowish perianth, odorless flowers, and widely lanceolate to oblanceolate leaves. The nearest documented occurrence of this species is located approximately two miles southeast of the project site.³⁶ The annual grassland within the project site is suitable habitat for this species. Roderick's fritillary was not observed within the study area during the April 2008 field surveys, which were conducted within the appropriate identification period.

HAYFIELD TARPLANT (HEMIZONIA CONGESTA SSP. LEUCOCEPHALA)

Asteraceae Family

Federal Status – none

State Status – none

Other – CNPS List 3

Hayfield tarplant is a soft-hairy annual herb that occurs in coastal scrub and valley and foothill grassland habitats at elevations that range from 25 to 455 m above mean sea level. This species blooms from April through October and is often seen on roadsides and in fallow fields. The known range of hayfield tarplant includes Mendocino, Marin, and Sonoma counties.³⁷ This species is noted for having beakless ray achenes, white corollas, phyllary tips that are much greater than the phyllary bodies, and clustered flower heads that are not overtopped by the upper leaves. This species is not documented within the CNDDDB because it is not listed pursuant to the CEQA review process. However, other local and/or regional ordinances or

constraints may consider this species. The annual grassland onsite is suitable habitat for hayfield tarplant. It was not observed within the study area during the field surveys, which were conducted within the appropriate identification period.

THIN-LOBED HORKELIA (*HORKELIA TENUILOBA*)

Rosaceae Family

Federal Status – None

State Status – None

Other – CNPS List 1B.2

Thin-lobed horkelia is a perennial herb in the rose family (Rosaceae). It occurs in broadleaf upland forest, chaparral, and in the open, mesic openings in valley and foothill grassland habitats at elevations ranging from 50 to 500 meters above mean sea level. Blooming occurs between May and July. The known range of this species includes Mendocino, Marin, and Sonoma counties.³⁸ The broadleaf upland forest edges and annual grassland habitat on the project site may provide marginally suitable habitat for the thin-lobed horkelia, though it prefers chaparral habitats. This species was queried through the CNPS Rare Plant Inventory and is not tracked by the CNDDDB, therefore distance from the project site could not be estimated. It was not observed within the project site during field surveys in July 2008, which occurred during the appropriate identification period for the species.

LEAFY-STEMMED MITREWORT (*MITELLA CAULESCENS*)

Saxifragaceae Family

Federal Status – None

State Status – None

Other – CNPS List 4.2

Leafy-stemmed mitrewort is a perennial herb in the saxifrage family (Saxifragaceae). It occurs in broadleaf upland forest, lower montane coniferous forest, meadows and seeps, and north coast coniferous forest at elevations ranging from 5 to 1,700 meters above mean sea level. Blooming occurs between April and October. The known range of this species includes Del Norte, Humboldt, Madera, Mendocino, Siskiyou, Tehama, Trinity, Idaho, Oregon, and elsewhere.³⁹ The nearest documented occurrence of this species is located approximately 10.2 miles northwest of the project site from 1942.⁴⁰ The broadleaf upland forest edges on the project site may provide marginally suitable habitat for the leafy-stemmed mitrewort. This species is a CNPS List 4.2 (plants of limited abundance, Watch List), which do not require evaluation under CEQA. It was not observed within the project site during field surveys, which occurred during the appropriate identification period for the species.

NORTH COAST SEMAPHORE GRASS (*PLEUROPOGON HOOVERIANUS*)

Poaceae Family

Federal Status – None

State Status – Threatened

Other – CNPS List 1B.1

North Coast semaphore grass is a rhizomatous herb in the grass family (Poaceae). It occurs in broadleafed upland forest, meadows and seeps, and in the open, mesic areas of North Coast coniferous forest habitats at elevations ranging from 10 to 671 meters above mean sea level. Blooming takes place from April through August. The known range of this species includes Mendocino, Marin, and Sonoma Counties.⁴¹ The nearest documented occurrence of this species is located approximately 8.5 miles northeast of the project site.⁴² The mixed evergreen

and riparian forest habitat onsite may contain suitable habitat for the North Coast semaphore grass. It was not observed within the study area during the field surveys, which were conducted within the appropriate identification period for the species.

GREAT BURNET (*SANGUISORBA OFFICINALIS*)

Rosaceae Family
Federal Status – None
State Status – None
Other – CNPS List 2.2

Great burnet is a rhizomatous herb in the rose family (Rosaceae). It occurs in bogs, fens, broadleaf upland forest, meadows and seeps, marshes and swamps, North Coast coniferous forest, Riparian forest (often with serpentinite soils) at elevations ranging from 60 to 1,400 meters above mean sea level. Blooming occurs between July and October. The known range of this species includes Del Norte, Mendocino, Humboldt counties, Oregon and Washington states and elsewhere.⁴³ The nearest documented occurrence of this species is located approximately 16.5 miles northwest of the project site, and represents an 1899 record which is likely extirpated.⁴⁴ The broadleaf and mixed evergreen forest edges onsite may provide marginally suitable habitat for the great burnet. It was not observed within the project site during field surveys in July 2008, which occurred during the appropriate identification period for the species.

