

# Appendix D

## Cultural Resources Study

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**A Cultural Resources Study for  
the King Ridge Dam Project  
at 31111 King Ridge Road, Cazadero  
Sonoma County, California**

Virginia Hagensieker, B.A.  
and  
Janine M. Origer, M.A./R.P.A.

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June 27, 2013



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the King Ridge Dam Project  
at 31111 King Ridge Road, Cazadero  
Sonoma County, California**

Prepared by:



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June 27, 2013

## **ABSTRACT**

Tom Origer & Associates conducted a cultural resources study for the King Ridge Dam Project, located at 31111 King Ridge Road, Cazadero, Sonoma County, California. The study was requested by Guadalupe Chavarria, in compliance with requirements of the County of Sonoma Permit and Resource Management Department. The study area consists of approximately two acres of land located five and a half miles northeast of Timber Cove. This project includes building a dam and associated pond.

This study included archival research at the Northwest Information Center, Sonoma State University (NWIC File No. 12-1568), examination of the library and files of Tom Origer & Associates, field inspection of the project location, and contact with the Native American community. Field survey of the study area found no cultural resources. Documentation pertaining to this study is on file at the offices of Tom Origer & Associates (File No. 13-056).

### **Synopsis**

Project: King Ridge Dam Project  
Location: 31111 King Ridge Road, Sonoma County, California  
Quadrangle: Fort Ross, California 7.5' series  
Study Type: Intensive survey  
Scope: ~2 acres  
Finds: None

## **Project Personnel**

Janine M. Origer provided project oversight. Ms. Loyd has 28 years experience working in Northern California cultural resources management. She has been with Tom Origer & Associates since 1991. She has worked on both prehistoric and historical archaeological sites, and has completed research and documentation of historical buildings. Ms. Loyd has a Bachelor of Arts in Anthropology from Sonoma State University. She holds a Master of Arts in Archaeology and Heritage from the University of Leicester. She has completed extensive continuing education in regulatory compliance, planning local surveys, and identifying historical resources. She is affiliated with the Society for California Archaeology (Secretary of the Executive Board 2004-2006), the International Association for Obsidian Studies, the Society for American Archaeology, the Society for Historical Archaeology, Society of Architectural Historians, Vernacular Architecture Forum, and the Register of Professional Archaeologists (#1066030).

Virginia Hagensieker prepared the report for this project. Ms. Hagensieker has been with Tom Origer & Associates since May 2010. She holds a Bachelor of Arts in Anthropology from Sonoma State University. She is working towards a Master of Arts in Cultural Resources Management at Sonoma State University. She is affiliated with the Society for California Archaeology.

Tom Origer participated in the field survey for this study. Mr. Origer obtained a Master of Arts degree in Anthropology from San Francisco State University in 1983, after obtaining a Bachelor of Arts degree in Anthropology at Sonoma State University in 1974. He has over thirty years of experience in cultural resources management throughout Northern California. His experience includes work that has been completed in compliance with local ordinances, CEQA, NEPA, and Section 106 (NHPA) requirements. Mr. Origer has been teaching archaeological analysis and field archaeology classes at Santa Rosa Junior College since 1979. He is affiliated with the Society for California Archaeology (Presidential duties from April 1998 to April 2001), the International Association for Obsidian Studies (charter member and President from 1990-1992), the Archaeological Institute of America (President of the North Coast Society from 1985 to 1987), the Society for American Archaeology, the Society for Historical Archaeology, and the Register of Professional Archaeologists.

Lauren Del Bondio participated in the field survey for this study. Ms. Del Bondio has been with Tom Origer & Associates since 2009. Ms. Del Bondio is pursuing a Bachelor of Arts degree in Anthropology at Sonoma State University and has been involved in Northern California archaeology for eight years. She is affiliated with the Society for California Archaeology, and the Western Obsidian Focus Group.

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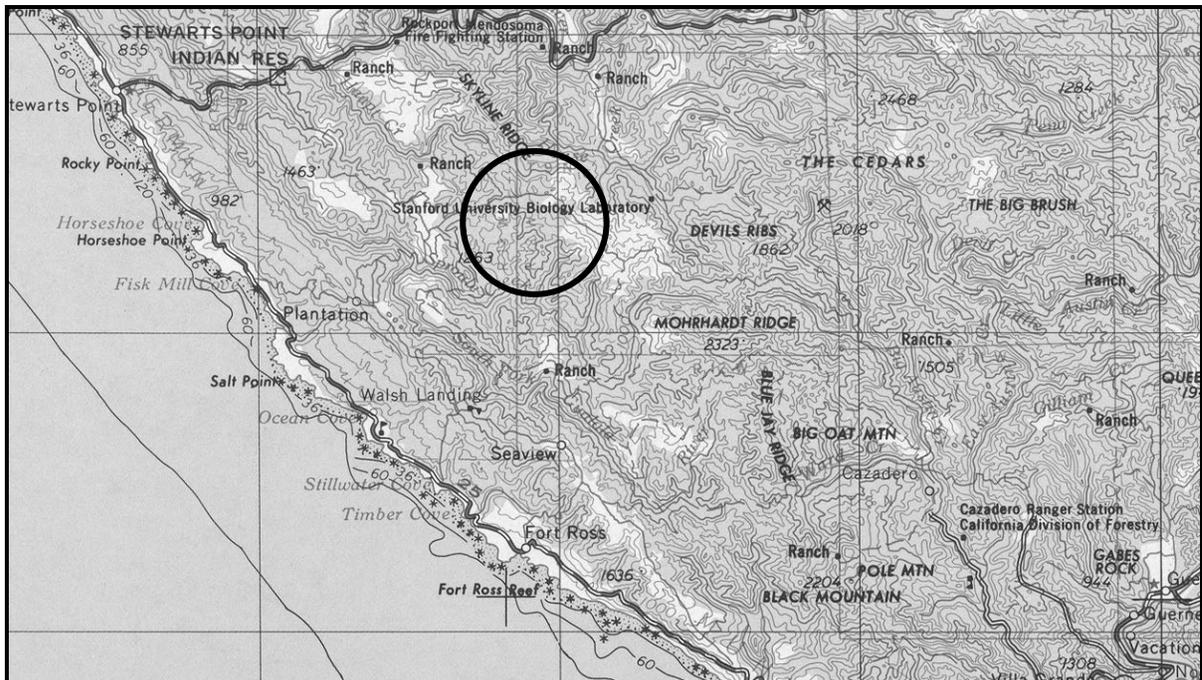
## INTRODUCTION

This report describes an archaeological survey for the King Ridge Dam Project, located at 31111 King Ridge Road, Cazadero, Sonoma County, California. The study area is located northeast of Timber Cove, in western Sonoma County (Figure 1). Project plans include a proposed dam and pond. This study was requested by Guadalupe Chavarria. Documentation pertaining to this study is on file at Tom Origer & Associates (File No. 13-056).

## REGULATORY CONTEXT

The California Environmental Quality Act (CEQA) requires that cultural resources be considered during the environmental review process. This is accomplished by an inventory of resources within a study area and by assessing the potential that cultural resources could be affected by development.

This cultural resources survey was designed to satisfy environmental issues specified in the CEQA and its guidelines (Title 14 CCR §15064.5) by: (1) identifying all cultural resources within the project area; (2) offering a preliminary significance evaluation of the identified cultural resources; (3) assessing resource vulnerability to effects that could arise from project activities; and (4) offering suggestions designed to protect resource integrity, as warranted.



**Figure 1. Project vicinity** (adapted from the 1970 Santa Rosa 1:250,000-scale USGS map).

## Resource Definitions

Cultural resources are classified by the State Office of Historic Preservation (OHP) as sites, buildings, structures, objects and districts, and each is described by OHP (1995) as follows.

**Site.** A site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value regardless of the value of any existing structure.

**Building.** A building, such as a house, barn, church, hotel, or similar construction, is created principally to shelter any form of human activity. "Building" may also be used to refer to a historically and functionally related unit, such as a courthouse and jail, or a house and barn.

**Structure.** The term "structure" is used to distinguish from buildings those functional constructions made usually for purposes other than creating human shelter.

**Object.** The term "object" is used to distinguish from buildings and structures those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed. Although it may be, by nature or design, movable, an object is associated with a specific setting or environment.

**District.** A district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.

## Significance Criteria

When a project might affect a cultural resource, the project proponent is required to conduct an assessment to determine whether the effect may be one that is significant. Consequently, it is necessary to determine the importance of resources that could be affected. The importance of a resource is measured in terms of criteria for inclusion on the California Register of Historical Resources (Title 14 CCR, §4852(a)) as listed below. A resource may be important if it meets any one of the criteria below, or if it is already listed on the California Register of Historical Resources or a local register of historical resources.

An important historical resource is one which:

1. Is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.

2. Is associated with the lives of persons important to local, California, or national history.
3. It embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of a master or possesses high artistic values.
4. It has yielded, or may be likely to yield, information important to the pre-history or history of the local area, California, or the nation.

In addition to meeting one or more of the above criteria, eligibility for the California Register requires that a resource retains sufficient integrity to convey a sense of its significance or importance. Seven elements are considered key in considering a property's integrity: location, design, setting, materials, workmanship, feeling, and association.

Additionally, the OHP advocates that all historical resources over 45 years old be recorded for inclusion in the OHP filing system (OHP 1995:2), although the use of professional judgment is urged in determining whether a resource warrants documentation.

