

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

**INITIAL STUDY**

**I. BACKGROUND**

PROJECT TITLE: Application to Appropriate Water

APPLICATION: 30740

APPLICANT: Sutter Home Winery  
P. O. Box 248  
St. Helena, CA 94574

APPLICANT'S CONTACT PERSON: Diane Willson  
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707/963-4927

General Plan Designation: Open Space, Watershed

Zoning: Agricultural Watershed, Airport Compatible

**Introduction**

The Sutter Home Winery project site (Application 30740) is located in Napa County, approximately 2 miles southeast of the City of Napa and approximately 1.5 miles south of the junction of Highway 12 and Highway 29 (Exhibit 1). In 1998, Sutter Home Winery (Applicant) purchased the 171.26-acre property and began vineyard development; most of the vineyard was planted in 1999 with small acreages planted in 2001 and 2004. Prior to that time, the property was grazed pasture.

There is an existing onstream reservoir on the property (Exhibit 2), which was present at the time of purchase. The reservoir was originally used as a stockwatering pond and was registered as such in 1981 (C002055). Although the stockpond certificate indicates a capacity of 7.5 acre-feet (af), the actual capacity of the reservoir is 26 af. The existing storage reservoir is an onstream reservoir formed by an earthen dam approximately 405 feet long and 24 feet high. The reservoir is located on an unnamed tributary to North Slough, and water stored in the reservoir is used to irrigate the 153 acres of existing vineyard. The irrigation season typically runs from May 15 to October 15. Prior to harvest, the vineyard is irrigated between 10 and 15 hours a week, depending on weather conditions. Historically, the average monthly use has been 12 af. During and after harvest, another +/- 6 af is applied. The total amount of water applied is between 35 af in a cool season and 49 af in a hot or dry season. In addition to water stored in the reservoir, the Applicant currently purchases between 15 to 30 af of municipal raw water annually from the City of American Canyon to supplement irrigation needs. The municipal raw water is pumped directly into the irrigation system and is not stored in the reservoir.

### **CEQA Baseline**

To determine whether the project has a significant environmental effect under the California Environmental Quality Act (CEQA), the lead agency must set a baseline against which to compare the project's effects on the environment. The normal baseline under CEQA is the current environmental setting, as provided in Section 15125 of the CEQA Guidelines. Section 15125 sets a general rule for determining the baseline for analysis of environmental impacts of a project. Under Section 15125, an environmental impact report (EIR) must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation of the EIR is issued or at the time environmental analysis is commenced. Section 15125 provides that normally this environmental setting constitutes the baseline for determining whether an impact is significant. The courts have approved the use of this baseline in cases where the project already has been constructed and is operating illegally.

The CEQA baseline for this project has been set at May 31, 1998; the date the water rights application (WRA) was initially filed with the State Water Resources Control Board (State Water Board), Division of Water Rights (Division) which triggers the CEQA process and the initial environmental review by Division staff. All WRA-related activities that were conducted subsequent to the WRA filing date shall be considered part of the proposed project under CEQA and therefore shall be analyzed for potential project impacts on the environment. The baseline for operations (i.e., hydrological and diversion-related) is pre-project conditions.

### **Public Trust Doctrine and California Water Right Law**

Under the public trust doctrine, certain resources are held to be the property of all citizens and subject to continuing supervision by the State. Originally, the public trust was limited to commerce, navigation, and fisheries, but over the years the courts have broadened the definition to include recreational and ecological values. In a landmark case, the California Supreme Court held that California water right law is an integration of both public trust and appropriative right systems, and that all appropriations may be subject to review if "changing circumstances" warrant their reconsideration and reallocation.

The Division must balance the potential value of a proposed or existing water diversion with the impact it may have on the public trust. After carefully weighing the issues and arriving at a determination, the Division is charged with implementing the action that would protect the latter. The Division has considered the public trust doctrine in reaching its conclusions regarding the proposed project.

### **Project Description**

On May 31, 1998, Sutter Home Winery filed WRA 30740 with the Division. The Applicant is seeking the right to appropriate and store surface water from an existing reservoir (C002055, filed in 1981) for irrigation of the vineyard. The water sought would be in addition to the municipal raw water currently being used for irrigation and would provide surety of supply for the long-term needs of the project.

Application 30740 seeks the appropriation of as much as 26 acre-feet per annum (afa) of water for storage in one existing onstream storage reservoir. Water collected for storage would be used for irrigation of approximately 161 acres of vineyard (i.e., 153 acres of existing vineyard,

plus an additional 8 acres which would be converted from pasture land to vineyard). Under the application, water would be collected for storage between December 15 and March 31 each year. Based upon historical applications, the fully developed vineyard could use up to 56 afa in a hot or dry season. In addition to water stored pursuant to Application 30740 (26 afa), supplemental water would continue to be provided by the purchase of municipal raw water (15 to 30 afa depending on weather and watershed yield). No alteration or expansion of the reservoir is proposed. Thus, no change to the existing irrigation pattern (described above) is anticipated. Application 30740 also includes fire protection as an incidental purpose of use.

The Applicant proposes to divert water at a Point of Diversion (POD) on an Unnamed Stream tributary to North Slough, thence Napa River, and thence San Pablo Bay (Exhibit 3). The Applicant would divert water to storage from December 15 to March 31 of the succeeding year.

The only construction-related activity proposed is the development of approximately 8 acres of additional vineyard. The vineyard expansion would not require removal of any vegetation other than pasture grasses, and no trees would be disturbed as a result of this project. Trees on the property are limited to the riparian corridor along the stream and the property line. The 8-acre vineyard expansion would be set back at least 30 feet from the unnamed tributary and at least 50 feet from the reservoir, and possibly greater distances depending on whether any additional setback distances are required per the Napa County Ordinance. Existing vineyard avenues would be used for construction access to the vineyard expansion area; no new roads will be constructed. Development of the vineyard expansion area would take place during the dry season (August through September of the year following issuance of the permit).

Withdrawal of water from the storage reservoir and the distribution of water for irrigation purposes would be by pumping. The irrigation distribution system consists of a number of buried PVC pipe throughout the irrigated place of use, which are connected to drip irrigation tubing. This tubing distributes water to individual vines via drip irrigation emitters. The main lines for the underground portion of the irrigation system are 6 inches in diameter and the sub mains are 2 to 4 inches in diameter.

The application was noticed on December 3, 1999. The Division accepted two protests. The Division accepted a protest from the U.S. Fish and Wildlife Service (USFWS) that stated that the proposed project might result in the take of federally listed species protected under the Endangered Species Act of 1973. Specifically, the project may result in the take of the federally endangered California freshwater shrimp and the threatened California red-legged frog. If the project were to potentially take a federally listed species then an incidental take permit would need to be obtained from USFWS. In addition the Division accepted a protest from the California Native Plant Society. The protest stated that adequate setbacks should be established to protect seasonal wetlands and potential habitat for a variety of plants and animals including the California red-legged frog. Both protests remain unresolved.

### **Environmental Setting**

The Place of Use (POU) is located in southern Napa County, approximately 1.5 miles south of the junction of Highway 12 and Highway 29. The site is at approximately 250 feet elevation, and is depicted on the United States Geological Survey (USGS) 7.5-minute series Cordelia quadrangle. An unnamed tributary to North Slough flows through the POU. This tributary branches into two ephemeral streams along the southern boundary of the POU. The storage

reservoir under application is located on the northern branch of the unnamed tributary (Exhibit 4). Annual precipitation is less than 25 inches in the POU, with a long and dry summer season.

The POU primarily consists of vineyards. The area was used primarily for grazing cattle for over 100 years. Patches of ruderal (barren or weedy) grassland occur between sections of vineyards. Annual grassland, used as pasture, occurs in the southeast portion of the POU. The grassland is composed of weedy species, such as ripgut brome (*Bromus diandrus*), foxtail barley (*Hordeum murinum* ssp. *leporinum*), wild oat (*Avena fatua*), and perennial ryegrass (*Lolium perenne*). Wildlife diversity in the vineyards and grassland edges in the POU is relatively low because of limited cover and food resources. Species observed or expected to occur in this habitat include black phoebe (*Sayornis nigricans*), savannah sparrow (*Passerculus sandwichensis*), American goldfinch (*Carduelis tristis*), black-tailed jackrabbit (*Lepus californicus*), California ground squirrel (*Spermophilus beecheyi*), and western pocket gopher (*Thomomys bottae*).

The reservoir is reported to contain at least some permanent water all year, but the drainage that feeds it usually dries up by mid-summer<sup>1</sup>. The two streams on the POU connect during high-water flows through an overflow channel immediately downstream of the reservoir. Aquatic vegetation in the reservoir includes smartweed (*Polygonum amphibium*), water milfoil (*Myriophyllum* sp.), and algae. Vegetation surrounding the reservoir is mainly weedy herbaceous species, such as spiny cocklebur (*Xanthium spinosum*), fiddle dock (*Rumex pulcher*), Dallis grass (*Paspalum dilatatum*), and annual beard grass (*Polypogon monspeliensis*). Sparse cattails (*Typha* sp.) and one small willow shrub (*Salix lasiolepis*) are present at the east end of the reservoir, but no emergent or woody riparian occurs along the shoreline. Upstream from the reservoir, the stream supports herbaceous riparian vegetation and small clumps of Himalayan blackberry (*Rubus discolor*) and cattails. Several species of wintering water birds were observed using the reservoir, including American coot (*Fulica americana*), lesser scaup (*Aythya affinis*), mallard (*Anas platyrhynchos*), and gadwall (*Anas strepera*). No fish, amphibians, or other aquatic animals were observed in the reservoir, but a dense mat of aquatic vegetation made observation into the water difficult.

Downstream of the reservoir, the stream supports a strip of riparian woodland, dominated by willow and Fremont cottonwood (*Populus fremontii*) trees. Most of the stream, however, is vegetated by weedy grass species such as wild oat, ripgut brome, black mustard (*Brassica nigra*), and winter vetch (*Vicia villosa* ssp. *villosa*). The riparian woodland present in the drainage downstream of the reservoir in the POU is a small patch (approximately less than 30 feet wide and 1,000 feet long) and is isolated from larger riparian areas, which are more than 0.5 mile away (Exhibit 4). In addition, the riparian woodland is surrounded by nonnative habitats (vineyards and annual grassland), which restrict the floodplain and limit the extent of the native vegetation. The vineyards and farm access roads border the riparian woodland for almost its entirety. Although riparian woodland is a very valuable habitat type for many wildlife species, the small size, isolation, and disturbed habitats surrounding the woodland reduce the relative value of this habitat type for wildlife. However, migratory songbirds may temporarily use this habitat in spring and late summer/early fall. The trees may provide suitable nesting or roosting habitat for raptors, such as American kestrel (*Falco sparverius*) and barn owl (*Tyto alba*). Pacific tree frogs (*Hyla regilla*) and raccoons (*Procyon lotor*) may also use the riparian woodland.