PURPLE-STEMMED CHECKERBLOOM (*SIDALCEA MALVIFLORA* SSP. *PURPUREA*)

Malvaceae Family
Federal Status – None
State Status – None
Other – CNPS List 2.2

Purple-stemmed checkerbloom is a rhizomatous herb in the mallow family (Malvaceae). It occurs in broadleaf upland forest and coastal prairie at elevations ranging from 15 to 85 meters above mean sea level. Blooming occurs between May and June. The known range of this species includes Mendocino, Marin, and Sonoma counties. The nearest documented occurrence of this species is located approximately 11.2 miles west of the project site on the Pacific coast.⁴⁵ The broadleaf and mixed evergreen forest edges on the project site may provide marginally suitable habitat for the purple-stemmed checkerbloom, though the majority of the project site occurs outside the elevation range for this species, as it is typically a coastal species. It was not observed within the project site during field surveys in July 2008, which occurred at the cusp the identification period for the species.

LONG-BEARD LICHEN (*USNEA LONGISSIMA*)

Parmeliaceae Family
Federal Status – None
State Status – None
Other – None; CNDDDB tracked

Long-beard lichen is a hanging lichen in the family Parmeliaceae. It occurs in old-growth forest, conifer, riparian and hardwood stands near coastal climates elevations widely varying between occurrences but seem to range from 90 to 520 meters above mean sea level. This species is readily identifiable year-round. The known range of this species includes most mesic woodlands throughout northern California to Alaska. The nearest documented occurrences occur west and northwest of the project site in “Elk, CA” and “Mallo Pass Creek” quadrangles,

more than five miles from the project site.⁴⁶ The broadleaf and mixed evergreen forest on the project site may provide marginally suitable habitat for long beard lichen, though the inland location of the project site may be outside the fog belt preferred by this species, as it is typically a coastal or moist forest species. This species is tracked within the CNDDDB but does not have any state or federal status, therefore is not required to be considered under CEQA. It was not observed within the project site during field surveys.

Special-Status Fishes

One special-status fish species was determined to have the potential to occur within the project site. While the intermittent drainages onsite may be suitable habitats for the Navarro roach (*Lavinia symmetricus navarroensis*), a query of the DFG Calfish – Anadromous Fish and Habitat Data Program, Passage and Assessment Database (PAD) for the project site revealed the presence of a complete barrier that prevents anadromous fish species from accessing the drainage reaches beyond it (i.e., Mill Creek).⁴⁷ Likewise, other aquatic features within the project site are also inaccessible to fish. Special-status fish do have the potential to occur further downstream in Mill Creek, Lazy creek and the Navarro River.

NAVARRO ROACH (*LAVINIA SYMMETRICUS NAVARROENSIS*)

Federal Status – None

State Status – Species of Special Concern

Other – None

The Navarro roach is one of six subspecies and is differentiated from other subspecies by locality and subtle morphological differences. It requires generally small warm streams and is often found in isolated pools within intermittent aquatic features. Navarro roach typically reach sexual maturity at approximately three years of age and spawning occurs during the months of March through July. They spawn in large groups and females deposit their eggs repeatedly into rock crevices. Males follow closely behind and fertilize the recently deposited eggs. The fertilized eggs typically hatch in a few days, and the larvae remain in the rock crevices until they are large enough to swim. The range of this species includes the Navarro River and its tributaries, all of which occur in Mendocino County. There are no documented occurrences of the Navarro Roach within five miles of the project site, though it is known to occur downstream in the Navarro River.⁴⁸ The intermittent features within the project site could support Navarro roach, but a barrier at the Highway 128 bridge crossing of the Navarro River prevents fish movement up into Mill Creek. Therefore, it is highly unlikely that this species would occur onsite, and the project does not involve changes to the water diversion authorized by Permit 20295.

Special-Status Birds

AMERICAN PEREGRINE FALCON (*FALCO PEREGRINUS ANATUM*)

Federal Status – Delisted (8/25/1999)

State Status – Delisted (11/4/2009)

Other – Fully Protected

The American peregrine falcon is relatively uncommon throughout its range. This species nests in a variety of habitats including woodlands, forest, and coastal communities and requires protected cliffs and ledges for cover. It breeds near wetlands, lakes, rivers, or other water sources on high cliffs, banks, dunes, and mounds. Peregrine falcon nests are scrapes on depressions or ledges within open sites. It will also nest on human-made structures and will occasionally nest in trees or snags and unoccupied nests of other raptors. Active nesting sites are known along the coast north of Santa Barbara, throughout the Sierra Nevada, and in other mountain regions throughout northern California. American peregrine falcon will migrate into

the Central Valley during the winter months. This species breeds from early March to late August. There is a documented occurrence of the American peregrine falcon within five miles of the project site.⁴⁹ Although the field surveys were not specifically designed to detect raptors, none were observed during site visits, which occurred during appropriate breeding season to detect this species. However, the mixed evergreen forest within the project site is considered suitable nesting habitat for this species and the species has the potential to occur onsite given the species' mobility.