## **PROJECT SETTING**

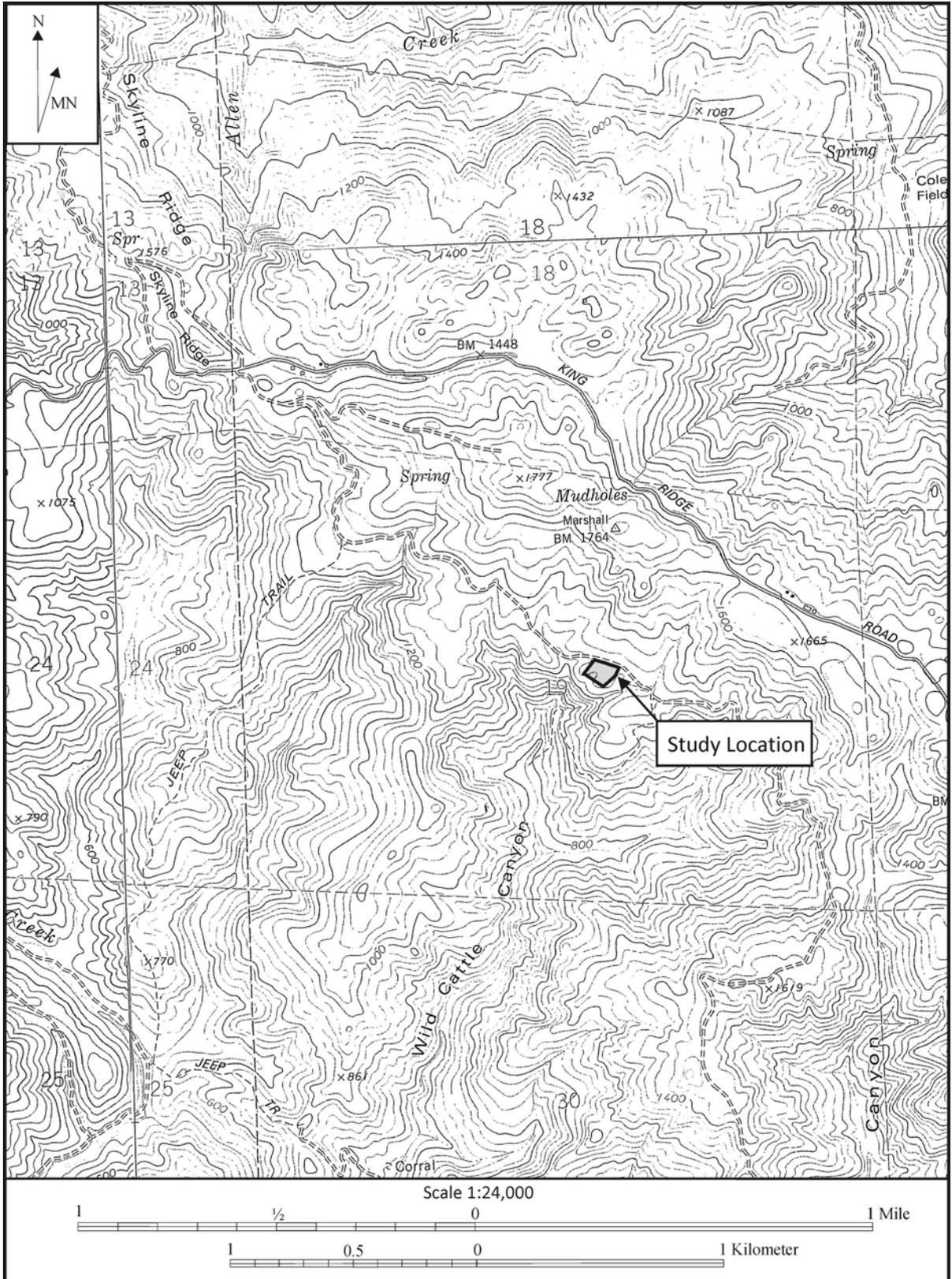
### **Study Area Location and Description**

The study area comprises approximately two acres of land for a proposed dam and pond, located approximately five and a half miles northeast of Timber Cove, as shown on the Fort Ross, California 7.5' USGS topographic map (Figure 2). At present, the study area is undeveloped.

The nearest fresh water source is an unnamed seasonal stream that flows through the property, about 500 feet southeast of the study area. There are also ephemeral creeks/drainages within 200 feet of the study area. The terrain in this area with gentle to moderate slopes.

The geology of the study area is undivided marine deposits of the Cretaceous, primarily including shales, siltstones, sandstones, conglomerates, and serpentines (Koenig 1963).

Soils within the study area are of the Laughlin-Yorkville complex (Miller 1972: Sheet 45). This complex is typically 70 % Laughlin and 30% Yorkville. These soils are moderate to well-draining loams with sandy clay loam or clay loam subsoils, and found on mountainous uplands. Laughlin-Yorkville soils typically support the growth of annual and perennial grasses, forbs and small shrubs or oakgrass and Manzanita. Historically, these soils were used for grazing (Miller 1972:57-58).



**Figure 2. Study location** (adapted from the Fort Ross 7.5' USGS topographic map)

## **Cultural Setting**

Archaeological evidence indicates that human occupation of California began at least 12,000 years ago (Fredrickson 1984:506). Early occupants appear to have had an economy based largely on hunting, with limited exchange, and social structures based on extended family units. Later, milling technology and an inferred acorn economy were introduced. This diversification of economy appears coeval with the development of sedentism, population growth, and expansion. Sociopolitical complexity and status distinctions based on wealth are also observable in the archaeological record, as evidenced by an increased range and distribution of trade goods (e.g., shell beads, obsidian tool stone), which are possible indicators of both status and increasingly complex exchange systems.

At the time of European settlement, the study area was situated within the linguistic territory of the Southwestern Pomo (Barrett 1908; McLendon and Oswalt 1978). The Southwestern Pomo, also known as the Kashia/Kashaya, were hunter-gatherers who lived in rich environments that allowed for dense populations with complex social structures (Barrett 1908; Kroeber 1925). They settled in large, permanent villages about which were distributed seasonal camps and task-specific sites. Primary village sites were occupied throughout the year and other sites were visited in order to procure particular resources that were especially abundant or available only during certain seasons. Sites often were situated near fresh water sources and in ecotones where plant life and animal life were diverse and abundant. For more information about the Kashia Pomo see Barrett (1908), Kniffen (1939), and Stewart (1943).

## **STUDY PROCEDURES AND FINDINGS**

### **Native American Contact**

The State of California's Native American Heritage Commission, Stewarts Point Rancheria, the Federated Indians of Graton Rancheria, Lytton Rancheria of California, Cloverdale Rancheria of Pomo Indians, Dry Creek Rancheria of Pomo Indians, and the Ya-Ka-Ama Indian Center were contacted in writing. A log of contact efforts is provided at the end of this report (Appendix A).

### **Archival Study Procedures**

Archival research included examination of the library and project files at Tom Origer & Associates. A review (NWIC File No. 12-1568) was completed of the archaeological site base maps and records, survey reports, and other materials on file at the Northwest Information Center (NWIC), Sonoma State University, Rohnert Park. Sources of information included but were not limited to the current listings of properties on the National Register of Historic Places (National Register), California Historical Landmarks, California Register of Historical Resources (California Register), and California Points of Historical Interest as listed in the Office of Historic Preservation's *Historic Property Directory* (OHP 2012).

The Office of Historic Preservation has determined that structures older than 45 years should be considered potentially important historical resources, and former building and structure locations could be potentially important historic archaeological sites. Archival research included an examination of historical maps to gain insight into the nature and extent of historical development in the general vicinity, and especially within the study area. Maps ranged from hand-drawn maps of the 1800s (e.g., GLO plats) to topographic maps issued by the United States Geological Survey (USGS) and the Army Corps of Engineers (USACE) from the early to the middle 20th century.

In addition, ethnographic literature that describes appropriate Native American groups, county histories, and other primary and secondary sources were reviewed. Sources reviewed are listed in the "Materials Consulted" section of this report.

### **Archival Study Findings**

Archival research found that the study area has not been previously surveyed for cultural resources. Three studies have been completed within a half-mile radius (DeGeorgey 2007; Peron 1989; Quinn and Origer 2001). One of these studies found five archaeological sites and seven isolated finds on the 300 acre property across Skyline Road (DeGeorgey 2007). One of the recorded archaeological sites is located within a half-mile of the study area (DeGeorgey 2007).

There are no reported ethnographic sites in the vicinity (Barrett 1908).

Historical maps show no buildings or structures in the project area. (Bowers 1867; GLO 1874; McIntire and Lewis 1908; Peugh 1934; Reynolds and Proctor 1898; Thompson 1877; USACE 1944; USGS 1943, 1978).

### **Field Survey Procedures**

A field survey was completed by Tom Origer and Lauren Del Bondio on June 24, 2013. The two acre study area was examined intensively by walking in a zigzag pattern within 10-15 meter corridors. Visibility was good to poor, with duff being the chief hindrance. Pigs had rooted through much of the study area exposing the native soil; however, hoes were used as needed to clear small patches of vegetation so that the entire study area was inspected.

Based on the distribution of known cultural resources and their environmental settings, it was anticipated that prehistoric archaeological sites could be found within the study area. Prehistoric archaeological site indicators expected to be found in the region include but are not limited to: obsidian and chert flakes and chipped stone tools; grinding and mashing implements such as slabs and handstones, and mortars and pestles; bedrock outcrops and boulders with mortar cups; and locally darkened midden soils containing some of the previously listed items plus fragments of bone, shellfish, and fire affected stones. Historic period site indicators generally include: fragments of glass, ceramic, and metal objects;

milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps).

