

**KJELDSSEN BIOLOGICAL CONSULTING**  
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923 St. Helena Ave.  
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September 23, 2019

**To:** Amici Cellars  
3130 Old Lawley Toll Rd  
Calistoga, CA 94515

**Re: Drainage Classification**  
Amici Cellars  
Napa County

## **INTRODUCTION**

This drainage review was requested by Amici Cellars to determine Napa County setbacks from an unnamed drainage on the property adjacent to proposed road improvements. The site was walked on September 9 2019.

### **California Fish and Wildlife Code Section 1600**

Streams, lakes, and riparian vegetation as habitat for fish and other wildlife species, are subject to jurisdiction by the CDFW under Sections 1600-1616 of the California Fish and Wildlife Code. Any activity that will do one or more of the following: 1) substantially obstruct or divert the natural flow of a river, stream, or lake; 2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or 3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake; generally require a 1602 Lake and Streambed Alteration Agreement. The term “stream,” which includes creeks and rivers, is defined in the California Code of Regulations (CCR) as follows: “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation” (14 CCR 1.72). In addition, the term stream can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife. Riparian is defined as, “on, or pertaining to, the banks of a stream;” therefore, riparian vegetation is defined as, “vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself.” Removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from the CDFW.

### **Waters of the U. S.**

Waters of the U.S. are defined as wetlands, ponds, lakes, creeks, streams, rivers, ephemeral drainages, ditches and seasonally ponded areas (EPA and ACOE rule August 28, 2015). Seasonal stream channels with a definable bed and bank fall within the jurisdiction of (EPA, ACOE and CDFW).

### **Waters of the State**

The term “Waters of the State” is defined by the Porter-Cologne Act as “any surface water or groundwater, including saline waters, within the boundaries of the state.” “Waters of the State” are determined by the evaluation of continuity, “ordinary high-water mark,” a definable bed and bank, evidence of or ability to transport sediment and/or a blue line on USGS Quadrangle Map. The Regional Water Quality Control Board (RWQCB) protects all waters in its regulatory scope and has special responsibility for wetlands, riparian areas, and headwaters. These water bodies have high resource value, are vulnerable to filling, and are not systematically protected by other programs. RWQCB jurisdiction includes “isolated” wetlands and waters that may not be regulated by the ACOE under Section 404.

Seasonal stream channels with a definable bed and bank fall within the jurisdiction of EPA, ACOE and CDFW. Tributaries to Waters of the U.S. as well as “Waters of the State” are determined by the presence of a definable bed and bank, evidence of or ability to transport sediment and/or a blue line on USGS Quadrangle Map.

### **Streams /Drainages**

In the area there are two types of streams or drainages; 1) perennial flowing waters and 2) seasonal ephemeral creeks or drainages that convey water during and shortly after rainfall. USGS 7.5 Min Quadrangle maps for the site were analyzed for the presence of “blue line” creeks. On site topography and evidence of bed and bank was used for evaluating ephemeral drainages. Drainages were walked and visually evaluated for continuity of bed and bank as well as signs of aquatic life. Representative photographs were made. The streambed was evaluated for flow, pools, substrate, bank and quality of habitat recorded in field notes. Vegetation in the streambed was recorded if present and quality and quantity of riparian conditions as distinct from surrounding vegetation noted.

### **Stream Classification**

**Class I** - Fish always or seasonally present onsite, includes habitat to sustain fish migration and spawning.

**Class II** - Fish always or seasonally present, aquatic habitat for non-fish aquatic species.

**Class III** - No aquatic life present, watercourse showing evidence of being capable of sediment transport to Class I and II waters under normal high-water flow conditions.

**Class IV** - Man-made watercourses, usually downstream, established domestic, agricultural, hydroelectric supply or other beneficial use.

## **FINDINGS**

The property was reviewed in the field on September 9, 2019. Review of USGS Calistoga Topographic Map does not show the drainage as a Blue Line drainage.

Napa County Chapter 18.108. Conservation Regulations

"Stream" means any of the following:

1. A watercourse designated by a solid line or dash and three dots symbol on the largest scale of the United State Geological Survey maps most recently published, or any replacement to that symbol;
2. Any watercourse which has a well-defined channel with a depth greater than four feet and banks steeper than 3:1 and contains hydrophilic vegetation, riparian vegetation or woody vegetation including tree species greater than ten feet in height; and
3. Those watercourses listed in Resolution No. 94-19 and incorporated herein by reference.

The drainage is ephemeral, and no water was present during our review. There is an existing agricultural reservoir above the drainage. Water only flows in the drainage during storm events or when the reservoir is full. The drainage does not meet the Napa County definition of a “Stream”.

Ephemeral or intermittent streams that do not meet the criteria for a stream as defined in Section 18.108.030 Napa County shall have a minimum 35-foot setback.

The drainage would be considered a Class III - No aquatic life present, watercourse showing evidence of being capable of sediment transport to Class I and II waters under normal high-water flow conditions.