OSPREY (*PANDION HALIAETUS*)

Federal Status – None

State Status – None

Other – None

The osprey is a wide-ranging and common bird of prey associated with large, water-bearing waters. It breeds from Cascade Ranges south to Lake Tahoe, and along the North Coast Ranges south to Marin County. Regular breeding sites include Shasta Lake, Eagle Lake, Lake Almanor, other inland lakes and reservoirs, and northwest river systems as well as many others. Osprey are associated strictly with large, fish-bearing waters, primarily in ponderosa pine through mixed conifer habitats. They use large trees, snags, and dead-topped trees in open forest habitats for cover and nesting. They require open, clear waters for foraging such as rivers, lakes, reservoirs, bays, estuaries, and surf zones. This species breeds from early March to late August. There are no documented occurrences of the osprey within five miles of the project site.⁵⁰ Although the field surveys were not specifically designed to detect raptors, no osprey were observed during site visits, which occurred during appropriate breeding season to detect this species. However, the mixed evergreen forest within the project site is considered suitable nesting habitat for this species and the species has the potential to occur onsite given the species' mobility.

Special-Status Mammals

SONOMA TREE VOLE (RED TREE VOLE) (*ARBORIMUS POMO*)

Federal Status – None

State Status – Species of Special Concern

Other – None

The Sonoma tree vole is primarily an arboreal animal that spends most of its time well above the ground in the tree canopy. This species occurs in coastal forests that are dominated by Douglas-fir and/or redwood trees. It is most often associated with old-growth Douglas-fir forest stands, but it can also occur in other mixed conifer and evergreen stands (including grand fir, hemlock, or spruce). The Sonoma tree vole feeds on the needles, tender bark, and terminal twigs of coniferous trees, and constructs its nests from the same materials. It nests within the tree canopy and occasionally at the base of larger trees, beneath the litter layer. This species breeds year-round, but most reproductive activity takes place between the months of February through September. The range of the Sonoma tree vole includes the coastal fog belt north of the San Francisco Bay to the Klamath Mountains. The mixed evergreen forest habitat onsite provides marginal habitat for this species. The nearest documented occurrence of this species is located approximately one mile south of the project site.⁵¹ No Sonoma tree vole were observed within the study area during the field surveys. However, this species is arboreal and is unlikely to be detected through ground surveys; focused surveys were not conducted for this species during the 2008 field surveys.

Questions A and E

No special-status plant or animal species were observed within the project site during the biological surveys conducted by AES biologists. No further construction is required for the proposed project.

The previous development of the project involved the removal of trees in the proposed POU. Based on a comparison of aerial photographs from 1996 and the present, as well as information of habitat and tree types surveyed in 2008, the number of trees removed subsequent to the CEQA baseline conditions was extrapolated. Approximately 33 mature trees (and accompanying vegetation) were removed from the mixed evergreen forest habitat on-site since the baseline date of 1996. Based on the existing vegetation observed during the field surveys, these tree species may have included Pacific madrone, tan oak, coast live oak, Douglas-fir, redwood, and black oak. The removed trees may have provided potential habitat for birds and arboreal mammals. This previous tree removal is considered a potentially significant impact. The County of Mendocino has no tree protection ordinances, and contains allowances for logging of trees within the mixed evergreen forests in the region; the trees removed fall within these guidelines. However, the State Water Board, as the lead agency, generally requires compensatory mitigation for oak removal.

To mitigate for previous impacts to oaks and potential wildlife habitat, the following permit term, substantially as follows, shall be included in any water right order or license issued pursuant to Application 27758:

- *Permittee shall compensate for the loss of 33 mature trees through planting of trees at a replacement ratio of 3:1.*

The tree replacement plantings shall be located within or adjacent to the existing mixed evergreen forest as identified in Figure 6 of the Initial Study on file for Application 27758. Trees planted should be contiguous to existing stands to facilitate colonization by birds and arboreal mammals. Proposed replacement trees shall be planted with 35 feet of separation between trunks. Permittee shall provide a map showing the location of each replacement planting within one year of the date of permit issuance and provide updates to the map with subsequent monitoring reports if changes occur.

Replacement tree plantings for the mitigation area shall be obtained from a combination of nursery stock grown on site, direct planting in proposed mitigation area from acorns and seeds collected on site, and/or trees obtained from a local native plant nursery or supplier. Plantings will consist of propagules derived from locally collected stock (native of Mendocino County) having a similar genetic origin to indigenous species on site. Permittee shall provide a written statement within one year of permit issuance disclosing the origin of each of the replacement plantings and updates to the written statement with subsequent monitoring reports if failed plantings are replaced or relocated.

Permittee shall provide photographic evidence to document the tree replacement plantings within one year of the date of permit issuance and update photographs with subsequent reports if failed plantings are replaced or relocated.