### **Field Survey Findings**

No cultural resources were found within the study area.

## **RECOMMENDATIONS**

### **Known Resources**

No prehistoric or historic-era archaeological sites were found within the study area; therefore, no resource-specific recommendations are warranted.

### **Accidental Discovery**

There is the possibility that buried archaeological deposits could be present, and accidental discovery could occur. In keeping with the CEQA guidelines, if archaeological remains are uncovered, work at the place of discovery should be halted immediately until a qualified archaeologist can evaluate the finds (§15064.5 [f]). Prehistoric archaeological site indicators include: obsidian and chert flakes and chipped stone tools; grinding and mashing implements (e.g., slabs and handstones, and mortars and pestles); bedrock outcrops and boulders with mortar cups; and locally darkened midden soils. Midden soils may contain a combination of any of the previously listed items with the possible addition of bone and shell remains, and fire affected stones. Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps).

The following actions are promulgated in Public Resources Code 5097.98 and Health and Human Safety Code 7050.5, and pertain to the discovery of human remains. If human remains are encountered, excavation or disturbance of the location must be halted in the vicinity of the find, and the county coroner contacted. If the coroner determines the remains are Native American, the coroner will contact the Native American Heritage Commission. The Native American Heritage Commission will identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent makes recommendations regarding the treatment of the remains with appropriate dignity.

## **SUMMARY**

Tom Origer & Associates conducted a cultural resources study for the King Ridge Dam Project located at 31111 King Ridge Road in western Sonoma County, California. The study was requested by Guadalupe Chavarria, in compliance with requirements of the County of

Sonoma Permit and Resource Management Department. No cultural resources were found within the study area, and no resource-specific recommendations are warranted. Documentation pertaining to this study is on file at the offices of Tom Origer & Associates (File No. 13-56).

## MATERIALS CONSULTED

Barrett, S.

1908 *The Ethno-Geography of the Pomo and Neighboring Indians*. University of California Publications in American Archaeology and Ethnology Vol. 6, No. 1. University of California Press, Berkeley.

Bell and Heymans

1888 *Map of Sonoma County, California*. Bell and Heymans, San Francisco.

Bowers, A.

1867 *Map of Sonoma County*. 2nd ed. A. Bowers.

DeGeorgey, A.

2007 *Letter Report regarding Archaeological Inventory of the Robert Kwok Property (APN 109-290-012 and 109-280-1017) Approximately 305-acres in Western Sonoma County, California*. Document S-34768 on file at the Northwest Information Center, Sonoma State University, Rohnert Park.

Fredrickson, D.

1984 *The North Coastal Region*. In *California Archaeology*, edited by M. Moratto. Academic Press, San Francisco.

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1925 *Handbook of the Indians of California*. Bureau of American Ethnology, Bulletin 78, Smithsonian Institution, Washington, D.C.
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1908 *Official Map of the County of Sonoma, California*. County of Sonoma, California.
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1978 Pomo. In *California*, edited by R. Heizer, pp. 274-288. Handbook of North American Indians, Vol. 8, W. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.
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1873 *Historical and Descriptive Sketchbook of Napa, Sonoma, Lake and Mendocino*. Reporter Publishing House. Napa, California.
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2012 *Historic Property Directory*. Office of Historic Preservation, Sacramento.
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1934 *Official Map of Sonoma County, California*. County of Sonoma, California.
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2001 *A Cultural Resources Survey for the Bill and Joan Smith Winery Project, Cazadero, Sonoma County, California*. Document S-24302 on file at the Northwest Information Center, Sonoma State University, Rohnert Park.
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1898 *Illustrated Atlas of Sonoma County, California*. Reynolds and Proctor, Santa Rosa.

State of California Department of Parks and Recreation

1976 *California Inventory of Historic Resources*. Department of Parks and Recreation, Sacramento.

Stewart, O.

1943 *Notes on Pomo Ethnography*. University of California Publications in American Archaeology and Ethnology. Vol. 40. Berkeley.

Thompson, T.H. & Co.

1877 *Historical Atlas of Sonoma County, California*. T.H. Thompson & Co., Oakland, California.

United States Army of Corps Engineers

1944 Fort Ross 1:31860 quadrangle. Department of the Interior, Washington, D.C.

United States Geological Survey

1943 Fort Ross 7.5' quadrangle. Geological Survey, Washington, D.C.

1978 Fort Ross 7.5' quadrangle. Geological Survey, Washington, D.C.

## **APPENDIX A: Native American Contact**

**Native American Contact Efforts  
King Ridge Dam Project, Sonoma County**

| <b>Organization</b>                       | <b>Contact</b>                              | <b>Letters</b>     | <b>Results</b>   |
|---|---|--------------------|--|
| Native American Heritage Commission       |   | 6/19/13            | Response 6/26/13 via facsimile. Sacred land file failed to indicated presence of Native American cultural resources in project area. |
| Lytton Band of Pomo Indians               | Margie Mejia<br>Lisa Miller                 | 6/19/13<br>6/27/13 | No response received as of the date of this report.  |
| Stewarts Point Rancheria                  | Otis Parrish<br>Emilio Valencia             | 6/19/13<br>6/27/13 | No response received as of the date of this report.  |
| Ya-Ka-Ama Indian Center                   |   | 6/19/13            | No response received as of the date of this report.  |
| Cloverdale Rancheria of Pomo Indians      | Patricia Hermosillo<br>Mario Hermosillo Jr. | 6/27/13<br>6/27/13 | No response received as of the date of this report   |
| Dry Creek Rancheria of Pomo Indians       | Harvey Hopkins                              | 6/27/13            | No response received as of the date of this report   |
| The Federated Indians of Graton Rancheria | Gene Buvelot<br>Greg Sarris<br>Frank Ross   | 6/27/13            | No response received as of the date of this report   |

## Appendix E

# Water Availability Analysis and Cumulative Flow Impairment Index Report

**TO:** File

**FROM:** Mitchell Moody, P.E.

**DATE:** August 28, 2013

**SUBJECT:** WATER AVAILABILITY ANALYSIS AND CUMULATIVE FLOW IMPAIRMENT INDEX (CFII) REPORT FOR APPLICATION 32139 OF KING RIDGE VINEYARDS, LLC

## 1.0 INTRODUCTION

This analysis calculates the 1) water available for appropriation as required under California Water Code section 1275 (a), 1375 (d), 1243, 1243.5 and California Code of Regulations, Title 23, section 782; and 2) CFII and February Median Bypass flow in accordance with the *Guidelines for Maintaining Instream Flows to Protect Fisheries Resources Downstream of Water Diversions in Mid-California Coastal Streams*, June 17, 2002 ("Guidelines"). USGS's California StreamStats<sup>1</sup> and gage data were used in preparing these calculations.

## 2.0 PROJECT DESCRIPTION

Application 32139 requests the right to divert to offstream storage 14.5 acre-ft (af) from Wild Cattle Canyon tributary to Marshall Creek thence South Fork Gualala River, thence Pacific Ocean. The proposed season of diversion is October 15 through May 15. The purpose of use is irrigation. The project is located approximately 2 miles northwest of the city of Cazadero in Sonoma County, within Section 19, T9N, R12W, MDB&M (See Figure 1).

## 3.0 WATER AVAILABLE FOR APPROPRIATION

Water available for appropriation is determined by calculating the average unimpaired flow produced by its overlying watershed during the season of diversion, less the total water right demand within its watershed.

### 3.1 Equations

Average seasonal unimpaired watershed supply at any point of diversion (POD) or other point of interest (POI) within a watershed is estimated by adjusting the gaged flow for differences in watershed area and mean annual precipitation (MAP) using the follow formula:

$$Q_2 = Q_1 \times (A_2/A_1) \times (MAP_2/MAP_1) \quad \text{Equation 1}$$

Where:

$Q_2$  = Flow at POD/POI

$Q_1$  = Estimated unimpaired flow at gage

$A_2$  = Watershed area above POD/POI

$A_1$  = Watershed above gage

$MAP_2$  = Weighted mean annual precipitation for watershed above POD/POI

---

<sup>1</sup> [http://streamstatsags.cr.usgs.gov/ca\\_ss/default.aspx?stabbr=CA&dt=1354809422484](http://streamstatsags.cr.usgs.gov/ca_ss/default.aspx?stabbr=CA&dt=1354809422484)

MAP<sub>1</sub> = Weighted mean annual precipitation for watershed above gage

### 3.2 Data and Assumptions

The data provided by USGS Gage #11467500, SF GUALALA NR THE SEA RANCH, CA, has been used to calculate the average seasonal unimpaired watershed supply at POD 1. The period of record for this gage extends from 1950 to 1971, a total of 21 water years. The gage was selected because of its length of record, proximity to watersheds of interest, and its low level of impairment. The monthly flows of record for this gage are shown in Attachment 1. Watershed areas and MAP were determined using USGS's California StreamStats, which measures drainage area to the tenth of a square mile.

Demand includes existing and pending water right applications for "Post-1914" appropriators, Statements of Water Diversion and Use for "Riparian" and "Pre-1914" appropriators, small domestic use registrations, stockpond registrations, and any other known authorized diversions using the Division of Water Rights Information Management System (WRIMS) database and water right files. A table summarizing watershed demand is shown in Attachment 2.

