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# Biological Assessment

**KJELDSSEN BIOLOGICAL CONSULTING**  
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**Date:** March 1, 2016

**To** James Keller  
PO Box 546  
Napa, CA 94559

**Subject** **Preliminary Assessment - Foothill Yellow-legged Frog**  
6170 Washington Street  
APN 036-110-009  
Napa, CA

## Introduction

A preliminary assessment for potential impacts for the Foothill Yellow-legged Frog (*Rana boylei*) was conducted on February 9, 2016 at 6170 Washington Street, Napa California. The project proposes the construction of a winery within the existing vineyard.

The California Department of Fish and Wildlife Natural Diversity Data (CNDDDB) Rare Find shows a known occurrence for the Foothill Yellow-legged Frog (FYLF) within the drainage along the southern edge of the property.

This preliminary survey was conducted to identify any potential habitat for the Foothill Yellow-legged Frog (FYLF) or the presence of the FYLF adjacent to the site.

## Description and Habitat

**Foothill Yellow-Legged Frog (*Rana boylei*):** (Regulatory Status: Species of Special Concern CSC) are found in or near rocky streams with riffles and sunny banks in a variety of habitats from sea level to approximately 6,300 feet elevation. Yellow-legged frogs require shorelines with dense, overhanging vegetation such as willow trees. Dry Creek and tributaries to the Napa River may potentially be suitable habitat for Foothill yellow-legged frogs.

Adults are 1.5 - 3.2 inches long from snout to vent (3.8 - 8.1 cm) (Stebbins & McGinnis, 2012). Coloring is gray, brownish, or olive, sometimes red, tending to match the background of its habitat. Mating and egg-laying occurs exclusively in streams and rivers (not in ponds or lakes) from April until early July, after streams have slowed from winter runoff. Tadpoles remain around the egg mass for about a week, then they move away to feed, using rocks and gravel for cover. Tadpoles transform in 3 to 4 months, typically from July to October. Newly metamorphosed juveniles typically migrate upstream from the hatching site.

This frog has disappeared from much of its range in California. Habitat loss, disease, introduced crayfish, stream alteration from dams, mining, logging, and grazing, are also threats to this frog.

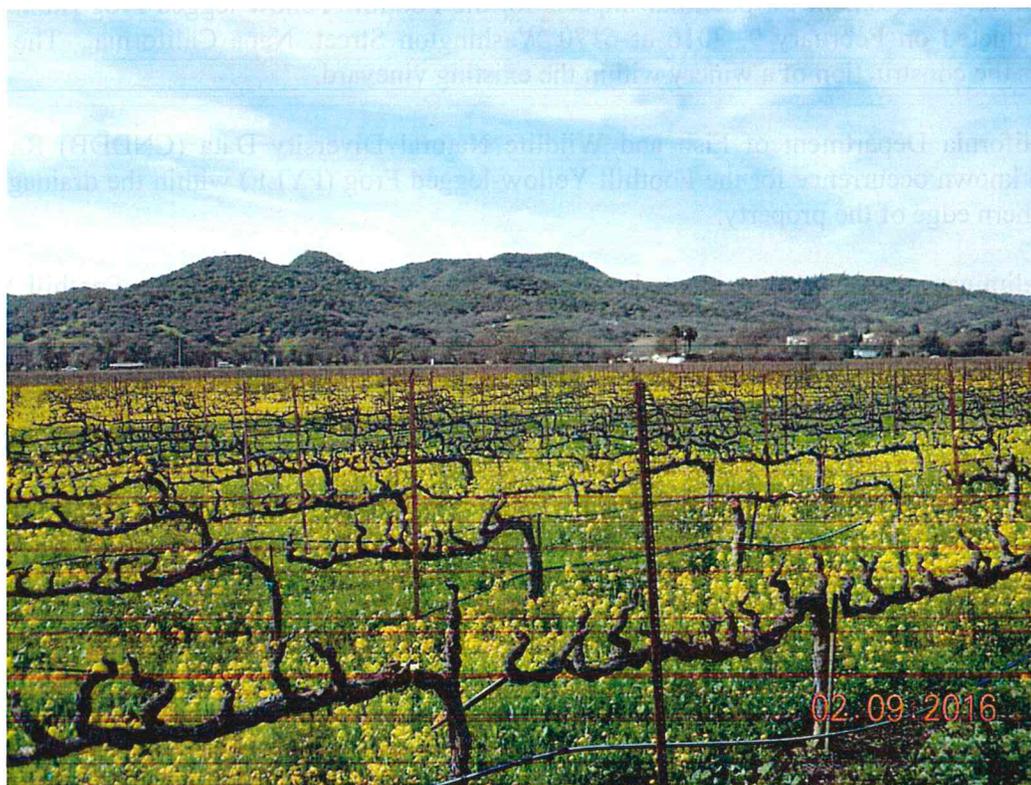
## Methods

Field analysis of the site was conducted on February 9, 2016. Field surveys were conducted by Daniel Kjeldsen, (California Department of Fish and Wildlife Scientific Collection Permit No 9325).