Any diversion of water pursuant to this permit is unauthorized if survival of any of the replacement tree species falls below 75%. Permittee shall maintain replacement plantings such that survival rate of each species is not less than the identified thresholds. Survival rate shall be documented and submitted by Permittee annually.

Annual monitoring reports shall be prepared by a biologist or certified arborist whose qualifications are acceptable to the Deputy Director for Water Rights. The initial monitoring report shall be submitted to the Deputy Director for Water Rights within one year of the date of permit issuance.

The initial monitoring report shall include documentation of:

- *planting locations (map)*
- *species of each planting*
- *size of each tree at planting (height and diameter at breast height if applicable)*
- *statement identifying the origin of each replacement tree*
- *photographic evidence documenting planted replacement trees.*

Subsequent annual reports shall be submitted annually to the Deputy Director for Water Rights and shall include documentation of:

- *size of each tree (height and diameter at breast height if applicable)*
- *age of each tree*
- *health status of each tree*
- *photographic evidence documenting progress of replacement trees*
- *locations (updated map), initial size measurement (height and diameter and breast height), photographic evidence and statement of origin for new plantings, if necessary to replace failed plantings.*

These reports shall be filed annually for a minimum of five years until at least 75% of each species has survived five years. At this time a final report shall be filed that provides written and photographic documentation of the following:

- *location of each tree*
- *size of each tree (height and diameter at breast height)*
- *age of each tree.*

Permittee shall refrain from any activities which may impact the replacement plantings including but not limited to development and timber harvesting in the replanting area.

Implementation of the above measures would reduce previous impacts to oak trees and potential wildlife habitat to less than significant levels.

Questions B-D

Operational activities carried out in proximity to onsite drainages could impact associated riparian or aquatic habitats. Riparian vegetation along streams provides essential habitat between terrestrial and aquatic environments for native plant and wildlife species, including several special-status species, and creates corridors for animal movement and plant dispersal across the landscape. In addition, riparian habitats provide important ecological services and

benefits to water quality including: water temperature regulation via canopy cover and shade, bed and bank stabilization and erosion control, filtration of sediments and pollutants, nutrient cycling, maintenance of channel form and character, and moderation of hydrologic peaks during the wet season. Due to the essential habitat and ecological function that riparian habitats provide, restrictions on the proximity of ground-disturbing activities are often employed (i.e., stream setbacks/buffers) as a means of protecting existing riparian vegetation and promoting regeneration of riparian vegetation after disturbance. Determination of the appropriate buffer size is difficult because standard agency guidelines have not been established. Likewise, the body of scientific literature associated with riparian buffers and stream setbacks is quite large, with recommendations varying depending on the specific objectives of the research (e.g., focal species, ecosystem function parameters and endpoints, etc.). Additionally, a wide range of physical factors influences local site sensitivity, including soil type, topography, precipitation and channel morphology. Consequently, recommended stream setbacks associated with mitigation are derived from the existing scientific literature, relevant guidance and professional judgment.

Protection of salmonid habitat relies on a set of ecological functions (e.g., sediment and nutrient filtration, water temperature moderation, maintenance of geomorphic processes, channel and habitat complexity, and forage) in combination with protection of appropriate stream flows. The analysis in this document utilizes the California Department of Forestry’s (CDF) stream classification system in combination with slope classes (less than 30 percent slope, 30 to 50 percent slope, and greater than 50 percent slope) and recommends appropriate stream setbacks based on the slope class and stream classification.⁵² As shown in **Table 6**, the recommended stream setback width varies from 25 to 150 feet depending on stream classification (setbacks from Class III streams are not as wide as setbacks from Class I streams) and slope class (setbacks in relatively flat areas are not as wide as setbacks in areas with steep slopes).

Operation of the proposed project would occur in proximity to several intermittent and ephemeral drainages (**Figure 6**). As noted above, the intermittent drainages are considered Class II streams and the ephemeral drainages are considered Class III streams. The Mendocino County Soil Survey indicates that slopes within and in the vicinity of the proposed POU vary between 0 and 30 percent; based on the CDF stream classification system, the drainages require minimum setbacks between 25 to 50 feet (**Table 6**), measured from the top of the bank. Minimum setbacks have been maintained along the drainages adjacent to the vineyard areas throughout the project site. The resulting buffers will protect water quality and habitat values during project operation.