### 3.3 Calculation of Water Available for Appropriation

The watershed area above POD 1 and USGS Gage #11467500 is shown in Figure 2. As indicated in Table 1 below, the POD 1 watershed is approximately 64 acres, with a mean annual precipitation of 65.6 inches per year. The average discharge at the gage during the requested diversion season is about 241,741 acre-feet.

**Table 1- Water Available for Appropriation**

| Watershed | Drainage Area (acres) | MAP (inches) | A  | B  | C = A - B                                       |
|-----------|-----------------------|--------------|--|--|---|
|           |                       |              | Oct 15 to May 15 Estimated Average Unimpaired Flow (ac-ft) | Oct 15 to May 15 Demand Volume of all Upstream Demands (ac-ft) | Oct 15 to May 15 Average Unappropriated (ac-ft) |
| Gage      | 103,168               | 57.1         | 241,741  | --   | --  |
| POD 1     | 64                    | 65.6         | 172.3  | 14.5   | 157.8   |

Table 1 indicates that sufficient water is available at POD 1 to satisfy the 14.5 af appropriation of Application 32139 in an average year. Column C shows the amount of water remaining after the proposed diversion. The amount available for appropriation at POD 1 is subject to any bypass requirement.

## **4.0 CUMULATIVE FLOW IMPAIRMENT INDEX**

The CFII is calculated in accordance with the Guidelines. Pursuant to CEQA, CESA and ESA, the Division is required to evaluate cumulative impacts to natural hydrology. The CFII is an index that is used to evaluate the cumulative flow impairment demand of all existing and pending projects in a watershed of interest. The CFII is a percentage obtained by dividing demand in acre-feet by supply in acre-feet at a specified POI, and for a specified time period. For the "coastal" watersheds in the counties of Mendocino, Sonoma, Marin and Napa, the season of October 1 to March 31 is used to compute demand.

Supply is the seasonal average unimpaired flow above the POI in acre-feet. For the coastal watersheds in the counties of Mendocino, Sonoma, Marin and Napa the season of December 15 through March 31 is used to compute supply<sup>2</sup>.

#### 4.1 Points of Interest

Points of Interest (POI), shown in Figure 2, were selected in consultation with Division environmental staff as follows:

POI 1: The point immediately below POD 1.

POI 2: The point immediately downstream of the confluence of Unnamed Stream and Wild Cattle Canyon

POI 3: The point immediately downstream of the confluence of Wild Cattle Canyon and Marshall Creek

POI 4: The point immediately downstream of the confluence of Marshall Creek and South Fork Gualala River

#### 4.2 Calculation of CFII

Table 2 shows the calculated average unimpaired supply of water, the demand totals from Attachment 2, and the CFII results.

**Table 2- CFII Results**

| Watershed | Drainage Area (Acres) | MAP (inches) | A   | B                     | B/A    |
|-----------|-----------------------|--------------|---|-----------------------|--------|
|           |                       |              | 12/15-3/31 Estimated Average Unimpaired Flow (af) | 10/1-3/31 Demand (af) | CFII % |
| Gage      | 103,168               | 57.1         | 221,557   | --                    | --     |
| POI 1     | 64                    | 65.6         | 158   | 14.5                  | 9.18   |
| POI 2     | 576                   | 64.5         | 1,397   | 14.5                  | 1.04   |
| POI 3     | 8,768                 | 65.9         | 21,732  | 25.0                  | 0.12   |
| POI 4     | 21,056                | 63.6         | 50,366  | 69.0                  | 0.14   |

#### 5.0 BYPASS FLOW

The bypass flow is the minimum flow rate to be maintained past a project's point of diversion, in cubic feet per second (cfs). The appropriate bypass is developed on a case-by-case basis. For projects located in the "coastal" watersheds in the counties of Mendocino, Sonoma, Marin and Napa, the National Marine Fisheries Service (NMFS)/California Department of Fish and Wildlife Guidelines recommend a bypass that

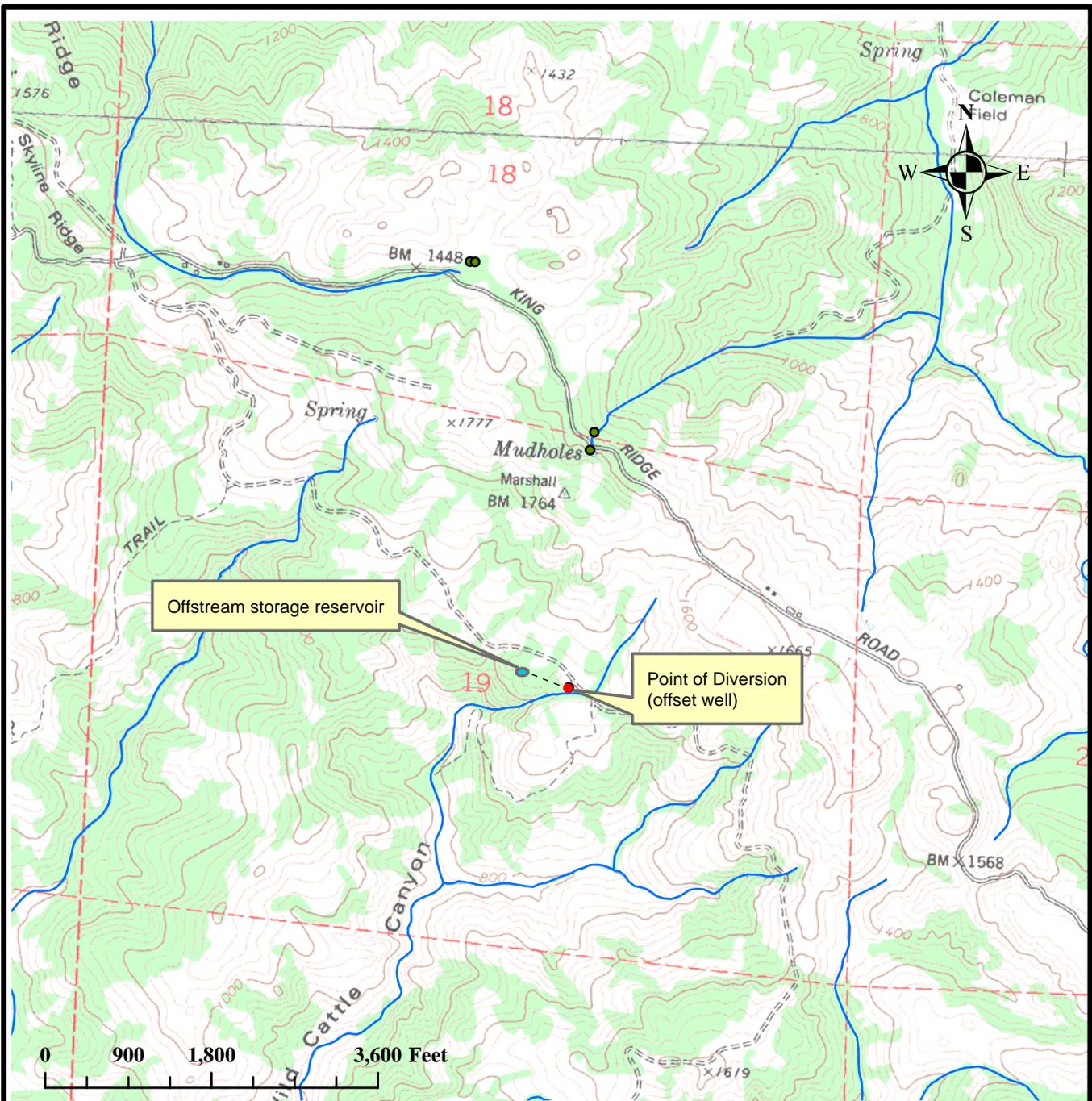
<sup>2</sup> National Marine Fisheries Service and The California Department of Fish and Wildlife, *Guidelines for Maintaining Instream Flows to Protect Fisheries Resources Downstream of Water Diversions in Mid-California Coastal Streams*, June 17, 2002 (Errata note, dated 8-19-02).

is equal to the February median flow should be used where needed to protect fish habitat. The adequacy of using the February median flow as a bypass depends on several factors, including the CFII (see section 4.0). The February Median Flow at the POIs is shown in Table 3.

**Table 3-February Median Flow at POIs**

| <b>Watershed</b> | <b>Drainage Area (Acres)</b> | <b>MAP (inches)</b> | <b>FMF(cfs)</b> |
|------------------|------------------------------|---------------------|-----------------|
| Gage             | 103,168                      | 57.1                | 412.00          |
| POI 1            | 64                           | 65.6                | 0.29            |
| POI 2            | 576                          | 64.5                | 2.60            |
| POI 3            | 8,768                        | 65.9                | 40.41           |
| POI 4            | 21,056                       | 63.6                | 93.66           |

U://Paldrv/Mmoody/32139WAA/32139cfii



OWNER KING RIDGE VINEYARDS, LLC

SOURCE WILD CATTLE CANYON TRIBUTARY TO MARSHAL CREEK  
THENCE S. FORK GUALALA RIVER

POINT OF DIVERSION SW1/4 OF NE1/4 OF SECTION 19

ALL WITHIN T9N, R12W, MDBM

COUNTY OF SONOMA

U.S.G.S. QUAD: FORT ROSS DATE: PH. RE. 1981 SCALE: 1: 20,000

STATE OF CALIFORNIA  
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY  
STATE WATER RESOURCES CONTROL BOARD  
DIVISION OF WATER RIGHTS

APPLICATION NO. 32139

FIGURE 1- PROJECT MAP

|                 |            |          |
|-----------------|------------|----------|
| DATE: 8-27-2013 | DRAWN: MSM | CHECKED: |
|-----------------|------------|----------|

Note: This map does not constitute a public land survey as defined by California Business & Professions Code section 8726. It has been prepared for descriptive purposes only.