**Photo 1.** Class III drainage illustrating conditions.



**Photo 2.** Conditions of ephemeral drainage as channel becomes more defined.

Should you have any questions, please do not hesitate to contact us at: Telephone (707) 544-3091, Email [kjeldsen@sonic.net](mailto:kjeldsen@sonic.net), or Fax (707) 575-8030. Thank you for the opportunity to clarify the above material.

Sincerely,

*Kjeldsen Biological Consulting*  
Kjeldsen Biological Consulting

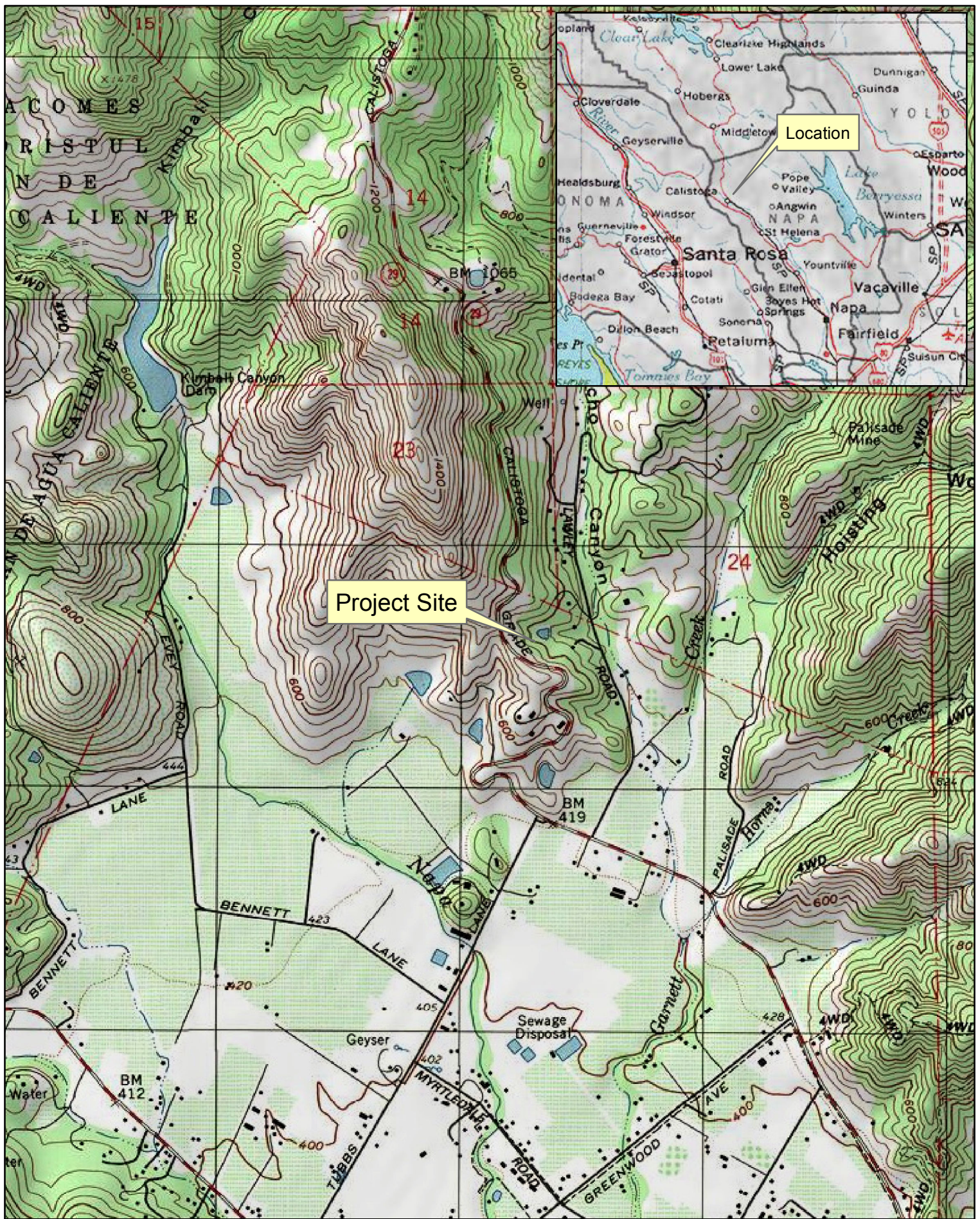
**Plate I. Location and Site Map**

**Plate II. Drainage Classification Map**

## **Qualifications of Field Investigators**

**Chris K. Kjeldsen, Ph.D., Botany**, Oregon State University, Corvallis, Oregon. He has over forty years of professional experience in the study of California flora. He was a member of the Sonoma County Planning Commission and Board of Zoning (1972 to 1976). He has over thirty years of experience in managing and conducting environmental projects involving impact assessment and preparation of compliance documents, Biological Assessments, DFW Habitat Assessments, DFW Mitigation projects, ACOE Mitigation projects and State Parks and Recreation Biological Resource Studies. Experience includes conducting special-status species surveys, jurisdictional wetland delineations, general biological surveys, 404 and 1600 permitting, and consulting on various projects. He taught Plant Taxonomy at Oregon State University and numerous botanical science and aquatic botany courses at Sonoma State University including sections on wetlands and wetland delineation techniques. He has supervised numerous graduate theses, NSF, DOE and local agency grants and served as a university administrator. He has a valid DFW collecting permit.