TABLE 6 – CDF STREAM CLASSIFICATIONS AND SETBACK REQUIREMENTS⁵³

Stream	Classification Description	Slope Range	Recommended Setback
Class I	Watercourses that are inhabited by fish seasonally or annually, or if domestic supplies are onsite or within 100 feet downstream.	Less than 30%	75 feet
		30% to 50%	100 feet
		Greater than 50%	150 feet
Class II	Watercourses where fish may not be present onsite, but may be found within 1,000 feet downstream and/or provide habitat for non-fish aquatic species.	Less than 30%	50 feet
		30% to 50%	75 feet
		Greater than 50%	100 feet
Class III	Watercourses that have the capability of transporting sediment downstream to Class I or II waters and where no aquatic life is present.	Less than 30%	25 feet
		Greater than 30%	50 feet

To protect riparian habitat, the following permit term, substantially as follows, shall be included in any water right order or license issued pursuant to Application 27758:

- *For the protection of riparian habitat, Permittee shall maintain the existing setbacks as shown on the Habitat Map, dated June 18, 2010, on file with the Division of Water Rights. The setbacks shall range from a minimum of 25 to 50 feet wide along the intermittent and ephemeral drainages adjacent to the expanded place of use as measured from the top of the bank on both sides of the stream. No ground disturbing activities shall occur within the setback area, including, but not limited to, grading, herbicide spraying, roads, fencing, and use or construction of storage areas, with the exception of occasional equipment access reasonably necessary for continued operation of the vineyard. Equipment access through the setback shall be limited to previously disturbed areas of the setback when possible and is only allowed when other means of access are not available. Equipment access through the setback area shall incorporate best management practices to minimize disturbance to water, soils, and vegetation. Planting and irrigation of native riparian vegetation within the setback area is allowed. Permittee shall restrict cattle or other domestic stock access to the riparian area. These requirements shall remain in effect as long as water is being diverted under this permit.*

The proposed project would not impact wetlands or other waters of the U.S. as defined by Section 404 of the CWA. No changes would occur to the existing permit term that requires the maintenance of a 0.04 cfs bypass at the POD during the diversion season for the protection of fish and wildlife. The total streamflow is bypassed during the diversion season whenever flow is less than 0.04 cfs, and all flow is bypassed outside of the diversion season. The proposed project would not interfere with the movement of fish or wildlife species.

Question F

The proposed project would not conflict with the provisions of any adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or any other approved local, regional, or state HCP. No impacts would occur.

Findings

After the implementation of the permit terms outlined above, impacts to biological resources as a result of the proposed project are considered less than significant.

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

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

The project site is zoned Agricultural/Rangeland (Type II Preserve).⁵⁴ Agriculture and agricultural production are valued land uses in Mendocino County. The project site is not located within an area designated as forest land or timberland.

Questions A, D, and E

The project site is designated within the County of Mendocino General Plan⁵⁵ as Agricultural Lands and Rangelands. Under the proposed project, the project site would continue to be used for agricultural purposes. The proposed project would not involve the conversion of forest land to non-forest use. As discussed in the Biological Resources section, previous development of vineyard within the POU resulted in the loss of approximately 33 native trees; mitigation to offset previous tree loss is discussed in Questions A and E in the Biological Resources section. Impacts are considered less than significant.

Questions B and C

The project site is zoned as Agricultural/Rangeland (Type II Preserve), and therefore would not conflict with existing zoning for forest land or timberland. No impact would occur.

Findings

No significant impacts would occur to agricultural or forestry resources as a result of the proposed project.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
6. Noise. Would the project result in:				
a) Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing in or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing in or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Potentially significant sources of noise within Mendocino County include: highways and freeways; primary arterials and major local streets; passenger and freight on-line railroad operations and ground rapid transit systems; commercial, general aviation, heliport, helistop, and military airport operations, aircraft over-flights, jet engine test stands, and all other ground facilities and maintenance functions related to airport operation; and local industrial plants, including, but not limited to, railroad classification yards. The circulation system within Mendocino County is one of the major sources of continuous noise.⁵⁶

Noise sensitive areas identified within Mendocino County include areas containing schools, hospitals, rest homes, long-term medical or mental care facilities, or any other land use areas deemed noise sensitive by the local jurisdiction. The Unicorn School is located approximately 1.5 miles southwest of the project site. Rural residences are located within one mile of the project site. The nearest airport to the project site is the Boonville County Airport, located approximately nine miles to the southeast.

Questions A-D

Potential sources of noise generated at the project site would result from routine agricultural activities and would be similar to existing activities in the project area. This is considered a less than significant impact.

Questions E and F

The project site is not located within two miles of an airport or airstrip. No impact would occur.

Findings

Impacts to noise as a result of the proposed project are considered less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
7. Land Use and Planning. Would the project:				
a) Physically divide or disrupt an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is located in Mendocino County immediately northwest of the community of Philo. The Mendocino County General Plan (General Plan) Land Use Element and its policies guide growth and the development and use of land in Mendocino County. The Land Use Element of the General Plan designates the project area as “Agricultural Lands” And “Rangelands.”⁵⁷ Permitted land uses within this category include agricultural and residential uses.

The Mendocino County Zoning Ordinance designates the project site as Agricultural (A-G) and Rangeland (R-L).

The Ordinance outlines the intent of the A-G designation as:

The Agricultural Lands classification is intended to be applied to lands which are suited for and are appropriately retained for production of crops. The classification should include lands presently under Type I Agricultural Preserve contracts, lands having present or future potential for significant agricultural production, and contiguous or intermixed smaller parcels on which non-compatible uses could jeopardize the agricultural use of agricultural lands. Permitted non-agricultural uses, to the greatest extent possible, should not occur on lands that might otherwise be devoted to crop production.