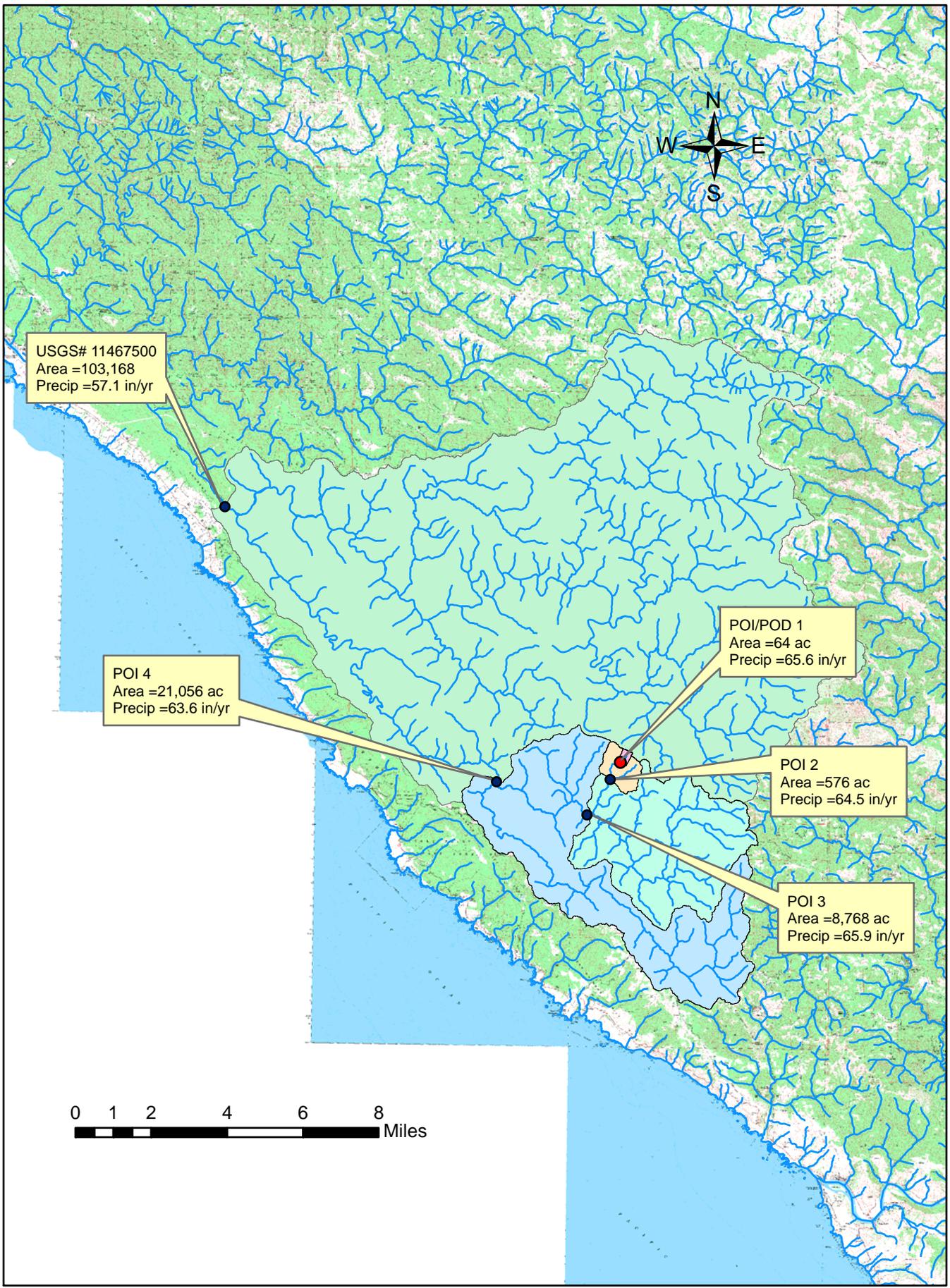


Figure 2 -POI Watersheds

**Attachment 1**  
**Discharge @ USGS 11467500 SF GUALALA NR THE SEA RANCH CA (cfs)**

| Day of month  | Mean of daily mean values for each day for 21 - 21 years of record in, ft <sup>3</sup> /s (Calculation Period 1950-10-01 -> 1971-09-30) |              |              |              |             |             |              |              |              |             |             |              |
|---------------|---|--------------|--------------|--------------|-------------|-------------|--------------|--------------|--------------|-------------|-------------|--------------|
|               | Calculation period restricted by USGS staff due to special conditions at/near site  |              |              |              |             |             |              |              |              |             |             |              |
|               | Jan   | Feb          | Mar          | Apr          | May         | Jun         | Jul          | Aug          | Sep          | Oct         | Nov         | Dec          |
| 1             | 588   | 1,540        | 498          | 576          | 175         | 56          | 22           | 8.1          | 6.3          | 21          | 52          | 1,440        |
| 2             | 530   | 1,060        | 466          | 620          | 161         | 68          | 21           | 8            | 5.9          | 22          | 103         | 1,030        |
| 3             | 579   | 829          | 388          | 512          | 154         | 58          | 20           | 7.8          | 5.6          | 22          | 62          | 2,270        |
| 4             | 997   | 1,170        | 573          | 640          | 171         | 52          | 18           | 7.7          | 5.3          | 20          | 92          | 1,560        |
| 5             | 1,350   | 1,090        | 1,010        | 670          | 150         | 50          | 18           | 7.5          | 5.3          | 22          | 88          | 1,090        |
| 6             | 906   | 810          | 788          | 827          | 132         | 50          | 17           | 7.1          | 5.2          | 23          | 84          | 1,190        |
| 7             | 1,070   | 1,040        | 786          | 496          | 121         | 48          | 17           | 7            | 5.1          | 22          | 61          | 1,110        |
| 8             | 1,070   | 1,610        | 674          | 442          | 125         | 47          | 16           | 6.9          | 5            | 21          | 142         | 502          |
| 9             | 1,380   | 1,660        | 514          | 460          | 121         | 47          | 16           | 6.8          | 4.9          | 194         | 222         | 472          |
| 10            | 1,180   | 1,120        | 531          | 410          | 111         | 44          | 15           | 6.6          | 4.9          | 154         | 195         | 663          |
| 11            | 867   | 1,300        | 440          | 339          | 104         | 42          | 15           | 6.5          | 4.7          | 109         | 126         | 504          |
| 12            | 1,960   | 1,490        | 749          | 304          | 95          | 39          | 15           | 6.6          | 4.8          | 340         | 178         | 538          |
| 13            | 1,720   | 1,830        | 589          | 281          | 92          | 37          | 14           | 6.4          | 4.9          | 458         | 258         | 468          |
| 14            | 1,880   | 1,270        | 674          | 450          | 89          | 36          | 14           | 6.3          | 4.8          | 162         | 669         | 510          |
| 15            | 1,450   | 1,200        | 747          | 396          | 83          | 35          | 13           | 5.9          | 4.8          | 95          | 496         | 686          |
| 16            | 3,030   | 1,350        | 888          | 358          | 78          | 33          | 13           | 5.8          | 4.9          | 67          | 288         | 748          |
| 17            | 2,130   | 1,110        | 792          | 317          | 76          | 31          | 12           | 5.6          | 4.8          | 45          | 160         | 548          |
| 18            | 1,280   | 1,140        | 625          | 343          | 296         | 31          | 12           | 5.5          | 36           | 39          | 159         | 799          |
| 19            | 1,240   | 1,250        | 795          | 337          | 187         | 29          | 12           | 5.4          | 12           | 38          | 428         | 1,550        |
| 20            | 2,200   | 1,060        | 684          | 396          | 148         | 29          | 11           | 6            | 7.4          | 35          | 432         | 1,000        |
| 21            | 3,120   | 1,240        | 696          | 598          | 138         | 28          | 11           | 7            | 5.9          | 32          | 217         | 1,700        |
| 22            | 1,660   | 1,170        | 621          | 328          | 113         | 27          | 11           | 6.4          | 5.2          | 31          | 160         | 2,270        |
| 23            | 1,790   | 1,040        | 556          | 286          | 102         | 26          | 11           | 5.8          | 5            | 61          | 350         | 1,410        |
| 24            | 1,860   | 1,510        | 433          | 251          | 95          | 25          | 10           | 5.5          | 5            | 48          | 310         | 1,200        |
| 25            | 1,310   | 939          | 417          | 236          | 87          | 25          | 10           | 5.5          | 4.8          | 45          | 383         | 720          |
| 26            | 1,380   | 714          | 691          | 243          | 83          | 24          | 9.7          | 5.4          | 7            | 37          | 310         | 1,070        |
| 27            | 1,240   | 543          | 669          | 472          | 76          | 23          | 9.3          | 6.1          | 81           | 35          | 247         | 1,350        |
| 28            | 1,080   | 517          | 513          | 292          | 71          | 23          | 9.1          | 19           | 24           | 34          | 373         | 1,160        |
| 29            | 1,480   | 364          | 499          | 228          | 67          | 26          | 9.1          | 12           | 17           | 46          | 284         | 912          |
| 30            | 1,490   |              | 618          | 200          | 64          | 22          | 8.6          | 8.4          | 14           | 67          | 412         | 746          |
| 31            | 1,780   |              | 474          |              | 59          |             | 8.3          | 7.1          |              | 37          |             | 587          |
| <b>Total:</b> | <b>42327</b>  | <b>32966</b> | <b>18306</b> | <b>12108</b> | <b>3501</b> | <b>1089</b> | <b>401.2</b> | <b>206.2</b> | <b>297.5</b> | <b>2278</b> | <b>6929</b> | <b>30470</b> |