The land use in the vicinity of the POU (approximately 1-mile radius around the existing reservoir) includes other vineyards to the north, west, and southwest and a golf course to the north (Exhibit 4). Small areas of ruderal grassland and access roads within the POU were not mapped due to their small size, but were classified as existing vineyard. Developed areas are few, but include a railroad and several buildings associated with agricultural operations or residences. Areas to the east, northeast, and south of the POU are undeveloped, primarily rolling annual grasslands and

oak woodland in the higher hills.

The Applicant has made revisions to the proposed project, and has included all permit terms specified in this Initial Study into the proposed project description, such that there will not be a significant effect on the environment.

### **Responsible and Trustee Agencies**

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

- County of Napa – County Use Permit
- California Department of Fish and Game (DFG) Compliance – Streambed Alteration Agreement, California Endangered Species Act (CESA)
- California Regional Water Quality Control Board (RWQCB) – Clean Water Act Section 401 Water Quality Certification
- U.S. Fish and Wildlife Service (USFWS) – federal Endangered Species Act (ESA) Compliance
- National Marine Fisheries Service (NMFS) –ESA Compliance
- U.S. Army Corps of Engineers (USACE)– Clean Water Act Section 404 Compliance

## **II. ENVIRONMENTAL IMPACTS**

The environmental factors checked below could be potentially affected by this project and are discussed in detail in the following analysis.

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

|  | Potentially Significant Impact | Less- Than- Significant With Mitigation Incorporated | Less- Than- Significant Impact      | No Impact                           |
|--|--------------------------------|--|-------------------------------------|-------------------------------------|
| <b>1. GEOLOGY AND SOILS.</b> Would the project:  |                                |  |                                     |                                     |
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:   |                                |  |                                     |                                     |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | <input type="checkbox"/>       | <input type="checkbox"/>                             | <input type="checkbox"/>            | <input checked="" 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 type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b) Result in substantial soil erosion or the loss of topsoil?  | <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 offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?   | <input type="checkbox"/>       | <input type="checkbox"/>                             | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1997), creating substantial risks to life or property?   | <input type="checkbox"/>       | <input type="checkbox"/>                             | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative 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"/> |

Although the POU is not located on a known earthquake fault, it does fall within the Cordelia quadrangle Alquist-Priolo fault-rupture hazard zone<sup>2</sup>. The POU is located approximately 5 miles west of the southern portion of the Green Valley fault, which is known to have experienced active displacement during the last several hundred years (Historic Time)<sup>3</sup>. The POU is also located

approximately 1 mile east of the southern portion of the West Napa Fault, which has experienced active displacement during the last 10,000 years (Holocene Epoch)<sup>3</sup>.

Development of an additional 8 acres of vineyard is proposed in the northern and southern portion of the POU where potential for landslide is considered low. These areas are nearly flat or gently sloping and are not adjacent to unstable slopes. Therefore, the potential impacts are considered less-than-significant and no mitigation is required.

|  | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
|--|--------------------------------|--|------------------------------|-----------|

**2. AIR QUALITY**

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied on 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) 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"/>            |
| d) Expose sensitive receptors to substantial pollutant concentrations?   | <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 type="checkbox"/>            | <input checked="" type="checkbox"/> |

Project operations would have virtually no effect on air quality. Construction-related effects on air quality would be temporary and only involve vineyard planting of 8 acres. Therefore, these impacts are considered to be less-than-significant.

|   | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact        | No Impact                           |
|---|--------------------------------|--|-------------------------------------|-------------------------------------|
| <b>3. HYDROLOGY AND WATER QUALITY.</b>  |                                |  |                                     |                                     |
| Would the project:  |                                |  |                                     |                                     |
| a) Violate any water quality standards or waste discharge requirements?   | <input type="checkbox"/>       | <input checked="" type="checkbox"/>                | <input 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 or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or offsite?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or offsite?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| f) Otherwise substantially degrade water quality?   | <input type="checkbox"/>       | <input checked="" type="checkbox"/>                | <input type="checkbox"/>            | <input type="checkbox"/>            |
| g) Place housing within a 100-year 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"/> |
| h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**a), f) Water quality:** Construction of the storage reservoir prior to its registration as a stockpond in 1981 may have resulted in the release of sediment into the stream; however, this activity took place prior to filing of the permit application; therefore, it is considered to be part of the CEQA baseline. Construction activities associated with the proposed vineyard development would involve the use of some heavy equipment, which uses small amounts of hazardous materials such as oils, fuels, and other potentially flammable substances. The vineyard expansion is proposed to be set back at least 30 feet from the unnamed tributary and at least 50 feet from the reservoir, and possibly greater distances depending on whether any additional setback distances are required per the Napa County Ordinance (see mitigation measures described in biological resource section). Existing vineyard avenues would be used for construction access to the vineyard expansion area; no new roads will be constructed. The proposed setbacks from waters would greatly reduce the potential for release of sediment or spillage of these substances into waters during construction. Therefore, impacts to water quality as a result of the proposed vineyard expansion construction are less-than-significant .

**b) Groundwater:** The project does not propose any activities that would directly affect groundwater or result in any substantial indirect effects on groundwater supplies or recharge. Impacts are less-than-significant.

**c), d), e) Runoff, drainage patterns:** The existing diversion being formally requested under this application is not anticipated to substantially alter the existing drainage pattern of the site or area. Further, this existing diversion is not anticipated to substantially increase erosion or siltation or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or offsite.

**g), h), i) Flooding:** The project would not place structures that would impede or redirect flood flows within a 100-year flood hazard area or place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map. Further, the project would not expose people or structures to a significant risk of loss, injury, or death from flooding.

**j) Seiche, tsunami, or mudflow:** The project would not result in inundation by seiche, tsunami, or mudflow because it is geographically isolated from associated features.

#### **Permit Terms**

Permit terms, substantially as follows, shall apply to any permit or license issued pursuant to Application 30740:

- < *Permittee shall prevent any debris, soil, silt, cement that has not set, oil, or other such foreign substance from entering into or being placed where it may be washed by rainfall runoff into the waters of the State.*

|  | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact        | No Impact                           |
|--|--------------------------------|--|-------------------------------------|-------------------------------------|
| <b>IV. BIOLOGICAL RESOURCES.</b> 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 California Department of Fish and Game or the U.S. Fish and Wildlife Service? | <input type="checkbox"/>       | <input checked="" type="checkbox"/>                | <input type="checkbox"/>            | <input type="checkbox"/>            |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?  | <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 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 checked="" type="checkbox"/>                | <input type="checkbox"/>            | <input type="checkbox"/>            |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input 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 type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

A search of DFG's Natural Diversity Database (CNDDB) was conducted for sensitive biological resources on the USGS 7.5-minute series Cordelia quadrangle. The sensitive species identified for

the quadrangle are: northwestern pond turtle (*Emys marmorata marmorata*), California red-legged frog (*Rana aurora draytonii*), salt-marsh harvest mouse (*Reithrodontomys raviventris*), Suisun shrew (*Sorex ornatus sinuosus*), white-tailed kite (*Elanus leucurus*), tricolored blackbird (*Agelaius tricolor*), golden eagle (*Aquila chrysaetos*), burrowing owl (*Athene cunicularia*), Suisun marsh aster (*Aster lentus*), big-scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*), Tiburon Indian paintbrush (*Castilleja affinis* spp. *neglecta*), and showy Indian clover (*Trifolium amoenum*)<sup>4</sup>.

Kjeldsen Biological Consulting prepared wildlife/botanical and fisheries surveys and evaluations in August 2001<sup>5</sup>. The report was based on daytime field surveys conducted on September 22, 2000 and March 13, April 2, and June 13, 2001 by Kjeldsen biologists; they conducted additional night surveys on May 9 and 17, 2001. An EDAW biologist conducted a reconnaissance-level field survey of the POU during daylight hours (approximately 10 AM to 4 PM) on November 4, 2003. The purpose of the EDAW field survey was to verify and update information in the Kjeldsen report. The EDAW biologist inspected all areas in the POU with potential to support sensitive biological resources, and other natural areas (i.e., not planted in vineyards). This included walking drainages in the POU and inspecting potential wetland and/or riparian areas. All observed wildlife species or sign of wildlife (e.g., tracks, scat) were recorded. Vegetation communities were mapped on an aerial photo and were classified based on the dominant plant species. No focused surveys for special-status species were conducted, but the potential for their occurrence was evaluated based on the suitability of habitats observed.

In June 2004, EDAW prepared a California red-legged frog habitat assessment for the proposed project, following USFWS 1997 guidance. The results of the assessment are documented in a separate report, but were based on site reconnaissance conducted on November 4, 2003, review of existing data (e.g., CNDDDB, recovery plan for California red-legged frog), and aerial photo interpretation. As part of this assessment, land cover for 1-mile surrounding the existing reservoir was mapped while in the field on an aerial photo (Exhibit 4).

On June 29, 2006, EDAW conducted a site visit with the Applicant, Applicant's agent, DFG staff and Division staff to discuss riparian conditions and appropriate setback buffer requirements. Observations were made at the confluence (and downstream) of the two unnamed streams to evaluate existing conditions and determine appropriate riparian buffer setback widths.

### **Special-Status Plant Species**

Four special-status plant species have potential to occur on the POU: Suisun marsh aster, big-scale balsamroot, Tiburon Indian paintbrush, and showy Indian clover. Tiburon Indian paintbrush and showy Indian clover are federally listed as endangered. All of these species are listed by the California Native Plant Society (CNPS) as 1B species (considered rare, threatened, or endangered in California and elsewhere).

Tiburon Indian paintbrush, showy Indian clover, and big-scale balsamroot have a low probability of occurrence in the POU because they are associated with serpentine soils and suitable habitat is not present. In their 2001 report, Kjeldsen biologists reported Suisun marsh aster in the POU down-slope from the reservoir near the unnamed tributary to North Slough<sup>6</sup>. The EDAW biologist located aster in bloom (approximately 35 stems) at this approximate location during the November 4, 2003 survey, but the taxonomy could not be verified in the field. Suisun marsh aster typically grows in brackish and freshwater marshes and swamps; however, the observed aster was growing along the tops of the bank of the dry tributary to North Slough among nonnative grasses. The CNDDDB does not report Suisun marsh aster occurrences for this location. Although the taxonomy was not verified, in order to ensure protection of sensitive species, it is assumed that the aster

observed was Suisun marsh aster.