The Ordinance outlines the intent of the R-L designation as:

- A. The grazing of livestock;
- B. The production and harvest of natural resources; and
- C. The protection of such natural resources as watershed lands from fire, pollution, erosion, and other detrimental effects. Processing of products produced on the premises would be permitted as would certain commercial activities associated with crop and animal raising.

Agricultural uses allowed within Agricultural and Rangeland Districts without a permit include: animal raising, tree crops, row and field crops, limited winery packing and processing, limited forest production and processing, and horticulture.⁵⁸

Question A

The project site is currently developed with agricultural uses. The proposed project would not result in physical barriers that would divide an established community. No impact would occur.

Question B

The proposed project includes the addition of 36 acres of vineyard to the POU of an existing permitted vineyard for a total POU of 246 acres. This use is consistent with the area’s General Plan and zoning designations. No impact would occur.

Question C

No habitat conservation plan or natural community conservation plan currently exists for the project site or immediate vicinity. The proposed project would not have the potential to conflict with any existing habitat conservation plans or natural community conservation plans.

Findings

No impacts would occur to land use and planning as a result of the proposed project.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
8. Mineral Resources. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Various minerals have been found within Mendocino County, including: asbestos, carbon dioxide, chromite, coal, copper, feldspar, gold, jade, limestone, magnesite, manganese, methane gas, mineral springs, natural gas, nickel, petroleum, phosphate, platinum, quicksilver, sand and gravel, and sulfur. The project site is not located in a mineral resource deposit area.⁵⁹

Questions A and B

No mineral resources are located near the project site as mapped by the County of Mendocino General Plan. No impact would occur.

Findings

No impacts would occur to mineral resources as a result of the proposed project.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
9. Hazards and Hazardous Materials. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or to the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

A search of the State Water Board GeoTracker Database was conducted for records of known sites of hazardous materials generation, storage, or contamination, as well as known storage tank sites on the project site and within the immediate vicinity.⁶⁰ The project site was not listed on any database as having previous and/or current generation, storage, and/or use of hazardous materials. The databases also did not identify any known hazardous materials sites within a one mile radius of the project site.

According to the Mendocino County General Plan, the proposed project is not located in an area with any identified hazards or hazardous materials.⁶¹

Questions A and B

No further construction activities are required for the proposed project. Hazardous materials that would be used during operation of the project and that would have been used during construction after the CEQA baseline date would be limited to common petroleum and agricultural products. When properly used, these products do not present a significant hazard. This is considered a less than significant impact.

Question C

The proposed project is not located within a quarter mile of any existing or proposed schools. No impact would occur.

Question D

A search of government environmental records did not reveal any known hazardous materials sites within the project area.⁶² No impact would occur.

Questions E and F

The nearest airport to the project site is the Boonville County Airport located approximately nine miles to the southeast. No impact would occur.

Question G

The proposed project does not include features that would interfere with an adopted emergency plan. No impact would occur.

Question H

The proposed project is located in an area that contains fuels (e.g., grasses, shrubs, trees, vines) that are susceptible to wildland fire. No new potential sources of fire would be introduced by the proposed project. This is considered a less than significant impact.

Findings

No impacts would occur to hazards and hazardous materials as a result of the proposed project.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
10. Population and Housing. Would the project:				
a) Induce substantial population growth in an area either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The surrounding area includes rural residential and agricultural land uses. As discussed above, the project site is currently developed with agricultural uses.

Question A

The proposed project does not involve the development of any homes or businesses. The proposed project would not generate commercial activities sizeable enough to induce substantial growth in the project area. This is considered a less than significant impact.

Questions B and C

The proposed project would not displace people or housing. No impact would occur.

Findings

Impacts to population and housing as a result of the proposed project are considered less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
11. Transportation and Traffic. Would the project:				
a) Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level-of-service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Vehicular access in the vicinity of the project site is provided by State Highway 128, a two-lane highway that traverses the southern portion of Mendocino County, from the coast, south of the town of Albion, and southeasterly to Cloverdale in Sonoma County.

Questions A-F

The proposed project is not anticipated to significantly increase traffic in the project area given the small scale of the project and the fact that the property has historically operated as a vineyard. No substantial new impediments to emergency access or incompatible uses are anticipated. The proposed project would not conflict with any applicable plans, ordinances, or policies establishing measures of effectiveness for the performance of the regional circulation system. The proposed project would not conflict with any applicable congestion management programs. The proposed project would not conflict with adopted alternative transportation policies, plans, or programs. Potential impacts are considered less than significant.

Findings

Impacts to transportation and circulation as a result of the proposed project are considered less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
12. Public Services. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service rations, response times or other performance objectives for any of the public services:				
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Public services include fire and police protection, schools, parks, and other public facilities. The Anderson Valley Fire Department provides fire protection to the project area. Police protection is provided by the Mendocino County Sheriff’s Department. Anderson Valley Unified School District provides K through 12th grade education in the project area.