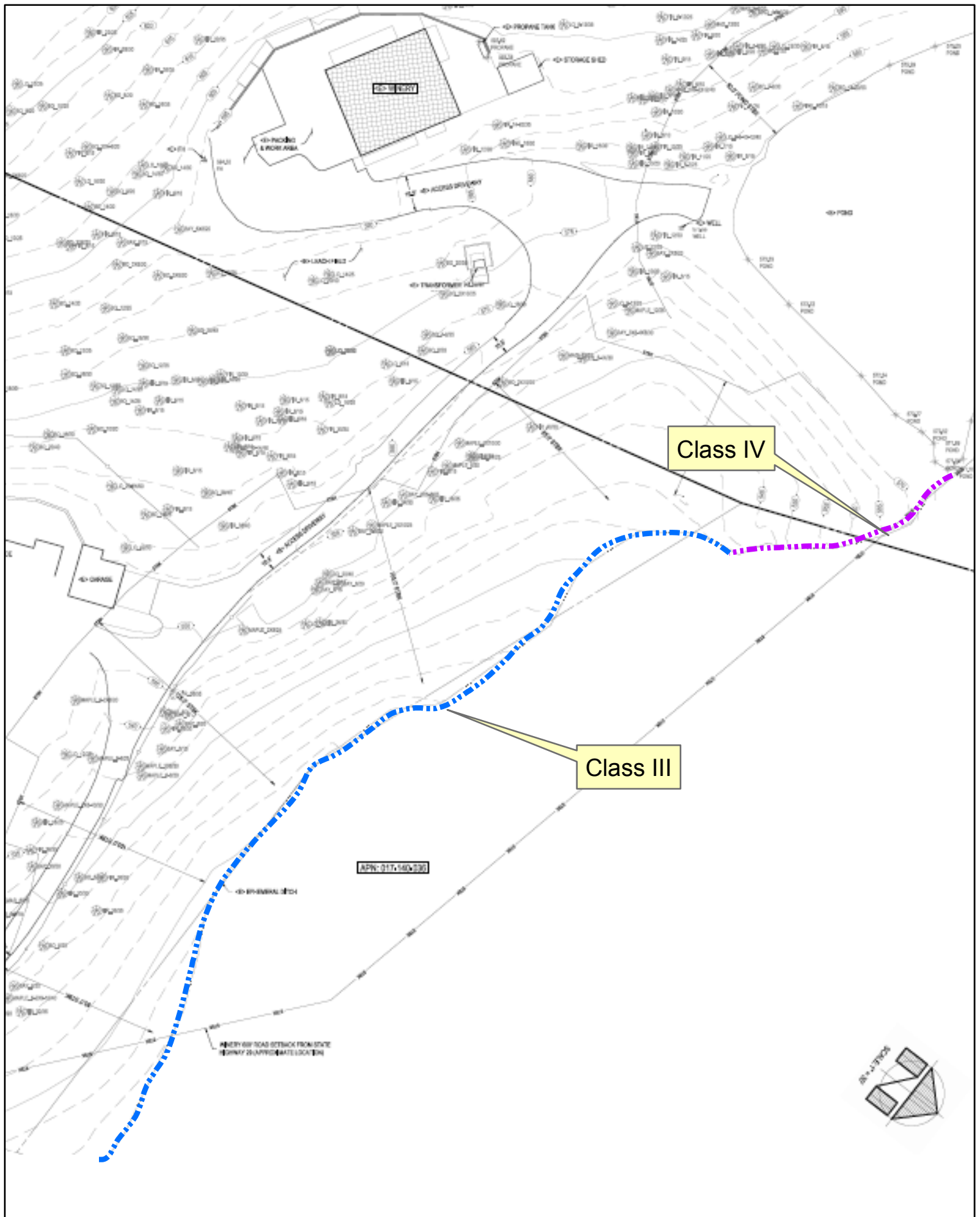
**Daniel T. Kjeldsen, B. S., Natural Resource Management**, California Polytechnic State University, San Luis Obispo, California. He spent 1994 to 1996 in the Peace Corps managing natural resources in Honduras, Central America. His work for the Peace Corps in Central America focused on watershed inventory, mapping and the development and implementation of a protection plan. He has over eighteen years of experience in conducting Biological Assessments, DFW Habitat Assessments, ACOE wetland delineations, wetland rehabilitation, and development of and implementation of mitigation projects and mitigation monitoring. He has received 3.2 continuing education units MCLE 27 hours in Determining Federal Wetlands Jurisdiction from the University of California Berkeley Extension. Attended Wildlife Society Workshop Falconiformes of Northern California; Natural History and Management California Tiger Salamander 2003, Natural History and Management of Bats Symposium 2005, Western Pond Turtle Workshop 2007, Laguna Foundation & The Wildlife Project Rare Pond Species Survey Techniques 2009, and Western Section Bat Workshop 2011. A full resume is available upon request.



**Plate I. Location and Site Map**

(USGS Calistoga Quadrangle)





**Plate II. Drainage Classification**