The entire length of the drainage was walked and scanned with binoculars. Surveys were conducted by walking the edge of all aquatic features, which contained standing water, on the property, listening for auditory clues of frogs jumping from the bank.

## Findings

The property consists of an existing vineyard. There is a channelized unnamed tributary to Dry Creek thence the Napa River along the southern property line. From review of historical aerial photos this drainage has been channelized and cleared of vegetation. The bed of the drainage consists of mud. Water was stagnant and algal growth was present on the water surface. Trees and shrubs have been planted along the bank.



**Photo 1.** View of habitat on property and location of proposed winery.



**Photo 2.** View of habitat and drainage along the south site of the property.



**Photo 3.** View of channelized drainage and vineyards on the property.

No Foothill Yellow-legged frogs were identified within the area during the field survey. The bed of the drainage (mud) does not provide potential breeding habitat for the FYLF. Foothill Yellow-legged frogs require rocky streams with riffles and sunny banks.

The occurrence recorded in the CDFW CNDDDB is from a historic 1956 sighting recorded in Dry Creek (See Attached CNDDDB Report). The drainage adjacent to the property is an unnamed drainage to Dry Creek. It is unknown why the area is mapped on CDFW CNDDDB within the drainage but the recorded observation is noted as Dry Creek. The alteration of habitat within the unnamed drainage adjacent to the property has directly and indirectly affected habitat for Foothill Yellow-legged frogs.

The aquatic habitat adjacent to the property does not contain habitat suitable for the Foothill Yellow-legged frog.

The Foothill Yellow-legged frog have likely been extirpated from this portion of the drainage, due to historic physical alteration, reducing and altering seasonal water flows necessary for channel function, changing in channel structure, providing habitat for non-native species that compete with, or prey on, native species.

Foothill Yellow-legged frogs require shorelines with dense, overhanging vegetation. There is no habitat associated with the project site or on the property, which would support this species.

Foothill Yellow-legged frogs do not disperse outside of the riparian area and do not use upland habitat. It is unlikely that Foothill Yellow-legged frog if present would leave the aquatic environment and inter into the vineyard.

## **Recommendations**

It is recommend that the project applicant review the PRESCRIBE Online Database. The PRESCRIBE online database application was developed to help pesticide applicators find out if they have any endangered species in the vicinity of their application site, and the use limitations applicable to the pesticide product(s) they intend to use. This site provides information consistent with the U.S. Environmental Protection Agency Interim Measures Bulletins for Protection of Endangered Species for user-selected sites and pesticides. This program is implemented by the Department of Pesticide Regulation on behalf of U.S. EPA under Section 7(a)(1) of the Endangered Species Act.

## Conclusions

It is unlikely that the Foothill Yellow-legged frog would be present within the channel or use the upland vineyard adjacent to the drainage. Construction for the winery will occur greater than 45-feet from the top of bank. There is no reason to expect that the proposed project will have a negative impact to the Foothill Yellow-legged frog.

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

### Plate I. CDFW CNDDDB Map

### Plate II. Aerial Photo

**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 fifteen years of experience in conducting Biological Assessments, CDFW 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. A full resume is available upon request.

**Chris K. Kjeldsen, Ph.D., Botany**, Oregon State University, Corvallis, Oregon. He has over thirty-five 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, CDFW Habitat Assessments, CDFW SB 34 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 1601-1603 permitting, and consulting on various projects. He has taught Plant Taxonomy at Oregon State University (three years) and numerous botanical science and aquatic botany courses (thirty-five years) 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. A full resume is available upon request. He has a valid CDFW collecting permit.