Questions A-E

The proposed project would result in the continued use of the project site for agricultural purposes, and therefore, would not generate additional demand for government facilities or services. This is considered a less than significant impact.

Findings

Impacts to public services as a result of the proposed project are considered less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
13. Utilities and Service Systems. Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Comply with federal, state, and local statutes and regulations related to solid waste? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Development of the proposed project would not require the use of water or wastewater treatment facilities. Other utility or service system requirements of the proposed project would be met by existing infrastructure within the project site. The Ukiah landfill in Mendocino County accepts solid waste from the project area.

Questions A-G

No new wastewater would be generated as a result of the proposed project and no storm water drainage facilities would be required. As discussed in the Hydrology and Water Quality section above, sufficient water supplies exist through the permitted water right to serve the project. Additional water supplies, such as connection to public water supply, would not be required. The proposed project would not generate significant solid waste and would not conflict with government regulations concerning the generation, handling or disposal of solid waste. No significant impacts would occur.

Findings

Impacts to utilities and service systems as a result of the proposed project are considered less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
14. Aesthetics. Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

The project area contains scenic resources characteristic of Mendocino County in general, including mountainous landscapes, agricultural and pastoral settings, and riparian areas. The existing agricultural use of the project site is consistent with the rural aesthetic quality of the project area.

Questions A-D

The proposed project does not involve the construction of new structures, sources of light, or glare. The proposed project would result in the continued agricultural use of the project site. This use is consistent with the rural aesthetic quality of the project area. No impact would occur.

Findings

No impacts would occur to aesthetics as a result of the proposed project.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
15. Cultural Resources. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Regulatory Framework

Under CEQA, historical resources are considered part of the environment (Public Resources Code, §§ 21060.5, 21084.1). A “‘historical resource’ includes, but is not limited to, any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California (Public Resources Code, §§ 21084.1, 5020.1, subd. (j)).”

In 1992, the Public Resources Code was amended as it affects historical resources. The amendments included creation of the California Register of Historic Resources (California Register) (Public Resources Code, § 5024.1.). The State Historical Resources Commission administers the California Register and adopted implementing regulations effective January 1, 1998 (Cal. Code Regs., tit. 14, § 4850 et seq.). The California Register includes historical resources that are listed automatically by virtue of their appearance on, or eligibility for, certain other lists of important resources. The California Register incorporates historical resources that have been nominated by application and listed after public hearing. Also

included are historical resources listed as a result of the State Historical Resources Commission's evaluation in accordance with specific criteria and procedures.

CEQA requires consideration of potential impacts to resources that are listed or qualify for listing on the California Register, as well as resources that are significant but may not qualify for listing.

Cultural Resources Study

A pedestrian survey of the proposed POU was conducted on April 22, 2010 by an AES archaeologist. The primary focus of the survey was to visually inspect the ground surface and any exposures of stratigraphy for evidence of cultural resources. A record search and literature review were completed prior to the commencement of the pedestrian survey. This research was completed at the Northwest Information Center (NWIC #06-1407) of the California Historical Resources Information System (CHRIS). The research included accessing the National Register of Historical Places (NRHP), California Inventory of Historic Resources, California Historical Landmarks, historical maps, previous cultural resource investigations, and State of California Department of Parks and Recreation (DPR) site records. Additional research was conducted in the library of the Cultural Resources Department at AES in Sacramento.

The record search revealed no previously recorded resources within the proposed POU. However, six previously recorded resources were located within one quarter-mile of the proposed POU. Five resources were identified as prehistoric and described as habitation sites and lithic scatters: CA-MEN-2620,⁶³ CA-MEN-1929,⁶⁴ P-61,⁶⁵ CA-MEN-3338,⁶⁶ and CA-MEN-3339.⁶⁷ One previously recorded resource located within one quarter-mile of the POU was historical in age and had been designated CA-MEN-2610H.⁶⁸

The record search also revealed that the project area had not yet been the subject of a cultural resources examination. However, eight cultural resources studies had taken place within one quarter-mile of the proposed POU.⁶⁹

On March 5, 2007, a request for a search of the sacred lands file was submitted to the Native American Heritage Commission (NAHC). The NAHC responded on March 23, 2007 stating the search of the sacred land file failed to indicate the presence of Native American cultural resources in the immediate area. The NAHC recommended contacting 31 interested individuals and groups. Letters were sent to these individuals on April 7, 2010. To date, one response has been received; it was from the Potter Valley Tribe requesting notification in the event of the discovery of archaeological materials.

The results of the cultural resources investigation concluded that no cultural resources are located within the proposed POU and no historic properties will be impacted.