Sensitive natural plant communities, as defined by DFG, are of relatively limited distribution or are of particular value to wildlife. The riparian woodland in the POU, downstream of the existing reservoir is considered a sensitive community by DFG.

### Special-Status Wildlife Species

The CNDDDB reports that eight special-status wildlife species are known to occur in the project vicinity, including: California red-legged frog, northwestern pond turtle, white-tailed kite, golden eagle, burrowing owl, tricolored blackbird, Suisun shrew, and salt-marsh harvest mouse. The California red-legged frog is federally listed as threatened. The white-tailed kite is a Fully Protected Species under the Fish and Game Code. The salt-marsh harvest mouse is federally and state listed as endangered. The remaining species are considered state species of special concern. The Bald Eagle Protection Act also protects the golden eagle.

Based on lack of suitable habitat, tricolored blackbird, salt-marsh harvest mouse, and Suisun shrew are not likely to occur on or adjacent to the POU. Golden eagle and burrowing owl, both uncommon in Napa County, are also unlikely to occur in the POU. Golden eagles, which are known to nest in the mountain and ranch country of eastern Napa County, are not expected to nest in the POU due to a lack of large trees or cliffs suitable for nesting. Foraging habitat in the POU for golden eagles is of marginal quality; almost all of the POU is planted with vineyard (See Exhibit 4). Because golden eagles typically capture prey, such as rabbits, by swooping down on them, shrubs or other structures, such as vineyard, are likely to interfere with their ability to detect, pursue, and successfully capture prey. The small patches of ruderal and annual grasslands in the POU that the Applicant proposes to convert to vineyard are surrounded by or adjacent to existing vineyards and access roads. It is unlikely that these grassland areas provide important foraging habitat for golden eagles due to the routine disturbance and structures on the adjacent areas. Grasslands also provide potential habitat for burrowing owl, but it is unlikely that this species occurs in the POU as it is thought to be extirpated as a breeding species from Napa County, according to the 2003 Petition to the State of California Fish and Game Commission and Supporting Information for Listing the California Population of Western Burrowing Owl. In addition, the Napa County Breeding Bird Atlas (2003) reports the north end of Lake Berryessa (almost 50 miles to the north of the POU) in 1990 as the only (possible, but not confirmed) location of breeding burrowing owls in Napa County. The CNDDDB does not contain any existing records of burrowing owl for the quadrangle on which the POU is located. No evidence of burrowing owl (e.g., burrows, white-wash) was observed in the grasslands or other areas in the POU.

In a November 22, 1999 protest, the U.S. Fish and Wildlife Service mentioned that this project may result in the take of the federally endangered California freshwater shrimp (*synarcis pacifica*). California freshwater shrimp live in low elevation, perennial freshwater streams. The project is located on an ephemeral stream and the perennial watercourses downstream are brackish and tidally influenced. Therefore the watercourses potentially affected by this project are not suitable habitat for the California freshwater shrimp and there would be no impact to this species.

Potentially suitable habitat for northwestern pond turtle, white-tailed kite, and California red-legged frog occurs in the POU. The presence or absence of these species has not been determined in the POU, as no focused surveys have been conducted.

The northwestern pond turtle is found in a variety of habitats including lakes, rivers, streams, and stockponds. They usually leave aquatic sites to reproduce and overwinter. Pond turtles nest in

upland habitat with sandy soils, sometimes almost 1/4 mile from aquatic sites. Northwestern pond turtles have been recorded within 5 miles of the POU near American Canyon and Vallejo<sup>5</sup>. Although no pond turtles have been observed during previous surveys, the existing reservoir may provide suitable aquatic habitat.

The white-tailed kite is found primarily in open grassland and agricultural habitats. Nests are usually constructed in medium-sized trees in riparian or oak woodland habitats. Grasslands, agricultural fields, pastures, and roadsides are used for foraging. Kites are not known to nest in the POU, but the riparian woodland along the stream at the southern edge of the POU may provide suitable nest trees and the adjacent pasture provides suitable foraging areas.

A habitat assessment conducted for California red-legged frog concluded that suitable breeding habitat is present in the POU. The California red-legged frog requires a variety of habitat elements with aquatic breeding areas typically located within a matrix of riparian and upland dispersal habitats. Breeding sites of the California red-legged frog include freshwater habitats such as pools and backwaters within streams and creeks, ponds, marshes, springs, and lagoons. Additionally, California red-legged frogs frequently breed in artificial impoundments such as stockponds<sup>6</sup>.

There are six reported populations of California red-legged frogs within 5 miles of the POU<sup>5</sup>. The closest population (approximately 2 miles) to the POU was last observed in 1998 on a tributary to American Canyon Creek; the population consisted of two adult frogs and approximately 20 larvae. Other small populations (1-3 adults) have been recorded west of I-80 and north of Highway 29 in 2003, in two locations near the I-80 corridor near McGary Road in 2000, east of I-80 near Page Flat in 1998, and south of Cordelia on Old Paseo Creek in 1998<sup>5</sup>.

The existing reservoir may provide suitable breeding habitat for California red-legged frogs. The reservoir appears to hold water for sufficient duration to allow successful egg-laying and larval metamorphosis. The aquatic vegetation in the reservoir may provide a suitable substrate for egg attachment and sufficient cover for tadpole development. Other aquatic habitat in the project vicinity, such as Fagan Creek and tributaries to the north of the POU, and other stockponds and reservoirs, may also provide suitable breeding habitat for red-legged frogs in the region.

The POU is within the Fagan Creek-Jameson Canyon-Lower Napa River core area designated for recovery actions in the USFWS Recovery Plan for California red-legged frogs. Core areas, which are distributed throughout portions of the historic and current range, represent a system of areas that, when protected and managed for California red-legged frogs, will allow for long-term viability of existing populations and reestablishment of populations within the historic range. Recovery actions specific to the Fagan Creek-Jameson Canyon-Lower Napa River core area include protecting existing populations for current and future urbanization, creating and managing alternative breeding habitats, and protecting dispersal corridors<sup>7</sup>.

Critical habitat for California red-legged frog was re-designated by USFWS on April 13, 2006. The new final designation does not include the POU.

### **Special-Status Fish Species**

One special-status anadromous fish species is known to occur in Napa River downstream of the project area. The Central California Coast steelhead has been federally listed by NMFS as threatened under ESA (62 FR 43938, August 18, 1997). Designated critical habitat for steelhead includes selected drainages of San Francisco and San Pablo Bays (70 FR 5248, September 2, 2005). This species is not listed as threatened or endangered under CESA.

The unnamed stream at the project site is tributary to North Slough thence Napa River thence San Pablo Bay. The unnamed stream on the project site does not have suitable habitat to attract steelhead, or to provide suitable spawning or rearing habitat for this species.<sup>7</sup> Consequently, there is no steelhead production from the project site. The unnamed stream may benefit sensitive-status species downstream, however, by providing a contribution of winter and spring flows to North Slough and Napa River. Downstream of the project site, North Slough flows into Napa River near its mouth at San Pablo Bay. The overall benefit of contributing winter and spring flows is likely negligible as this section of Napa River is relatively large and heavily influenced by tidal fluctuations. Freshwater flows from the unnamed stream to North Slough and Napa River may, however, be important in the maintenance of ecological processes and thus, could contribute to habitat value for anadromous salmonids downstream. Cumulative contributions of ecologically important inputs such as woody debris, detritus, dissolved organic matter, sediment, minerals, aquatic macroinvertebrates, and influx of freshwater could all be important to maintaining habitat for fish species in North Slough and/or Napa River.

Anadromous fish spend their adult lives in the ocean and return to freshwater to spawn. Steelhead adults migrate through the Napa River to upstream spawning habitat in the late fall and winter. Juvenile steelhead typically rear 1-3 years in freshwater. Consequently, juvenile steelhead may be in Napa River year-round. The greatest limiting factor to steelhead production in Napa River and similar streams is the summer low-flow period. During low flows, available habitat can be substantially reduced, predation rates high, competition for food increased, thermal stress increased resulting from higher water temperatures, habitat connectivity lost, and the number of steelhead ultimately becoming adults determined. While limiting factors vary, low summer and fall streamflow is a substantial limiting factor for steelhead in the Napa River basin within Napa County.<sup>8</sup>

Recognizing the importance of instream flows to anadromous salmonid production; DFG and NMFS distributed guidelines for maintaining instream flows to protect fisheries resources downstream of water diversions in mid-California coastal streams.<sup>9</sup> These guidelines provided bypass flow recommendations and measures for protecting natural hydrographs. The appropriate bypass is developed on a case-by-case basis. For projects located in the "coastal" watershed in the counties of Sonoma, Napa, Mendocino, and Marin, NMFS, DFG, and the Division have recommended that, in most cases, a bypass that is equal to the February median flow be used where needed to protect fish habitat.

Subsequent analysis and discussions by the Division, DFG, and NMFS resulted in an alternative approach for conserving natural hydrographs and assessing cumulative impacts of multiple water projects. This method involves computation of a Cumulative Flow Impairment Index (CFII), an index that is used to evaluate the cumulative flow impairment demand of all existing and pending projects in a watershed of interest. DFG and NMFS have provided updated guidance for calculating and applying the CFII.<sup>10</sup> DFG and NMFS provide key guidelines for ensuring that anadromous salmonids will not be adversely impacted by water diversions:<sup>11</sup>

- Limit new water right permits to diversions during the winter period (December 15 – March 31);
- Provide bypass flow regimes that would not be less than the estimated unimpaired February median flow at the point(s) of diversion;
- Protect the natural hydrograph and avoid cumulative impacts by disallowing diversions if the CFII exceeds 10% (unless compelling site-specific biological and hydrologic

information indicates that additional water can be diverted without adversely impacting anadromous salmonids) or demonstrating that the project will not cause or exacerbate significant adverse cumulative effects to migration and spawning flows for salmonids if the CFII is between 5 and 10%;

- Screen water diversions using NMFS or DFG screening criteria and provide fish passage facilities where appropriate;
- Construct storage ponds off-stream rather than on-stream, except for limited circumstances; and
- Ensure mechanisms for assuring bypass flows will be maintained and permitted rates of diversion will not be exceeded.