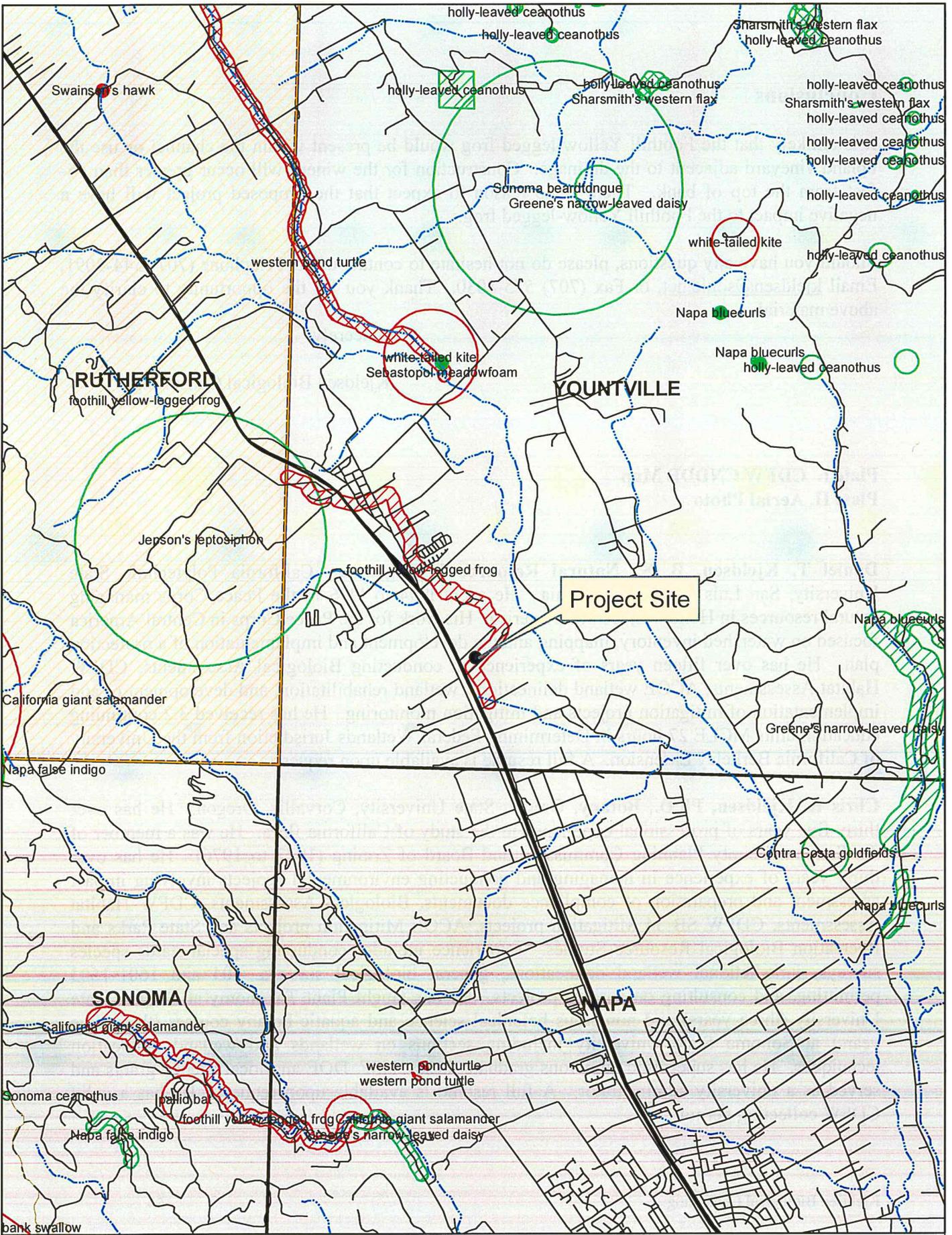


Plate I. CDFW CNDDDB RareFind 3 Map 0 0.35 0.7 1.4 Miles (Data Date February 2016)



Plate II. Aerial Photo

<b>Rana boylei</b>		foothill yellow-legged frog		Element Code: AAABH01050	
_____ Status _____		NDDB Element Ranks		_____ Other Lists _____	
Federal: None		Global: G3		CDFG Status: SC	
State: None		State: S3			
_____ Habitat Associations _____					
General: PARTLY-SHADED, SHALLOW STREAMS & RIFFLES WITH A ROCKY SUBSTRATE IN A VARIETY OF HABITATS.					
Micro: NEED AT LEAST SOME COBBLE-SIZED SUBSTRATE FOR EGG-LAYING. NEED AT LEAST 15 WEEKS TO ATTAIN METAMORPHOSIS.					

Occurrence No. 119      Map Index: 32348      EO Index: 2572      \_\_\_\_\_ Dates Last Seen \_\_\_\_\_  
Occ Rank: Unknown      Element: 1956-04-XX  
Origin: Natural/Native occurrence      Site: 1956-04-XX  
Presence: Presumed Extant  
Trend: Unknown      Record Last Updated: 1995-07-25

Quad Summary: Rutherford (3812244/500B), Yountville (3812243/500A)  
County Summary: Napa

Lat/Long: 38.39524° / -122.35190°      Township: 06N  
UTM: Zone-10 N4249868 E556595      Range: 04W  
Mapping Precision: NON-SPECIFIC      Section: 06      Qtr: XX  
Symbol Type: POLYGON      Meridian: M  
Area:      Elevation: 80 ft

Location: DRY CREEK TRIBUTARY TO NAPA RIVER IN YOUNTVILLE.  
Location Detail:  
Ecological: RIVER.  
Threat:  
General: SPARSE NUMBERS OF FROGS OBSERVED.  
Owner/Manager: UNKNOWN

\_\_\_\_\_ Sources \_\_\_\_\_  
GER93U0001      GERSTUNG, E. MEMO OF AMPHIBIA OBSERVED ON NORTHERN CALIFORNIA WATERS DURING MAR-APR 1956.  
1993-04-30.