Questions A-D

Though no cultural resources were identified in the proposed POU, there is the possibility that subsurface archaeological deposits could be present and accidental discovery could occur. The following permit term, substantially as follows, shall be included in any water right order or license issued pursuant to Application 27758:

- *Should any buried archaeological materials be uncovered during project activities, such activities shall cease within 100 feet of the find. Prehistoric archaeological indicators include: obsidian and chert flakes and flaked stone tools; bedrock outcrops and boulders with mortar cups; ground stone implements (grinding slabs, mortars and pestles) and locally darkened midden soils containing some of the previously listed items plus*

fragments of bone and fire affected stones. Historic period site indicators generally include: fragments of glass, ceramic and metal objects; milled and split lumber; and structure and feature remains such as building foundations, privy pits, wells and dumps; and old trails. The Deputy Director for Water Rights and the Potter Valley Tribe shall be notified of the discovery and a professional archeologist shall be retained by the Permittee to evaluate the find and recommend appropriate mitigation measures. Proposed mitigation measures shall be submitted to the Deputy Director for Water Rights for approval. Project-related activities shall not resume within 100 feet of the find until all approved mitigation measures have been completed to the satisfaction of the Deputy Director for Water Rights.

There is also the possibility that an unanticipated discovery of human remains could occur. The following permit term, substantially as follows, shall be included in any water right order or license issued pursuant to Application 27758:

- *If human remains are encountered, then the Permittee shall comply with Section 15064.5 (e)(1) of the CEQA Guidelines and the Health and Safety Code Section 7050.5. All project-related ground disturbances within 100 feet of the find shall be halted until the Mendocino County Coroner has been notified. If the Coroner determines that the remains are Native American, the Coroner will notify the Native American Heritage Commission to identify the most-likely descendants of the deceased Native Americans. Project-related ground disturbance, in the vicinity of the find, shall not resume until the process detailed under Section 15064.5 (e) has been completed and evidence of completion has been submitted to the Deputy Director for Water Rights.*

Findings

After the implementation of the permit terms outlined above, impacts to cultural resources as a result of the project are considered less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
16. Recreation. Would the project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Mendocino County has various types of parklands, including Federal Recreation Areas and State Parks, regional parks, county parks, and neighborhood parks. Recreational opportunities include fishing, camping, swimming, picnicking, horseback riding, bicycling, and hiking or walking.

Question A

The proposed project would result in the continued agricultural use of the project site. No new demand would be generated for the use of existing neighborhood and regional parks or other recreation. No impact would occur.

Question B

The proposed project does not include recreation facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. No impact would occur.

Findings

No impacts would occur to recreation as a result of the proposed project.

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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17. Mandatory Findings of Significance

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|--|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| a) Does the project have the potential to 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, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects) | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Questions A-C

As discussed in the preceding sections, the proposed project has a potential to degrade the quality of the environment by adversely impacting biological and cultural resources. However, with implementation of the identified permit terms, potential impacts would be reduced to a less than significant level. No cumulatively considerable environmental impacts have been identified. No potentially significant adverse affects to humans have been identified.

III. DETERMINATION

On the basis of this initial evaluation:

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

I find that although the 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 NEGATIVE DECLARATION will be prepared.

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

I find that the 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 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 project, nothing further is required.

Prepared By:

Original Signed By

October 3, 2011

David Zweig
Analytical Environmental Services

Date

Reviewed By:

Original Signed By

December 13, 2011

Phillip Crader, Manager
Permitting and Licensing Section
Division of Water Rights

Date

(Form updated 3/28/00)

Authority: Public Resources Code Sections 21083, 21084, 21084.1, and 21087.

Reference: Public Resources Code Sections 21080(c), 21080.1, 21080.3, 21082.1, 21083, 21083.1 through 21083.3, 21083.6 through 21083.9, 21084.1, 21093, 21094, 21151; *Sundstrom v. County of Mendocino*, 202 Cal. App. 3d 296 (1988); *Leonoff v. Monterey Board of Supervisors*, 222 Cal. App. 3d 1337 (1990).

IV. REFERENCES

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- ¹ Petition for Change. Permit 20295 (Application 27758). State Water Resources Control Board, Division of Water Rights. August 29, 2000.
 - ² Attachment to Petition for Change, Permit 20295 (A027758). Napa Valley Vineyard Engineering, Inc. June 6, 1996, revised August 26, 2008.
 - ³ Ibid.
 - ⁴ Stretars, Mark L. Letter to: Robert Gibson. Permit 20295 (Application 27758) of Anderson Vineyards, Inc. Unnamed Stream Tributary to Mill Creek Thence Navarro River in Mendocino County. April 5, 2000.
 - ⁵ Permit 20295 (Application 27758). Order Approving A New Development Schedule and Amending the Permit. State Water Resources Control Board, Division of Water Rights. April 5, 2000.
 - ⁶ Report of Inspection for Application 27758. State Water Resources Control Board, Division of Water Rights. Conducted March 19, 1999.
 - ⁷ Petition for Change. Permit 20295 (Application 27758). State Water Resources Control Board, Division of Water Rights. August 29, 2000.
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