Total (cfs) Oct.1-May 15: 121,876  
 Total (af) Oct 1- May 15: 241,741

Total (cfs) Dec 15 - March 31: 111,700  
 Total (af) Dec 15- March 31: 221,557

**Attachment 2  
Demand Above Points of Interest (POI)**

| POI                       | Water Right ID Number | Applicant            | Max Diversion Rate (cfs) | Direct Diversion Season | Seasonal Days 10/1-3/31 | Direct Diversion 10/1-3/31 (af) | Storage Season | Use                       | Max Storage 10/1-3/31 (af) | Total Demand 10/1-3/31 (af) |
|---------------------------|-----------------------|----------------------|--------------------------|-------------------------|-------------------------|---------------------------------|----------------|---------------------------|----------------------------|-----------------------------|
| <b>Demand Above POI 1</b> |                       |                      |                          |                         |                         |                                 |                |                           |                            |                             |
|                           | A032319               | King Ridge Vineyards |                          |                         |                         |                                 | 10/15-5/15     | I                         | 14.5                       | 14.5                        |
|                           |                       |                      |                          |                         |                         |                                 |                | <b>Total above POI 1:</b> |                            | 14.5                        |
| <b>Demand Above POI 2</b> |                       |                      |                          |                         |                         |                                 |                |                           |                            | 14.5                        |
|                           |                       |                      |                          |                         |                         |                                 |                | <b>Total above POI 2:</b> |                            | 14.5                        |
| <b>Demand Above POI 3</b> | A022732               | Andreatta            |                          |                         |                         |                                 | 10/1 - 5/15    | R, S                      | 10.0                       | 24.5                        |
|                           | A020212               | Sequoia Nat. Forest  | 0.0007                   | 1/1 - 12/31             | 365                     | 0.5                             |                | S                         |                            | 25.0                        |
|                           |                       |                      |                          |                         |                         |                                 |                | <b>Total above POI 3:</b> |                            | 25.0                        |
| <b>Demand Above POI 4</b> | A022824               | Gualala Ranch Assoc. |                          |                         |                         |                                 | 10/1 - 5/31    | R                         | 5.0                        | 30.0                        |
|                           | A031373               | Flowers Vineyard     |                          |                         |                         |                                 | 12/15 - 3/31   | FP,D,I,FR                 | 13.0                       | 43.0                        |
|                           | A024081               | Tunheim              |                          |                         |                         |                                 | 1/1 - 12/31    | FP,S,I,R                  | 8.0                        | 51.0                        |
|                           | A025187               | Ratna Ling           |                          |                         |                         |                                 | 11/1 - 4/1     | FP,S,I,R                  | 6.0                        | 57.0                        |
|                           | A025131               | (Revoked)            |                          |                         |                         |                                 |                |                           |                            | 57.0                        |
|                           | A027635               | Isaac                |                          |                         |                         |                                 | 11/1 - 4/30    | FP, R                     | 12.0                       | 69.0                        |
|                           |                       |                      |                          |                         |                         |                                 |                | <b>Total above POI 4:</b> |                            | 69.0                        |

D=domestic  
 FP=Fire Protection  
 FW=Fish and Wildlife Enhancement and Protection  
 I=Irrigation  
 S=Stockwatering  
 R=Recreation  
 IN=Industrial  
 FR=Frost Protection

# Appendix F

## Draft Permit for Application 32139



**STATE OF CALIFORNIA  
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY  
STATE WATER RESOURCES CONTROL BOARD**

**DIVISION OF WATER RIGHTS**

**RIGHT TO DIVERT AND USE WATER**

APPLICATION 32139

PERMIT **XXXXX**

Right Holder: King Ridge Vineyards, LLC  
1291 Zinfandel Lane  
St. Helena, CA 94574

The State Water Resources Control Board (State Water Board) authorizes the diversion and use of water by the right holder in accordance with the limitations and conditions herein SUBJECT TO PRIOR RIGHTS. The priority of this right dates from **June 24, 2013**. This right is issued in accordance with the State Water Board delegation of authority to the Deputy Director for Water Rights (Resolution 2012-0029) and the Deputy Director for Water Rights redelegation of authority dated July 6, 2012.

The Deputy Director for Water Rights finds that the State Water Board and/or the Applicant have met the following requirements for permit issuance: (a) demonstrated the availability of unappropriated water; (b) resolved protests in compliance with Water Code section 1330 et seq. and included appropriate permit conditions; (c) demonstrated that the water will be diverted and used without injury to any lawful user of water; (d) demonstrated that the intended use is beneficial; (e) demonstrated that the requirements of the California Environmental Quality Act (CEQA) have been met or that the project is exempt from CEQA; and (f) demonstrated that the requirements of the Policy for Maintaining Instream Flows in Northern California Coastal Streams have been met.

The State Water Board has complied with its independent obligation to consider the effect of the proposed project on public trust resources and to protect those resources where feasible. (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419 [189 Cal.Rptr. 346, 658 P.2d 709].)

**Right holder is hereby granted a right to divert and use water as follows:**

1. Source of water: **(1) (2) 2 Unnamed Streams**

tributary to: **(2) An Unnamed Stream thence (1) Wild Cattle Canyon thence Marshall Creek thence the South Fork Gualala River**

within the County of **Sonoma**.

2. Location of points of diversion

| By California Coordinate System of 1983 in Zone 2                    | 40-acre subdivision of public land survey or projection thereof | Section (Projected)* | Township  | Range      | Base and Meridian |
|--|---|----------------------|-----------|------------|-------------------|
| <b>Well</b><br>(1) North 1,985,832 feet and East 6,210,964 feet      | <b>SW ¼ of NE ¼</b>   | <b>19</b>            | <b>9N</b> | <b>12W</b> | <b>MDB&amp;M</b>  |
| <b>Reservoir</b><br>(2) North 1,985,037 feet and East 6,210,548 feet | <b>SW ¼ of NE ¼</b>   |                      |           |            |                   |

Location of place of storage

|   |   |                      |           |            |                   |
|---|---|----------------------|-----------|------------|-------------------|
| By California Coordinate System of 1983 in Zone 2                           | 40-acre subdivision of public land survey or projection thereof | Section (Projected)* | Township  | Range      | Base and Meridian |
| <b>Reservoir</b><br><b>(2) North 1,986,037 feet and East 6,210,548 feet</b> | <b>SW ¼ of NE ¼</b>   | <b>19</b>            | <b>9N</b> | <b>12W</b> | <b>MD</b>         |

| 3. Purpose of use | 4. Place of use   |                      |           |            |                   |              |
|-------------------|---|----------------------|-----------|------------|-------------------|--------------|
|                   | 40-acre subdivision of public land survey or projection thereof | Section (Projected)* | Township  | Range      | Base and Meridian | Acres        |
| <b>Irrigation</b> | <b>NW ¼ of NW ¼</b>   | <b>19</b>            | <b>9N</b> | <b>12W</b> | <b>MD</b>         | <b>6.0</b>   |
|                   | <b>NE ¼ of NW ¼</b>   |                      |           |            |                   | <b>0.5</b>   |
|                   | <b>SW ¼ of NW ¼</b>   |                      |           |            |                   | <b>5.5</b>   |
|                   | <b>SE ¼ of NW ¼</b>   |                      |           |            |                   | <b>20.2</b>  |
|                   | <b>NE ¼ of SW ¼</b>   |                      |           |            |                   | <b>0.3</b>   |
|                   | <b>NW ¼ of SE ¼</b>   |                      |           |            |                   | <b>10.0</b>  |
|                   |   |                      |           |            |                   | <b>Total</b> |

The place of use is shown on map filed on June 24, 2013 with the State Water Board.

1. The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed **0.22 cubic foot per second** by direct diversion to be diverted and **12 acre-feet per year** by storage to be collected from October 15 of each year to May 15 of the succeeding year. The total amount of water to be taken from the source (direct diversion plus collection to storage) for all uses shall not exceed **14 acre-feet per year**.  
(0000005E)
2. No water shall be collected to storage outside of the specified season to offset evaporation and seepage losses or for any other purpose.  
(0000005I)
3. The maximum rate of diversion to offstream storage shall not exceed **0.22 cubic foot per second**.  
(0000005J)
4. Construction work and complete application of the water to the authorized use shall be prosecuted with reasonable diligence and completed by December 31, 2029.  
(0000009)
5. Based on the information in the Division's files, water has not been used under a claimed existing right on the place of use. If right holder exercises a claimed existing right on the place of use authorized by this right without prior approval from the State Water Board, right holder shall forfeit this water right.  
(0000021C)

6. The State Water Board intends to develop and implement a basin-wide program for real-time electronic monitoring and reporting of diversions, withdrawals, releases and streamflow in a standardized format if and when resources become available. Such real-time reporting will be required upon a showing by the State Water Board that the program and the infrastructure are in place to accept real-time electronic reports. Implementation of the reporting requirements shall not necessitate amendment to this right. (0090031)

7. No water shall be diverted to offstream storage under this right unless right holder is monitoring and reporting said diversion of water. This monitoring shall be conducted using a device and methods satisfactory to the Deputy Director for Water Rights. The device shall be capable of continuous monitoring the rate and quantity of water diverted and shall be properly maintained.