For the proposed project, the Division required the applicant to complete a Water Availability Analysis (WAA). The Division utilized the results of the WAA to determine the impact of the proposed project on streamflow to evaluate the potential impacts to fisheries resources using the guidelines developed by DFG and NMFS<sup>12</sup>. Before the WAA could be prepared, Points of Interest (POIs) had to be selected to determine locations where potential cumulative impacts to aquatic resources might occur. A memorandum dated August 11, 2000 by DFG fisheries biologist John Emig, determined that no Steelhead trout or their habitat are found in North Slough. In two separate letters sent out in March of 2003, Division staff asked DFG and NMFS to confirm that there was no need to calculate CFIs for any POIs associated with Application 30740 because of the finding that Steelhead trout and their habitat did not exist at North Slough. According to the May 1, 2002 memorandum from DFG regional manager Robert Floerke, DFG and NMFS representatives delineated a single POI for Application 30740, at the mouth of North Slough.

A WAA dated June 12, 2003 and revised November 3, 2005, was completed for the proposed project and has been accepted by Division staff. The WAA calculated the CFII at one project-related POI, POI #1 (Mouth of North Slough), to be 3.7%. Thus, cumulative hydrologic impacts to anadromous fish from the project are considered to be less-than-significant; with a CFII less than 5%, there is little chance of significant cumulative impacts to anadromous fish due to diversions (California Department of Fish and Game and National Marine Fisheries Service 2002).

### **Onstream Reservoir Evaluation**

The Draft Guidelines indicate that new storage ponds should be constructed offstream and permitting of new or existing onstream storage ponds should be avoided. In this case the Applicants have constructed one onstream pond for which they now seek approval. The Draft Guidelines state that onstream reservoirs may remain onstream if all of the following conditions are met:

1. The diversion is at a point in a stream where fishes or non-fish aquatic species were not historically present upstream (i.e., a Class III drainage);
2. The project could not contribute to a cumulative reduction of more than 10 percent of the natural instantaneous flow in any reach where fish are at least seasonally present (i.e., a Class I drainage); and
3. The project would not cause the dewatering of any fishless stream reach supporting non-fish aquatic species (i.e., a Class II drainage).

A site-specific evaluation was performed to determine whether the diversion meets the three conditions described above.

#### Condition No. 1

During the site visit conducted on June 29, 2006 and during previous biological surveys conducted by EDAW and Kjeldsens Biologists, the ephemeral stream where the onstream reservoir is located was observed. EDAW biologists made the determination that the reservoir was located on a class III drainage, meaning there is no aquatic life present. It is also unlikely that non-fish aquatic species have ever historically been present in the stream at the location of the reservoir. Representatives from the DFG and the Division that were present at the June 29, 2006 site visit concurred with the class III determination. The reservoir is on a class III drainage and therefore the project meets condition 1.

#### Condition No. 2

Calculations to determine the natural instantaneous flow at the affected stream reach where fish are at least seasonally present have not been conducted. In correspondence with DFG (Emig, 2000), it was determined that the point at which anadromous fish are at least seasonally present (point of anadromy) downstream of the diversion was at the confluence of North Slough with the Napa River. The Napa River at the location of the confluence with North Slough is located in an estuarine zone, which is tidally influenced. Since tidal flows mix with the freshwater runoff from the Napa River and its tributaries, calculation of the cumulative instantaneous impairment at this location is of limited value. The CFII at the mouth of North Slough is 3.7%, which indicates relatively unimpaired conditions in Napa River downstream from the influence of the proposed project. Condition 2 should not be applied to this project given the site-specific conditions that exist at the point of anadromy (i.e., tidal influence combined with CFII value of less than 5%)

#### Condition No. 3

Downstream of the reservoir, the unnamed ephemeral stream supports a riparian/woodland corridor where it merges with another unnamed stream on the property. Although surveys did not find aquatic life in the stream reach within the riparian/woodland corridor, habitat for aquatic life may exist, which could conservatively make it a class II watercourse in this reach. The stream reaches beyond the property were not surveyed, so it may be possible that these reaches may also be considered class II. The stream reaches downstream of the diversion will not be dewatered because the project includes a passive bypass system designed to ensure that the February median flow (0.11 cfs) at the POD is bypassed during the diversion season (December 15 – March 31) and the entire stream flow is bypassed outside the diversion season (April 1-December 14). Therefore with implementation of the passive bypass system, the project meets condition 3.

Due to the site specific conditions described above, the onstream reservoir should be allowed to remain onstream.

### **Impact Discussion**

#### **a) Sensitive, candidate, or special-status species:**

### Special-Status Plant Species

Direct impacts to Suisun marsh aster would be less-than-significant because the population is located in an area that will not be affected by any project-related ground-disturbing activities. No indirect impacts are expected to occur from continued water diversion because the aster is growing on the top of bank in an upland area.

### Special-Status Wildlife Species

Securing the appropriative rights to stream flows on the unnamed tributary of North Slough could result in potentially significant impacts to California red-legged frog and northwestern pond turtle. Although the ephemeral stream may not have provided suitable habitat for these species previously because it may not have held ponded water for sufficient duration, the construction of the reservoir created marginally suitable habitat for these species. The area around the reservoir is primarily herbaceous weedy vegetation, bordered by vineyards. The vineyards are approximately 50-100 feet from the reservoir edge on the north side and approximately 100-300 feet on the south side. Red-legged frogs frequently use upland habitats adjacent to breeding habitats for estivation and dispersal. According to the USFWS (2006)<sup>13</sup>, estivation habitat for California red-legged frog includes any landscape features that provide cover and moisture during the dry season within 200 feet of a riparian area. This could include boulders or rocks and organic debris such as downed trees or logs; industrial debris; and agricultural features, such as drains, watering troughs, spring boxes, abandoned sheds, or hay-ricks<sup>7,9</sup>. Recent research has found typical movement of California red-legged frogs to be only 9 to 16 feet from the waters edge, with a maximum distance of 48 feet<sup>14</sup>.

It is not certain whether red-legged frogs use the reservoir because focused surveys have not been conducted. However, the reservoir provides potentially suitable habitat and any operations-related activity which could lead to take of red-legged frogs would be considered a potentially significant impact. Take is defined under ESA, in part, as killing, harming, or harassing a listed species. Under federal regulations, take is further defined to include habitat modification or degradation where it actually results in death or injury to a listed wildlife species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Water diversions for irrigation could result in the stranding of adult red-legged frogs or western pond turtle if they were to be present. In addition, water diversions could desiccate red-legged frog egg masses or tadpoles if California red-legged frog were to breed in the reservoir. No dredging or expansion of the existing reservoir would be required. To ensure that no take of red-legged frogs would occur, several permit terms are required that would reduce these potential impacts to a less-than-significant level.

The development of 8 additional acres of vineyard would not require any trees to be removed and would not result in the destruction of any existing or future raptor nests, including nests of white-tailed kites. In addition, permit terms below serve to protect the existing riparian woodland and provide a stream buffer to allow the propagation of riparian vegetation. Impacts to white-tailed kite are considered less-than-significant because permit terms will protect habitat and loss of individuals is not likely to occur from the proposed project.

### Special-Status Fish Species

Although natural flows on the unnamed tributary on Sutter Home Winery property would be modified with the proposed application, no special-status aquatic species, including anadromous fish, exist in the tributary. The small size of the Class III tributary (i.e., no aquatic life present, capable of sediment transport) and associated limited quality habitat precludes past, present, or

future steelhead production on Sutter Home Winery property. Consequently, the requested diversion of water from the tributary would have no effect on past, existing, or potentially future steelhead populations on the Sutter Home Winery property.

The proposed project requests diversions from December 15 to March 31, which is within the acceptable diversion window specified by DFG and NMFS. The CFII at POI#1 at the mouth of North Slough is 3.7%. This value is below the DFG/NMFS threshold of 5%. When a minimum bypass flow of the February median flow (0.11 cfs) is maintained at the POD, this CFII would not represent a potentially "substantial adverse effect" on steelhead. Therefore, the cumulative flow-related impacts to North Slough are considered to be less-than-significant and diversions associated with the proposed project would not have significant effects on steelhead downstream of the project site.

Future diversion of water under riparian right in combination with diversion of water under a permit issued pursuant Application 30740 could result in streamflow impairments beyond those identified in the WAA report, which in turn could lead to potentially significant impacts to fisheries or other aquatic life. To insure that future diversion under claim of riparian right does not result in potential impacts to aquatic resources a permit term will be added to limit riparian diversion. Permit terms will also be added to insure that water is diverted in compliance with the authorized season and diversion volume.

The permit terms provided below shall apply to any permit or license issued pursuant to Application 30740 for the purpose of guaranteeing the required bypass flows to the area downstream of the diversion structure when such flows are available to be bypassed. The specified flows are the February median flows determined at the POD. Implementation of the permit conditions below, in conjunction with other permit conditions herein, will insure that all impacts to fisheries resources are less-than-significant.

**b) Riparian habitat or other sensitive natural community:** Riparian vegetation provides important habitat for many wildlife and plant species. The riparian woodland provides potential nesting habitat for the white tailed kite. Riparian vegetation also provides ecosystem functions and water quality benefits including shade and cover, inputs of large woody debris, minimization of erosion potential, filtration of sediment, nutrients, and pesticides, and maintenance of channel form and complexity. The previous construction of the unauthorized onstream reservoir could have resulted in adverse effects to habitat under the jurisdiction of DFG (i.e., riparian habitat and bed and banks of a stream); however, the reservoir was constructed prior to the permit application and is therefore considered to be part of the CEQA baseline. Existing buffer widths (width between vineyards and stream bank) along the unnamed stream vary between approximately 30 and 60 feet. Riparian vegetation varies with tree and shrub species in some areas and herbaceous weedy grass species in others. Generally, the trees and shrubs are located along the upstream portion of the unnamed stream to approximately 200 feet downstream of the confluence of the unnamed stream and the spillway channel. With the exception of the area immediately adjacent to the channel, grasses were mowed and some evidence of unintended herbicide spraying (resulting in mostly bare ground) was present. Operational requirements within the stream setback area include mowing of grasses once annually to reduce fire hazards and equipment access and turnarounds for mechanical harvesting.

To protect the existing riparian vegetation and to promote the natural regeneration of riparian vegetation in the future, ground-disturbing activity restrictions (i.e., stream setback buffers) and minimum instream flow requirements would be required. While there is a tremendous amount of valuable information derived from scientific research studies regarding determining the effective

widths of stream buffers, there is a wide range of buffer widths that have been identified to achieve specific ecosystem functions. The wide variability in guidance can be attributed to the protection of different functions, as well as, local site conditions such as soil type, topography, and precipitation, and the size of the active channel. Even with complete knowledge of a given site, criteria for determining the appropriate widths are not well established (Fischer et al. 2000).<sup>15</sup> Ultimately, it is important to rely on professional judgment along with relevant guidance in making the final determination.

Ligon et al. (1999)<sup>16</sup> (prepared for DFG and NMFS) provided buffer guidance based on protecting salmonid habitat by stream classification (stream classes reflect California Department of Forestry classification). Protection of salmonid habitat is dependent on a suite of ecological functions (e.g., sediment and nutrient filtration, water temperature moderation through shade and cover, maintenance of geomorphic processes, channel and physical habitat complexity, forage production) in combination with the protection of appropriate instream flows. Of these factors, stream setbacks and the potential resulting buffer functions are an appropriate means to address all but the instream flow component (addressed separately through water availability analyses [i.e., cumulative flow impairment index, see below]). Thus, salmonid habitat protection (and associated ecological functions) can be partially realized through buffers. In summary, the basic recommendations are as follows: 150-foot setback for Class I streams; 100-foot setback for Class II streams; and 30- to 50-foot setback for Class III streams. The unnamed tributary is considered a Class III stream (see fisheries discussion below); therefore, a setback buffer between approximately 30 and 50 feet would be consistent with this guidance.

The Sonoma County Water Agency flood control manual (1983)<sup>17</sup> provides a formula to determine setback distance to maintain bank stability. The Sonoma County Water Agency uses the 2.5:1 plus 30 feet from toe of bank, but no less than 30 feet from top of bank as a building setback. Because the formula was developed for Sonoma County, which has coastal watersheds that have similar attributes (e.g., ephemeral tributary streams with similar vegetated basins) to watersheds in Napa County, the setback formula could theoretically be appropriately applied (with site-specific confirmation) to the proposed project.

Other resources that provide setback determination guidance and ecological justification for varying site specific attributes, conditions, functions, and values include NHI 2002;<sup>18</sup> Robbins 2002;<sup>19</sup> and Peterson et al. 1992.<sup>20</sup>

Observations of site-specific conditions made during a site visit with resource agency personnel (conducted on June 29, 2006) resulted in the development of a stream setback buffer that incorporates relevant guidance provided by scientific literature along with professional judgment made in the field. The resulting setback buffer incorporated a varying width that is designed to protect all existing riparian vegetation, provide vegetated filter strips, and to promote and encourage the recruitment of native riparian shrub and tree species. Mitigation incorporated below under permit terms that addresses stream setback buffers would reduce potential impacts to riparian habitat to a less-than-significant level. Additionally, the minimum bypass flow permit term (see below) for the protection of potential downstream special-status fish would also protect existing riparian vegetation and promote the natural regeneration of riparian vegetation in the future.

**c) Wetlands:** In addition, the onstream reservoir may have significantly affected jurisdictional Waters of the United States. Mitigation incorporated below under permit terms would reduce these impacts to a less-than-significant level.

**d) Fish and wildlife movement, wildlife corridors, or wildlife nursery sites:** A wildlife corridor is generally a topographical/landscape feature or movement area that connects two areas of natural habitat. The POU is mostly developed vineyard. Although the small riparian corridor along the unnamed tributary could be used for wildlife movement, it would not be disturbed by securing water rights or expansion of 8 acres of vineyards. Because the drainage is small and ephemeral, anadromous salmonids are highly unlikely to ascend this stream to the POD; therefore, it does not likely provide an important fish movement corridor. Because there are no fish occurring at the POD in the unnamed stream, and no potential for fish to occur at the POD in the future, no fish screens or fish passage facilities are required. No known wildlife nursery sites are known in the POU. Therefore, this impact is considered less than significant.

**e) Local policies or ordinances:** The permit does not conflict with any local policies or ordinances protecting biological resources. Therefore, no impact would occur.

**f) Adopted habitat conservation plan, natural community conservation plan, or other conservation plan:** The POU is not within any area subject to an adopted habitat conservation plan, natural community conservation plan, or other approval local, regional, or state habitat conservation plan. Therefore, the project would not conflict with any plans and no impact would occur.

#### **Permit Terms**

Permit terms, substantially as follows, shall apply to any permit or license issued pursuant to Application 30740:

- < *Before storing water in the reservoir, Permittee shall install a staff gage in the reservoir, satisfactory to the Chief of the Division of Water Rights, for the purpose of determining water levels in the reservoir. This staff gage must be maintained in operating condition as long as water is being diverted or used under this permit.*

*Permittee shall record the staff gage readings on the last day of each month and on December 15 annually. Permittee shall record the maximum and minimum water surface elevations and the dates that these water levels occur each water-year between October 1 and September 30. Permittee shall maintain a record of all staff gage readings and shall submit these records with annual progress reports, and whenever requested by the Division.*

- < *The State Water Board may require the release of water that cannot be verified as having been collected under a valid basis of right.*
- < *Prior to diversion or use of water under this permit, Permittee shall install an in-line flow meter, satisfactory to the Chief of the Division of Water Rights that measures the instantaneous rate and the cumulative amount of water withdrawn from the Reservoir. This in-line flow meter must be maintained in operating condition as long as water is being diverted or used under this permit. Permittee shall maintain a record of the end-of-the-month meter readings and of the days of actual diversion, and shall submit these records with annual progress reports, and whenever requested by the Division.*
- < *The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed 26 acre-feet per annum to be collected from December 15 of each year to March 31 of the succeeding year.*

- < *The total capacity of the reservoir authorized by this permit shall not exceed 26 acre-feet.*
- < *For the protection of potential habitat for California red-legged frog (*Rana aurora draytonii*) and the Northwestern pond turtle (*Emys marmorata marmorata*) and to allow for the continued growth of riparian vegetation, the Permittee shall:*
  - a) *Maintain a 50-foot-wide setback around the reservoir as shown on Setback Map No. SB-01 dated March 27, 2007 on file with the Division of Water Rights. No new ground disturbing activities shall occur within the setback area, with the exception of occasional equipment access necessary for continued operation of the reservoir. Equipment access within the setback area shall be limited to only activities necessary for the ongoing operation of the reservoir and shall incorporate best management practices to minimize disturbance to water, soils, and vegetation. Natural vegetation shall be preserved and protected within the setback area. Planting of native riparian vegetation within the setback area is allowed.*
  - b) *Obtain approval of the United States Fish and Wildlife Service (USFWS), Sacramento Endangered Species Office, and the California Department of Fish and Game (DFG) prior to any future reservoir dredging operations. Permittee shall submit to the Chief of the Division of Water Rights evidence of agencies approval prior to any future reservoir dredging operations;*
  - c) *Refrain from disturbing emergent (wetland) vegetation in the reservoir during dredging operation;*
  - d) *Not introduce nonnative fish or amphibian species into the reservoir; and*
  - e) *Consult with DFG and USFWS should any bullfrogs be discovered at or near the reservoir to develop and implement an acceptable bullfrog eradication program. The eradication program may require periodic draining of the reservoir.*
- < *For the protection of riparian habitat, Permittee shall establish a setback as shown on Setback Map No. SB-01 dated March 27, 2007 on file with the Division of Water Rights. The setback shall be at least 30 feet wide along unnamed stream 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. Additionally, annual mowing of grasses to reduce fire hazard will be allowed in a 20-foot wide area adjacent to vineyards, provided that rooted vegetative cover is maintained year-round in mowed areas. Planting 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.*
- < *Based on the information contained in the Division's files, riparian water has not been used on the place of use. Diversion of water is not authorized under this permit if in the future the Permittee diverts water under riparian right. With the Chief of the Division's approval, Permittee may use water under basis of riparian right on the authorized place of use,*

*provided that Permittee submits reliable evidence to the Chief of the Division quantifying the amount of water that Permittee likely would have used under the basis of riparian right absent the appropriation authorized by this permit. The Chief of the Division is hereby authorized to approve or reject any proposal by Permittee to use water under the basis of riparian right on the place of use authorized by this permit.*

- < For the protection of fish and wildlife, under all bases of right, Permittee shall during the period from December 15 through March 31 bypass a minimum of 0.11 cubic feet per second (cfs). Under all bases of right Permittee shall bypass the total streamflow from April 1 through December 14. The total streamflow shall be bypassed whenever it is less than 0.11 cfs.*
- < Prior to diversion or use of water under this permit, the Permittee shall submit a revised Compliance Plan for approval by the Chief of the Division of Water Rights that will demonstrate compliance with the flow bypass terms specified in this permit. The Compliance Plan shall include the following:*
  - a) A description of the physical facilities (i.e., outlet pipes, siphons, pipelines, bypass ditches, splitter boxes etc.) that will be constructed or have been constructed at the project site and will be used to bypass flow.*
  - b) A description of the gages and monitoring devices that will be installed or have been installed to measure stream flow and/or reservoir storage capacity, including any necessary calibration.*
  - c) A time schedule for the installation and rating of these facilities.*
  - d) A description of the frequency of data collection and the methods for recording bypass flows and storage levels.*
  - e) An operation and maintenance plan that will be used to maintain all facilities in good condition.*
  - f) A description of the events that will trigger recalibration of the monitoring devices, and the process that will be used to recalibrate.*

*The Permittee shall be responsible for all costs associated with developing the Compliance Plan, and installing and maintaining all flow bypass and monitoring facilities described in the Compliance Plan.*

*The monitoring data shall be maintained by the Permittee and made available to the Chief of the Division of Water Rights, upon request.*

*Diversion or use of water prior to approval of the Compliance Plan and the installation of facilities specified in the Compliance Plan is not authorized.*

- < Any non-compliance with the terms of the permit shall be reported by the Permittee to the Chief of the Division of Water Rights within 3 days of identification of the violation.*
- < No water shall be diverted or used under this permit until Permittee has installed devices, satisfactory to the Chief of the Division of Water Rights, which are capable of measuring the bypass flows required by the conditions of this permit.*

*Said measuring devices shall be properly maintained in operating condition as long as water is being diverted or used under this permit.*

- < Permittee shall install and maintain an outlet pipe of adequate capacity in the dam as near as practicable to the bottom of the natural stream channel, or provide other means satisfactory to the State Water Resources Control Board, in order that water entering the reservoir, which is not authorized for appropriation under this permit, can be released. Before storing water in the reservoir, Permittee shall furnish to the Division of Water Rights, evidence which substantiates that the outlet pipe, or alternative facility, has been installed in the dam. Evidence shall include photographs showing completed works or certification by a registered Civil or Agricultural Engineer.*

|  | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
|--|--------------------------------|--|------------------------------|-----------|

**5. AGRICULTURAL RESOURCES:**

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland.

Would the project:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Under the proposed project, existing agricultural land would continue to be used for agricultural purposes. Grazing land would be converted into 8 acres of vineyard. Therefore, no adverse impacts on agricultural resources would occur as a result of the proposed project.

|   | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact        | No Impact                           |
|---|--------------------------------|--|-------------------------------------|-------------------------------------|
| <b>6. NOISE.</b> 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 type="checkbox"/>            | <input checked="" 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 or working in the project area to excessive noise levels? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

The Napa County Airport is located approximately 1.5 miles west of the site. The short-term duration of vineyard development at the site and long-term farming activities of the vineyard would not pose a significant risk of exposure to excessive noise levels.

Activities associated with vineyard development would generate temporary, short-term increases in noise levels at the project site for the duration of the construction period. However, there are no noise-sensitive receptors or sensitive land uses within one-half mile of the project site. Therefore, the temporary, short-term increase in ambient noise levels in the vicinity of the project site would be less-than-significant.

|  | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact                           |
|--|--------------------------------|--|------------------------------|-------------------------------------|
| <b>7. LAND USE AND PLANNING.</b> Would the project:  |                                |  |                              |                                     |
| a) Physically divide 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 site is zoned as Agricultural Watershed, Airport Compatible and designated in the Napa County General Plan as Open Space, Watershed and is approximately 1.5 miles from the Napa County Airport. The proposed project does not change the general land use in the area (agricultural) nor does it conflict with any land use plan or policies.

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

The small amount of earth-moving activity necessary for the proposed project would have no direct or indirect effect on known mineral resources or any delineated mineral resource recovery sites.

|  | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact        | No Impact                           |
|--|--------------------------------|--|-------------------------------------|-------------------------------------|
| <b>9. HAZARDS AND HAZARDOUS MATERIALS.</b>   |                                |  |                                     |                                     |
| 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 type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and, as a result, would it create a significant hazard to the public or the environment?                                  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard 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   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

areas or where residences are  
intermixed with wildlands?

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Temporary construction activities associated with the vineyard expansion would involve the use of some heavy equipment, which uses small amounts of hazardous materials such as oils, fuels, and other potentially flammable substances that are typically associated with construction activities. A minor potential exists for the spill of these substances onsite during construction.

To minimize the potential for spill of hazardous substances associated with construction activities, a special permit term, substantially as follows, shall be included in any permit or license issued pursuant to Application 30740:

**Permit Terms**

- < *Permittee shall prevent any debris, soil, silt, cement that has not set, oil, or other such foreign substance from entering into or being placed where it may be washed by rainfall runoff into the waters of the State.*

|   | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact                           |
|---|--------------------------------|--|------------------------------|-------------------------------------|
| <b>10. POPULATION AND HOUSING.</b> Would the project:   |                                |  |                              |                                     |
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| b) Displace substantial numbers of existing 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"/> |

No impacts on population growth or increased housing would occur as a result of the proposed project.

|   | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact        | No Impact                           |
|---|--------------------------------|--|-------------------------------------|-------------------------------------|
| <b>11. TRANSPORTATION/TRAFFIC.</b> Would the project:   |                                |  |                                     |                                     |
| a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" 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 type="checkbox"/>            | <input checked="" 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 type="checkbox"/>            | <input checked="" type="checkbox"/> |
| e) Result in inadequate emergency access?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f) Result in inadequate parking capacity?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

The proposed project would not require any change in transportation systems. During development of the vineyards, a temporary and minor increase in traffic volumes could occur on South Kelly Road, on Napa Valley Highway, or on other minor roads, but this increase would be less-than-significant. The temporary and minor increase in truck traffic that may result while the vineyard is being developed would not require any changes or upgrades to the local road system.

|  | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact                           |
|--|--------------------------------|--|------------------------------|-------------------------------------|
| <b>12. PUBLIC SERVICES.</b>  |                                |  |                              |                                     |
| a) 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 ratios, response times, or other performance objectives for any of the public services: |                                |  |                              |                                     |
| Fire protection?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| Police protection?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| Schools?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| Parks  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| Other public facilities?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |

The proposed project would not generate a need for new or physically altered governmental facilities, and thus no impacts on public services would be associated with the proposed project.

|  | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact                           |
|--|--------------------------------|--|------------------------------|-------------------------------------|
| <b>13. UTILITIES AND SERVICE SYSTEMS. Would the project:</b>   |                                |  |                              |                                     |
| 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 effects?                           | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| 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 effects?                                    | <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 type="checkbox"/>     | <input checked="" 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"/> |

The proposed project would not require any changes in local utility systems.

|  | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact        | No Impact                           |
|--|--------------------------------|--|-------------------------------------|-------------------------------------|
| <b>14. AESTHETICS.</b> Would the project:  |                                |  |                                     |                                     |
| a) Have a substantial adverse effect on a scenic vista?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input 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 checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?                                     | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

Existing, distant, and immediate views would not be substantially affected by development of the vineyard expansion, which is consistent with the existing visual character on and adjacent to the project site. Any views of construction vehicles at the project site would be temporary and would be partially obscured or concealed by the existing vineyard, shrubbery, and topography. The project would have a less-than-significant effect on the visual character of the area.

|   | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact                           |
|---|--------------------------------|--|------------------------------|-------------------------------------|
| <b>15. CULTURAL RESOURCES.</b> 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 pursuant to §15064.5? | <input type="checkbox"/>       |  | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?       | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| d) Disturb any human remains, including those interred outside of formal cemeteries?                          | <input type="checkbox"/>       | <input checked="" type="checkbox"/>                | <input type="checkbox"/>     |                                     |

A cultural resources survey conducted in November 2000<sup>21</sup> did not identify any prehistoric or historic cultural resources within the POU. However, two archaeologically sensitive areas are located within the POU and occur in the vicinity of proposed vineyard expansion. A structure that appears to have dated from the late 19<sup>th</sup> or early 20<sup>th</sup> centuries once existed in the south central portion of the property. The 2000 survey found no intact foundations or structure remains at this site. However, piles of metal pipes were located near the creek and several pieces of glass, a few pieces of ceramics, and an opaque white glass mason jar lid liner were observed in the area where the structures had been located. Consequently, there is a possibility that subsurface archaeological deposits could be located in this area. The other area of sensitivity was identified as along the banks of the stream in the southern portion of the POU. Such settings are well known throughout the region to contain traces of early Native American activities such as bedrock mortars, habitation sites, or lithic artifact scatters. This location is currently heavily overgrown and the ground surface is not visible and could contain artifacts or other indications of significant cultural deposits. Development of vineyard in the vicinity of these areas could be potentially significant. The impacts are less-than-significant with the mitigation proposed below.

#### Permit Terms

To avoid and/or mitigate potentially significant impacts to previously undiscovered cultural resources located in the areas of proposed vineyard expansion, a permit term, substantially as follows, shall be included in any permit or license issued pursuant to Application 30740:

- < *Should any buried archeological materials be uncovered during project activities, such activities shall cease within 100 feet of the find. Prehistoric archeological indicators can include, but not necessarily be limited to: stone tools and flaking debris; bedrock outcrops and boulders with mortar cups; ground stone implements (grinding slabs, mortars and pestles); and locally darkened midden soils containing artifactual material such as bone and shell fragments, stone tools, or fire-cracked rock. Historic period site indicators can include: fragments of glass, ceramic, and metal objects; milled and split lumber; structure and feature remains such as building foundations, privy pits, wells and dumps; and old trails.*

*The Chief of the Division of Water Rights 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 Chief of the Division of 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 Chief of the Division of 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 permit or license issued pursuant to Application 30740:

- < *If human remains are encountered, then the Permittee shall comply with Section 1564.5 (e) (1) of the CEQA Guidelines and the Public Resources Code Section 7050.5. All project-related ground disturbance within 100 feet of the find shall be halted until the 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 Chief of the Division of Water Rights.*

|  | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact                           |
|--|--------------------------------|--|------------------------------|-------------------------------------|
| <b>16. RECREATION.</b>   |                                |  |                              |                                     |
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?                         | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |

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

|   | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact        | No Impact                |
|---|--------------------------------|--|-------------------------------------|--------------------------|
| <b>17. MANDATORY FINDINGS OF SIGNIFICANCE.</b>  |                                |  |                                     |                          |
| 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 checked="" type="checkbox"/>                | <input 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"/> |

With the permit terms proposed by the Division of Water Rights and accepted by the Applicant, the proposed project would have less-than-significant impacts on the environment. Please refer to the earlier sections in this Initial Study for the full texts of the special water right permit terms that minimize potentially significant environmental impacts to less-than-significant levels.

**III. DETERMINATION**

On the basis of this initial evaluation

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

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

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

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

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

Prepared By:

*Phil Dunn*

*5-23-07*

Phil Dunn, EDAW Principal, Water Resources

Date

Reviewed By:

*Joe Bandel*

*5/23/07*

Joe Bandel, Environmental Scientist, Watershed Unit 1

Date

*Steven Herrera*

*5/29/07*

Steven Herrera, Chief, Water Rights Permitting Section

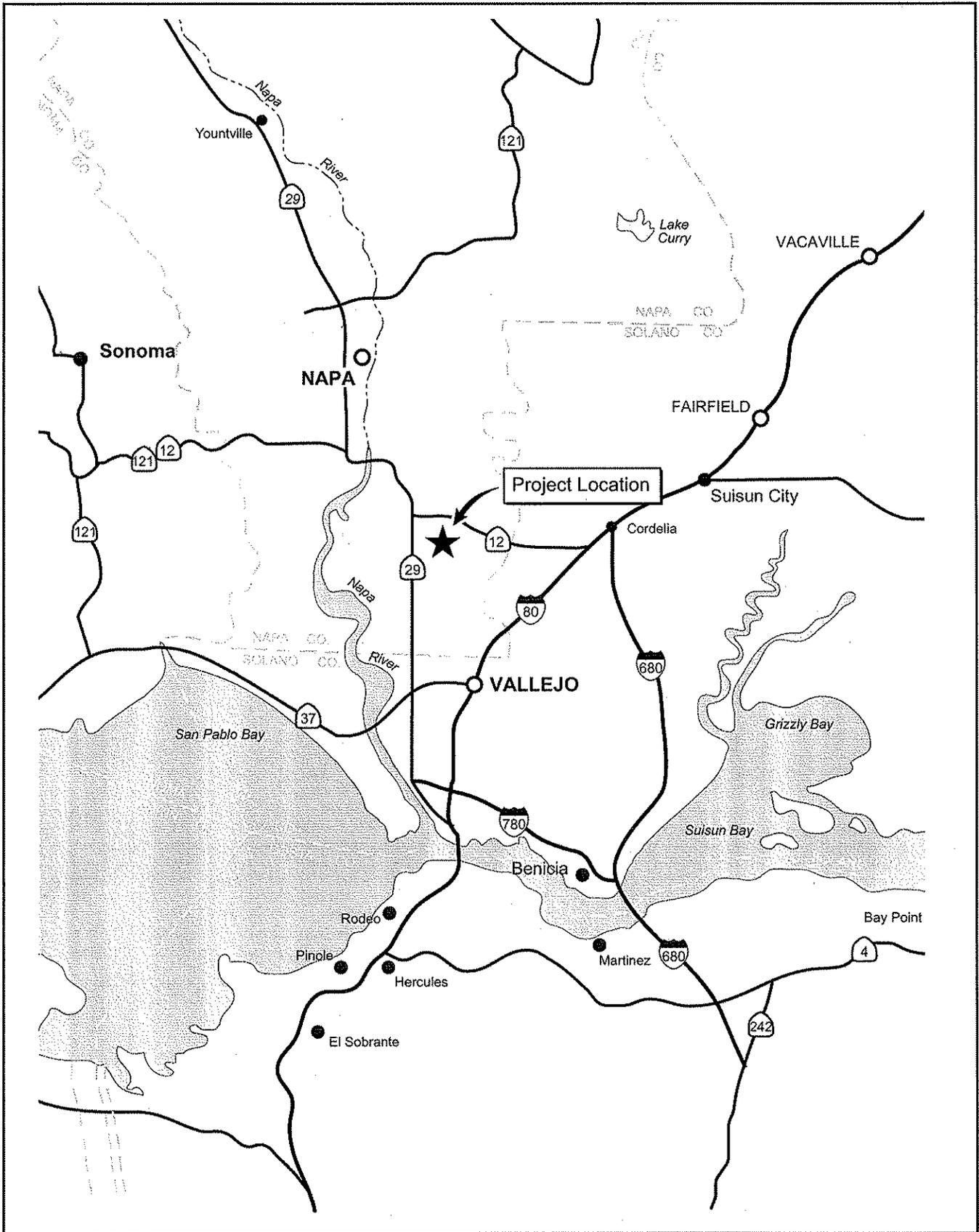
Date

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

#### IV. INFORMATION SOURCES

- <sup>1</sup> Huffsmith, Hal. Vice President Vineyard Operations, Trincherro Family Estates. Email to Kristen Stoner of EDAW on May 24, 2004.
- <sup>2</sup> California Department of Conservation, California Geological Survey. 2004. Index to Official Maps of Alquist-Priolo Earthquake Fault-Rupture Hazard Zones in California. Available online: <[http://www.consrv.ca.gov/cgs/rghm/ap/map\\_index/F4B.htm#5](http://www.consrv.ca.gov/cgs/rghm/ap/map_index/F4B.htm#5)>.
- <sup>3</sup> Jennings, C. W. 1994. Fault Activity Map of California and Adjacent Areas. California Division of Mines and Geology, Geologic Data Map No. 6.
- <sup>4</sup> California Natural Diversity Database (CNDDB). 2004. Rare Find, version 3.0.2, data expires October 4, 2004 and GIS layer (cnddb.shp), dated September 26, 2003. California Department of Fish and Game. Wildlife Habitat Data Analysis Branch. Sacramento, CA.
- <sup>5</sup> Kjeldsen Biological Consulting. 2001 (August 2). *Biological Resources Report. Sutter Home Winery. Water Right Application 30740, Napa County, California.* Santa Rosa, CA. Prepared for Tevis Armstrong, Water Rights Consultant.
- <sup>6</sup> U.S. Fish and Wildlife Service (USFWS). 2002, May 28. *Recovery Plan for the California Red-legged Frog (Rana aurora draytonii).* Portland, OR.
- <sup>7</sup> Emig, John. 2000 (August). Memorandum from John Emig (DFG) to Joan Jurancich (State Water Board) stating that the DFG has found that no steelhead trout or their habitat are found in North Slough, Napa County, CA.
- <sup>8</sup> San Francisco Bay Water Quality Control Board and California State Coastal Conservancy. 2002. Napa River Basin, Limiting Factor Analysis, Final Technical Report. Prepared by: Stillwater Sciences, Berkeley, CA and University of California, Berkeley, CA.
- <sup>9</sup> California Department of Fish and Game and National Marine Fisheries Service. 2000. Draft: May 22, 2000, *Guidelines for Maintaining Instream Flows to Protect Fisheries Resources Downstream of Water Diversions in Mid-California Coastal Streams.* Sacramento and Santa Rosa, CA.
- <sup>10</sup> California Department of Fish and Game and National Marine Fisheries Service. 2002. *Guidelines for Maintaining Instream Flows to Protect Fisheries Resources Downstream of Water Diversions in Mid-California Coastal Streams.* Sacramento and Santa Rosa, CA.
- <sup>11</sup> California Department of Fish and Game and National Marine Fisheries Service 2002, supra note 12.
- <sup>12</sup> California Department of Fish and Game and National Marine Fisheries Service. 2002. *Guidelines for Maintaining Instream Flows to Protect Fisheries Resources Downstream of Water Diversions in Mid-California Coastal Streams.* Sacramento and Santa Rosa, CA.
- <sup>13</sup> USFWS. 2006 (April 13). *Designation of Critical Habitat for the California Red-Legged-Frog.* Federal Register 71:19244-19346.

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- <sup>14</sup> USFWS. 2005 (November 3). *Revised Proposed Designation of Critical Habitat for the California Red-Legged Frog. Proposed Rule.* Federal Register 70: 66906-67064.
- <sup>15</sup> Fischer, R.A., C. O. Martin, and J.C. Fishenich. 2000. Improving riparian buffer strips and corridors for water quality and wildlife. Pp. 457-462 in P.J. Wigington and R.L. Beschta (eds.). *Riparian Ecology and Management in Multi-land Use Watersheds.* American Water Resources Association, Middleburg, VA, TPS-00-2.
- <sup>16</sup> Ligon, F., A. Rich, G. Rynearson, D. Thornburg, and W. Trush. 1999. Report of the Scientific Review Panel on California Forest Practice Rules and Salmonid Habitat. Prepared for the Resources Agency of California and National Marine Fisheries Service, Sacramento, CA.
- <sup>17</sup> Sonoma County Water Agency. 1983. Flood Control Design Criteria Manual for Waterways, Channels and Closed Conduits.
- <sup>18</sup> Natural Heritage Institute. 2002. *Corridor Width Report, Parcel Inventory, and Conceptual Stream Corridor Master Plan for Marsh, Sand, and Deer Creeks in Brentwood, CA.*
- <sup>19</sup> Robbins, J. 2002. Stream Setback Technical Memo. Prepared by Jim Robins for the Napa County Conservation, Development, and Planning Department.
- <sup>20</sup> Petersen, R.C., L.B.M. Petersen, and J. Lacoursiere. 1992. A building block model for stream restoration. Pp. 293-309. In: *River Conservation and Management.* P.J. Boon, P. Calow and G.E. Petts (eds). Chichester: John Wiley.
- <sup>21</sup> Archaeological Resource Service. 2000. *A Cultural Resources Evaluation of the Sutter Home / Gunn Project Vineyards, Napa Junction, Napa County, California.* Petaluma, CA.



Source: California State Automobile Association, Bay and Mountain Section 1999

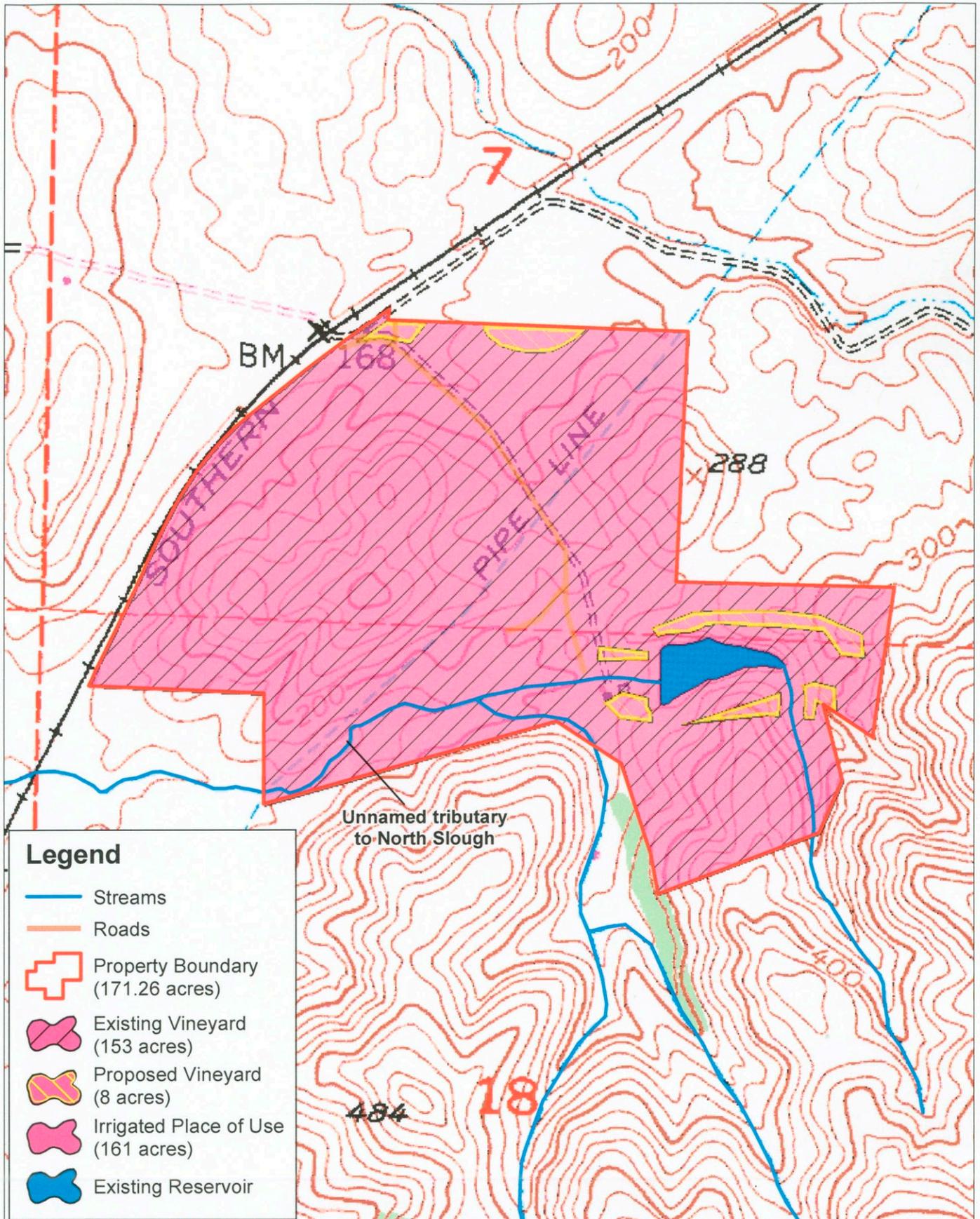
**Regional Location Map**

EXHIBIT 1

Sutter Home Winery Water Rights Initial Study

P 3T045.01 05/04



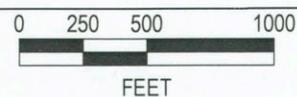


Source: USGS Cordelia Quad 1951 (revised 1980), USGS Cutting Wharf Quad 1949 (revised 1981), and Napa County 2004

## Project Site

Sutter Home Winery Water Rights Initial Study

X 3T045.01 8/04



EDAW

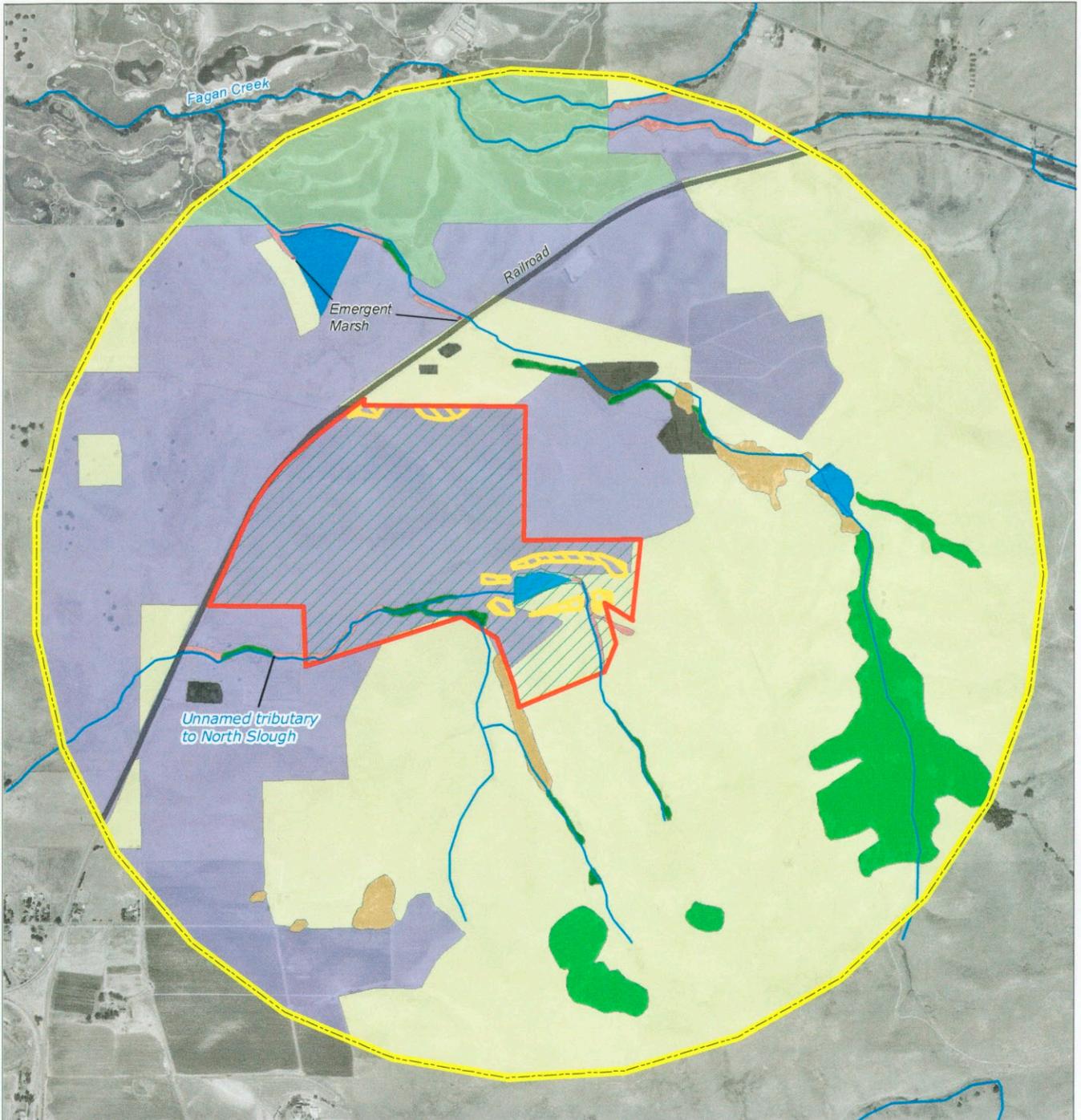


Source: Napa Valley Vineyard Engineering, June 2003

### Watershed Map

Sutter Home Winery Water Rights Initial Study  
P-31045.01.08.04





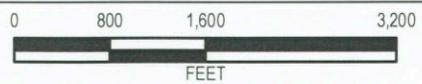
| LEGEND |                                |
|--------|--------------------------------|
|        | 1-Mile Radius of Project Site  |
|        | Irrigated Place of Use         |
|        | Proposed Vineyard              |
|        | Project Location               |
|        | Stream                         |
|        | Emergent Marsh                 |
|        | Herbaceous Riparian            |
|        | Oak Woodland                   |
|        | Mixed Riparian Woodland        |
|        | Annual Grassland               |
|        | Eucalyptus/Non-native Woodland |
|        | Golf Course                    |
|        | Developed                      |
|        | Vineyard                       |
|        | Existing Reservoir             |

Sources: EDAW 2003  
 Aerial: USGS 1993

### Land Cover

Sutter Home Winery Water Rights Initial Study

X 3T045.01 8/05



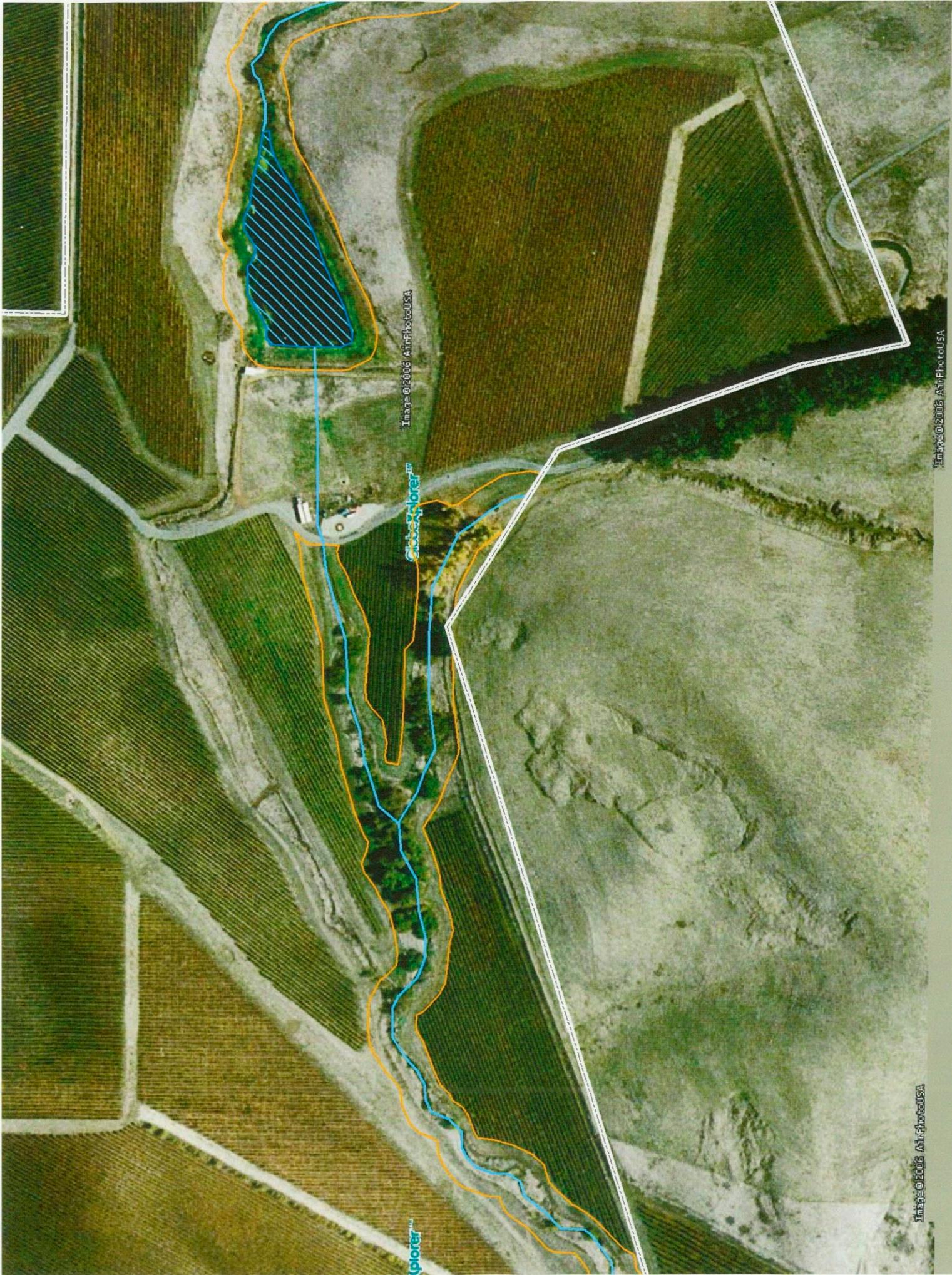


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