Right holder shall provide the Division of Water Rights with evidence that the device has been installed with the first annual report submitted after device installation. Right holder shall provide the Division of Water Rights with evidence that substantiates that the device are functioning properly every five years after device installation as an enclosure to the current annual report or whenever requested by the Division of Water Rights.

Right holder shall maintain a record of all diversions under this right that includes the date, time, rate of diversion at time intervals of one hour or less, and the amount of water diverted. The records shall be submitted with the annual report or whenever requested by the Division of Water Rights.

(0060046)

8. No water shall be diverted under this right unless right holder is monitoring and reporting the water surface elevation in the reservoir. This monitoring shall be conducted using a device and methods satisfactory to the Deputy Director for Water Rights. The device shall be capable of monitoring water surface elevations from the maximum water line to the minimum water line known to exist for the reservoir and shall be properly maintained.

Right holder shall provide the Division of Water Rights with evidence that the device has been installed and the mark or reading corresponding to the maximum water line of the reservoir with the first annual report submitted after device installation. Right holder shall provide the Division of Water Rights with evidence that substantiates that the device is functioning properly every five years after device installation as an enclosure to the current annual report or whenever requested by the Division of Water Rights.

Right holder shall maintain a record of water surface elevations. The records shall be submitted with the annual report or whenever requested by the Division of Water Rights. The State Water Board may require release of water held in storage that cannot be verified by monthly records. Failure to maintain or submit the required records may result in the requirement to release the entire content of the reservoir's storage.

(0100047)

9. No water shall be diverted under this right unless right holder is monitoring and reporting the withdrawal of water for beneficial use and the release of water from the reservoir. This monitoring shall be conducted using a device and methods satisfactory to the Deputy Director for Water Rights. The device shall be capable of continuous monitoring of the rate and quantity of water withdrawn for beneficial use or released to the stream channel from the reservoir and shall be properly maintained.

Right holder shall provide the Division of Water Rights with evidence that the device has been installed with the first annual report submitted after device installation. Right holder shall provide the Division of Water Rights with evidence that substantiates that the device is functioning properly every five years after

device installation as an enclosure to the current annual report or whenever requested by the Division of Water Rights.

Right holder shall maintain a record of all withdrawals of water for beneficial use or releases of water to the stream channel under this right that includes the date, time, rate of withdrawal or release at time intervals of one hour or less, and the amount of water withdrawn or released. The records shall be submitted with the annual report or whenever requested by the Division of Water Rights.

(0100052)

10. No water shall be diverted under this right unless right holder is operating in accordance with a mitigation plan satisfactory to the Deputy Director for Water Rights. The mitigation plan shall address eradication of non-native species. Right holder shall submit a report on mitigation plan activities in accordance with the time schedule contained in the mitigation plan, and whenever requested by the Division of Water Rights. The Deputy Director for Water Rights may require modification of the mitigation plan upon a determination that the plan is ineffective or unsuccessful, or provide relief from this term upon a determination that the mitigation plan is no longer required.

(0400053)

11. No water shall be diverted from Point of Diversion 1 under this right unless the flow in the Unnamed Stream is at or above 0.29 cubic foot per second, as determined at Point of Diversion 1.

(0140060)

12. No water shall be diverted under this right unless right holder is bypassing the flow required by this water right by use of a passive bypass device.

Right holder shall provide the Division of Water Rights with evidence that the device has been installed with the first annual report submitted after device installation. Right holder shall provide the Division of Water Rights with evidence that substantiates that the device is functioning properly every year after device installation as an enclosure to the current annual report or whenever requested by the Division of Water Rights. Evidence required by this condition shall include current photographs of the system in place and a statement, signed by the right holder, certifying that the system is still operating as designed.

(0050062C)

13. Prior to starting construction, right holder shall submit an erosion control plan for approval by the Deputy Director for Water Rights. Said plan shall include measures to prevent sediment from leaving the construction area and entering waters of the State before, during, and after construction.

(0000207)

14. Within six months of the issuance date of this right, an erosion control plan shall be submitted to and approved by the Deputy Director for Water Rights. Said plan shall include measures to prevent sediment from leaving the place of use and entering waters of the State. Right holder shall provide the Division of Water Rights with evidence that substantiates that the erosion control measures contained in the plan are functioning properly every five years after installation as an enclosure to the current annual report or whenever requested by the Division of Water Rights.

(0000207)

15. No debris, soil, silt, cement that has not set, oil, or other such foreign substance will be allowed to enter into or be placed where it may be washed by rainfall runoff into the waters of the State. When operations are completed, any excess materials or debris shall be removed from the work area.

(0000208)

16. Right holder shall plant 11 oak trees. The tree replacement plantings shall be located within or adjacent to the existing vegetation. Right holder shall provide a map showing the location of each replacement planting within one year of the date of permit issuance and provide updates to the map with subsequent monitoring reports if changes occur.

Replacement tree plantings will consist of propagules derived from locally collected stock (native of Sonoma County) having a similar genetic origin to indigenous species on site. Right holder shall provide a written statement within one year of permit issuance disclosing the origin of each of the replacement plantings and updates to the written statement with subsequent monitoring reports if failed plantings are replaced or relocated. Right holder shall provide photographic evidence to document the tree replacement plantings within one year of the date of permit issuance and update photographs with subsequent reports if failed plantings are replaced or relocated.

Any diversion of water pursuant to this permit is unauthorized if survival of any of the replacement tree species falls below 75%. Right holder shall maintain replacement plantings such that survival rate of each species is not less than the identified thresholds. Survival rate shall be documented and submitted by right holder annually. Annual monitoring reports shall be prepared by a biologist or certified arborist whose qualifications are acceptable to the Deputy Director for Water Rights. The initial monitoring report shall be submitted to the Deputy Director for Water Rights within one year of the date of permit issuance. The initial monitoring report shall include documentation of:

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

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

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

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

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

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

(0000210A)

17. Should any buried archeological materials be uncovered during project activities, such activities shall cease within 100 feet of the find. Prehistoric archeological indicators include: obsidian and chert flakes and chipped stone tools; bedrock outcrops and boulders with mortar cups; ground stone implements (grinding slabs, mortars and pestles) and locally darkened midden soils containing some of the previously listed items plus fragments of bone and fire affected stones. Historic period site indicators generally include: fragments of glass, ceramic and metal objects; milled and split lumber; and structure and feature remains such as building foundations, privy pits, wells and dumps; and old trails. The Deputy Director for Water Rights shall be notified of the discovery and a professional archeologist shall be retained by the right holder to evaluate the find and recommend appropriate mitigation measures. Proposed mitigation measures shall be submitted to the Deputy Director for Water Rights for approval. Project-related activities shall not resume within 100 feet of the find until all approved mitigation measures have been completed to the satisfaction of the Deputy Director for Water Rights.

(0000215)
18. If human remains are encountered, then the right holder shall comply with Section 15064.5(e) of the California Environmental Quality Act Guidelines and Health and Safety Code Section 7050.5. All project-related ground disturbances within 100-feet of the find shall be halted until the Sonoma County Coroner has been notified. If the Coroner determines that the remains are Native American, the Coroner will notify the Native American Heritage Commission to identify the most-likely descendants of the deceased Native Americans. Project-related ground disturbance in the vicinity of the find shall not resume until the process detailed under Section 15064.5 (e) has been completed and evidence of completion has been submitted to the Deputy Director for Water Rights.

(0380500)
19. If vertebrate fossils are discovered during project activities, all work shall cease within 100 feet of the find until a qualified professional paleontologist as defined by the Society of Vertebrate Paleontology's Conformable Impact Mitigation Guidelines Committee (2011) can assess the nature and importance of the find and recommend appropriate treatment. The Division of Water Rights will also be notified of the discovery and the qualified professional paleontologist's opinion within 48 hours of the initial finding. Treatment may include preparation and recovery of fossil materials, so that they can be housed in an appropriate museum or university collection, and also may include preparation of a report for publication describing the finds. Project activities shall not resume until after the qualified professional paleontologist has given clearance and evidence of such clearance has been submitted to the Division of Water Rights.

(0380502)
20. If construction and/or tree removal activities are to occur during the period March 15 to August 15, a biologist, whose qualifications are acceptable to the Deputy Director for Water Rights, shall conduct a pre-construction survey for the purpose of identifying nesting bird species prior to construction and/or tree removal. The pre-construction survey shall include all potential nesting habitat within 500 feet of the proposed tree removal activities. The survey shall be conducted no more than 14 days prior to the beginning of tree removal activities. If an active raptor or migratory bird nest is found during the pre-construction survey, right holder shall notify the Deputy Director for Water Rights. If an active raptor nest is found during the pre-construction survey, a 500-foot no-disturbance buffer shall be established and maintained around the nest until all young have fledged. If an active nest of any other migratory or non-migratory bird is found, a 250-foot buffer shall be established around the nest until all young have fledged. Right holder shall report to the Deputy Director for Water Rights the results of the survey prior to any construction in the place of use.

(0400500)
21. A biologist, whose qualifications are acceptable to the Deputy Director for Water Rights, shall be present during any construction work within the stream channel to ensure that no take of foothill yellow-legged frog (*Rana boylei*) occurs. If foothill yellow-legged frogs are encountered during construction, right holder

shall cease construction and ground disturbing activities within 250 feet of the location where foothill yellow-legged frogs are present and shall contact the California Department of Fish and Wildlife. Prior to restarting construction activities, right holder shall submit to the Deputy Director for Water Rights evidence of approval by the California Department of Fish and Wildlife to continue construction.

(0400500)

22. During construction, right holder shall comply with the Dust Control and Mitigation Plan approved on April 15, 2014 by the Northern Sonoma County Air Pollution Control District.

(0400500)

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**THIS RIGHT IS ALSO SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:**

- A. Right holder is on notice that: (1) failure to timely commence or complete construction work or beneficial use of water with due diligence, (2) cessation or partial cessation of beneficial use of water, or (3) failure to observe any of the terms or conditions of this right, may be cause for the State Water Board to consider revocation (including partial revocation) of this right. (Cal. Code Regs., tit. 23, § 850.) (0000016)
- B. Right holder is on notice that when the State Water Board determines that any person is violating, or threatening to violate, any term or condition of a right, the State Water Board may issue an order to that person to cease and desist from that violation. (Wat. Code, § 1831.) (0000017)
- C. Right holder is not authorized to make any modifications to the location of diversion facilities, place of use or purposes of use, or make other changes to the project that do not conform with the terms and conditions of this right, prior to submitting a change petition and obtaining approval of the State Water Board. (0000018)
- D. Once the time to develop beneficial use of water ends under this permit, right holder is not authorized to increase diversions beyond the maximum annual amount diverted or used during the authorized development schedule prior to submitting a time extension petition and obtaining approval of the State Water Board. (0000019)
- E. The amount of water for consideration when issuing a license shall be limited to only the amount of water diverted and applied to beneficial use in compliance with the terms and conditions of this right, as determined by the State Water Board. (Wat. Code, § 1610.) (0000006)
- F. Right holder shall maintain records of the amount of water diverted and used under this right to enable the State Water Board to determine the amount of water that has been applied to beneficial use. (0000015)
- G. Right holder shall promptly submit any reports, data, or other information that may reasonably be required by the State Water Board, including but not limited to documentation of water diversion and use under this right and documentation of compliance with the terms and conditions of this right. (0000010)
- H. No water shall be diverted under this right unless right holder is operating in accordance with a compliance plan, satisfactory to the Deputy Director for Water Rights. Said compliance plan shall specify how right holder will comply with the terms and conditions of this right. Right holder shall comply with all reporting requirements in accordance with the schedule contained in the compliance plan. (0000070)
- I. Right holder shall grant, or secure authorization through right holder's right of access to property owned by another party, the staff of the State Water Board, and any other authorized representatives of the State Water Board the following:
  - 1. Entry upon property where water is being diverted, stored or used under a right issued by the State Water Board or where monitoring, samples and/or records must be collected under the conditions of this right;

2. Access to copy any records at reasonable times that are kept under the terms and conditions of a right or other order issued by State Water Board;
3. Access to inspect at reasonable times any project covered by a right issued by the State Water Board, equipment (including monitoring and control equipment), practices, or operations regulated by or required under this right; and,
4. Access to photograph, sample, measure, and monitor at reasonable times for the purpose of ensuring compliance with a right or other order issued by State Water Board, or as otherwise authorized by the Water Code.

(0000011)

J. This right shall not be construed as conferring right of access to any lands or facilities not owned by right holder.

(0000022)

K. All rights are issued subject to available flows. Inasmuch as the source contains treated wastewater, imported water from another stream system, or return flow from other projects, there is no guarantee that such supply will continue.

(0000025)

L. This right does not authorize diversion of water dedicated by other right holders under a senior right for purposes of preserving or enhancing wetlands, habitat, fish and wildlife resources, or recreation in, or on, the water. (Wat. Code, § 1707.) The Division of Water Rights maintains information about these dedications. It is right holders' responsibility to be aware of any dedications that may preclude diversion under this right.

(0000212)

M. No water shall be diverted or used under this right, and no construction related to such diversion shall commence, unless right holder has obtained and is in compliance with all necessary permits or other approvals required by other agencies. If an amended right is issued, no new facilities shall be utilized, nor shall the amount of water diverted or used increase beyond the maximum amount diverted or used during the previously authorized development schedule, unless right holder has obtained and is in compliance with all necessary requirements, including but not limited to the permits and approvals listed in this term.

Right holder shall prepare and submit to the Division of Water Rights a list of, or provide information that shows proof of attempts to solicit information regarding the need for, permits or approvals that may be required for the project. At a minimum, right holder shall provide a list or other information pertaining to whether any of the following permits or approvals are required: (1) lake or streambed alteration agreement with the Department of Fish and Wildlife (Fish & G. Code, § 1600 et seq.); (2) Department of Water Resources, Division of Safety of Dams approval (Wat. Code, § 6002); (3) Regional Water Quality Control Board Waste Discharge Requirements (Wat. Code, § 13260 et seq.); (4) U.S. Army Corps of Engineers Clean Water Act section 404 permit (33 U.S.C. § 1344); and (5) local grading permits.

Right holder shall, within 30 days of issuance of any permits, approvals or waivers, transmit copies to the Division of Water Rights.

(0000203)

- N. Urban water suppliers must comply with the Urban Water Management Planning Act (Wat. Code, § 10610 et seq.). An “urban water supplier” means a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually.

Agricultural water users and suppliers must comply with the Agricultural Water Management Planning Act (Act) (Water Code, § 10800 et seq.). Agricultural water users applying for a permit from the State Water Board are required to develop and implement water conservation plans in accordance with the Act. An “agricultural water supplier” means a supplier, either publicly or privately owned, supplying more than 50,000 acre-feet of water annually for agricultural purposes. An agricultural water supplier includes a supplier or contractor for water, regardless of the basis of right, which distributes or sells for ultimate resale to customers.

(0000029D)

- O. Pursuant to Water Code sections 100 and 275 and the common law public trust doctrine, all rights and privileges under this right, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of the State Water Board in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of said water.

The continuing authority of the State Water Board may be exercised by imposing specific requirements over and above those contained in this right with a view to eliminating waste of water and to meeting the reasonable water requirements of right holder without unreasonable draft on the source. Right holder may be required to implement a water conservation plan, features of which may include but not necessarily be limited to (1) reusing or reclaiming the water allocated; (2) using water reclaimed by another entity instead of all or part of the water allocated; (3) restricting diversions so as to eliminate agricultural tailwater or to reduce return flow; (4) suppressing evaporation losses from water surfaces; (5) controlling phreatophytic growth; and (6) installing, maintaining, and operating efficient water measuring devices to assure compliance with the quantity limitations of this right and to determine accurately water use as against reasonable water requirements for the authorized project. No action will be taken pursuant to this paragraph unless the State Water Board determines, after notice to affected parties and opportunity for hearing, that such specific requirements are physically and financially feasible and are appropriate to the particular situation.

The continuing authority of the State Water Board also may be exercised by imposing further limitations on the diversion and use of water by right holder in order to protect public trust uses. No action will be taken pursuant to this paragraph unless the State Water Board determines, after notice to affected parties and opportunity for hearing, that such action is consistent with California Constitution, article X, section 2; is consistent with the public interest; and is necessary to preserve or restore the uses protected by the public trust.

(0000012)

- P. The quantity of water diverted under this right is subject to modification by the State Water Board if, after notice to right holder and an opportunity for hearing, the State Water Board finds that such modification is necessary to meet water quality objectives in water quality control plans which have been or hereafter may be established or modified pursuant to Division 7 of the Water Code. No action will be taken pursuant to this paragraph unless the State Water Board finds that (1) adequate waste discharge requirements have been prescribed and are in effect with respect to all waste discharges which have any substantial effect upon water quality in the area involved, and (2) the water quality objectives cannot be achieved solely through the control of waste discharges.

(0000013)

- Q. This right does not authorize any act which results in the taking of a candidate, threatened or endangered species or any act which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish & G. Code, § 2050 et seq.) or the federal Endangered Species Act (16 U.S.C. § 1531 et seq.). If a "take" will result from any act authorized under this right, right holder shall obtain any required authorization for an incidental take prior to construction or operation of the project. Right holder shall be responsible for meeting all requirements of the applicable Endangered Species Act for the project authorized under this right.

(0000014)

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*This right is issued and right holder takes it subject to the following provisions of the Water Code:*

*Section 1390. A permit shall be effective for such time as the water actually appropriated under it is used for a useful and beneficial purpose in conformity with this division (of the Water Code), but no longer .*

*Section 1392. Every permittee, if he accepts a permit, does so under the conditions precedent that no value whatsoever in excess of the actual amount paid to the State therefor shall at any time be assigned to or claimed for any permit granted or issued under the provisions of this division (of the Water Code), or for any rights granted or acquired under the provisions of this division (of the Water Code), in respect to the regulation by any competent public authority of the services or the price of the services to be rendered by any permittee or by the holder of any rights granted or acquired under the provisions of this division (of the Water Code) or in respect to any valuation for purposes of sale to or purchase, whether through condemnation proceedings or otherwise, by the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State, of the rights and property of any permittee, or the possessor of any rights granted, issued, or acquired under the provisions of this division (of the Water Code).*

STATE WATER RESOURCES CONTROL BOARD

*Barbara Evoy, Deputy Director  
Division of Water Rights*

Dated: