

“M”

Biological Study

May 22, 2015

Michael Cook
Firma Design Group
1425 N. McDowell Blvd., Suite 130
Petaluma, CA 94954

Michael,

The following summarizes my findings from the site visit conducted May 20, 2015, at 1075 Buchli Station Road, Napa, Napa County, California, during which I conducted a plant survey.

Introduction and Site Description

Per the letter dated May 14, 2015 (Attachment A) from the County of Napa, Planning Building, and Environmental Services Division, addressed to Michael Cook, a survey for showy Indian clover (*Trifolium amoenum*) is required to complete the Use Permit Major Modification and Variance applications (Permit Nos. P14-00408 and P1400409) at 1075 Buchli Station Road, Napa, Napa County, California (Project Area). The Project Area is located approximately 0.25 mile south of the intersection of Las Amigas Road and Buchli Station Road. It consists of four separate areas, listed below from north to south:

- A partially landscaped, partially paved, and partially unused field
- Existing, active vineyard
- A small, unoccupied homestead with two standing, abandoned structures (a house and a barn or garage structure).
- A small, unoccupied homestead with a standing, abandoned house.

On May 20, 2015, Scott Batiuk, plant biologist with WRA, Inc. (WRA), visited the Project Area to perform a targeted rare plant survey. In addition to the rare plant survey, I assessed the site for other special-status plant species and any other potentially sensitive biological resources.

The Project Area is flat to gently sloping, and elevations range from approximately 25 to 75 feet above sea level. It is underlain by one soil type, the Haire series, a neutral to strongly acid alluvial fine loam derived from sandstone and granodiorite. These soils are moderately well drained with slow to rapid runoff and very slow permeability¹.

Currently, the Project Area consists of landscaping and built structures; rows of grapevines in an active vineyard; and non-native grassland in a remnant of a fallow, historically farmed field. Each of the separate areas will be addressed individually below:

¹ California Soil Resource Lab. 2015. SoilWeb: An Online Soil Survey Browser. University of California, Davis. Most recently accessed: May 2015.

- The northernmost part of the Project Area is approximately 40 percent landscaped and paved and 60 percent fallow, historic agricultural field. Vegetation in the landscaped area consists of ornamental plantings, such as acacia (*Acacia* sp.), cherry plum (*Prunus cerasifera*), cork oak (*Quercus suber*), coast live oak (*Quercus agrifolia* var. *agrifolia*), and Matilija poppy (*Romneya* sp.), with scattered non-native annual forbs such as bull mallow (*Malva nicaeensis*) and Jersey cudweed (*Pseudognaphalium luteoalbum*). The vegetation of the historic agricultural field consists of dense, non-native grasses, primarily Harding grass (*Phalaris aquatica*), and scattered non-native forbs such as cutleaf geranium (*Geranium dissectum*). Two small coast live oaks are present along the fence line.
- The vineyard area is almost entirely rows of grapevines (*Vitis* sp.) with a fringe of ruderal, herbaceous vegetation and a dirt road along the northern perimeter. The grapevine area is actively maintained and heavily disturbed as a result of tilling and foot and vehicle traffic. The vegetation is dominated by non-native or disturbance-adapted native species such as cultivated oats (*Avena sativa*), bull mallow, prickly lettuce (*Lactuca serriola*), and tall annual willowherb (*Epilobium brachycarpum*).
- The northernmost abandoned homestead area contains large, built structures. It is also used as a staging and storage area for equipment. There is a large, ornamental sycamore (*Platanus* sp.) in front of the house and a large, ornamental mulberry (*Morus alba*) behind it. The rest of the area is mowed or otherwise heavily disturbed as a result of foot and vehicle traffic and past land use. It contains sparse, primarily non-native annual plant species, such as spotted spurge (*Euphorbia maculata*) and various non-native annual grasses.
- The southernmost abandoned homestead area contains a built structures surrounded by landscaped and ruderal vegetation. The west and north edges of the area are lined with large Lombardy poplars (*Populus nigra*) and weeping willows (*Salix babylonica*). Various ornamental species are present in front of the house. The remaining area contains sparse, primarily non-native annual grasses and forbs.

Rare Plant Survey

Background Literature Search

Prior to the rare plant survey, I conducted a database query of the California Natural Diversity Database (CNDDDB)² and the California Native Plant Society (CNPS) Electronic Inventory³ of the Kenwood 7.5-minute USGS quadrangle to assess special-status plant species, in addition to showy Indian clover, that may have the potential to occur in the Project Area. Thirty-three special-status plant species have been documented from the Kenwood quadrangle, including showy Indian clover.

2 California Department of Fish and Wildlife (CDFW). 2015. California Natural Diversity Database (CNDDDB), Wildlife and Habitat Data Analysis Branch, Sacramento, CA. Accessed: May 2015.

3 California Native Plant Society (CNPS). 2015a. Electronic Inventory of Rare and Endangered Vascular Plants of California. California Native Plant Society, Sacramento, CA. Available at: <http://www.cnps.org/inventory>. Accessed: May 2015.

Field Survey Method

I performed an on-site special-status plant assessment and survey for showy Indian clover, per the request of the County of Napa on May 14, 2015. I traversed the entire Project Area, and recorded all observed plant species, which were identified with Jepson eFlora⁴, to a taxonomic level sufficient to determine rarity (Attachment B).

Site Assessment and Survey Results

Of the 17 special-status plant species, including showy Indian clover, all are unlikely or have no potential to occur within the Project Area. The highly and actively disturbed nature of much of the Project Area does not provide suitable habitat for showy Indian clover or other special-status plant species. In the northernmost part of the Project Area, the density and height of the grasses as well as the resultant thatch accumulation, in conjunction with historic and recent management activities (i.e., tilling, disking, mowing), precludes the opportunity for spring native annuals to persist on-site. Additionally, I did not observe any summer native annuals (e.g. tarweed (*Hemizonia congesta*)) either standing or within the accumulated thatch. Throughout California, summer native annuals continue to maintain a relatively healthy position within non-native annual grasslands, and their absence from such can generally be regarded as a site having experienced complete type conversion to non-native vegetation.

In addition to the density of non-native herbaceous vegetation and land management activities, several of the special-status plant species are unlikely or have no potential to occur within the Project Area because of one or more of the following reasons:

- Hydrologic conditions (e.g. marsh habitat, vernal pool habitat) necessary to support the special-status plants do not exist on site;
- Edaphic (soil) conditions (e.g. serpentine, volcanics) necessary to support the special-status plants do not exist on site;
- Topographic conditions (e.g. north-facing, mountainous) necessary to support the special-status plants do not exist on site;
- Associated vegetation communities (e.g. chaparral, closed-cone coniferous forest) necessary to support the special-status plants do not exist on site.

No special-status plant species, including showy Indian clover, were observed within the Study Area. Sixty-nine plant species (not including some ornamental, landscape species) were observed within the Project Area, of which eight are considered not native to California (Attachment B).

Other Potential Sensitive Biological Resources

Following *A Manual of California Vegetation, Online Edition*⁵, where applicable, the Project Area is composed of two biological communities: Harding grass swards (*Phalaris aquatica* Semi-Naturalized Herbaceous Stands) and developed/ruderal/agricultural areas. These are not sensitive biological communities according to the California Department of Fish and Wildlife (CDFW). Additionally, I did not observe areas that appear to meet the criteria of wetland⁶ or

4 Jepson Flora Project (eds.). 2015. Jepson eFlora. Online at: <http://ucjeps.berkeley.edu/IJM.html>; accessed May 2015.

5 California Native Plant Society. 2015b. *A Manual of California Vegetation, Online Edition*. Sacramento, California. Available online at: <http://vegetation.cnps.org/>; most recently accessed: May 2015.

6 U.S. Army Corps of Engineers (Corps). 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). September.

non-wetland waters⁷ under the Clean Water Act. Therefore, the Project Area does not contain other potential sensitive biological resources.

Summary and Recommendations

A focused rare plant survey was conducted on May 20, 2015, within the Project Area to determine the absence or presence of showy Indian clover and assess the potential to support other special-status species and sensitive biological resources. The survey resulted in negative findings for showy Indian clover and other special-status plant species. Additionally, the Project Area does not have the potential to support showy Indian clover or other special-status plant species, and does not contain other potential sensitive biological resources (e.g. sensitive vegetation communities). Therefore, Project activities will not impact special-status plant species or sensitive vegetation communities.

Should you have any questions or concerns, please feel free to contact me. Sincerely,



Scott Batiuk
Plant Biologist
batiuk@wra-ca.com
WRA, Inc.
2169-G East Francisco Blvd.
San Rafael, California 94901

⁷ U.S. Army Corps of Engineers (Corps). 2005. Regulatory Guidance Letter No. 05-05. Ordinary High Water Mark Identification. December 7.

Attachment A – Letter from County of Napa, Planning Building, and Environmental Services
Division, May 14, 2015



A Tradition of Stewardship
A Commitment to Service

Planning, Building & Environmental Services

1195 Third Street, Suite 210
Napa, CA 94559
www.countyofnapa.org

David Morrison
Director

May 14, 2015

Bouchaine Winery
c/o Michael Cook
Firma Design
1425 N. McDowell Blvd., Suite 130
Petaluma, CA 94954

**Re: Bouchaine Winery – Major Modification No. P14-00408 & Variance No. P14-00409
1075 Buchli Station Road, Napa, CA (APN 047-320-031)**

Dear Mr. Cook,

Thank you for your April 15, 2015 revised submittal of the above-referenced Use Permit Major Modification and Variance application. An initial review of the resubmittal has been conducted. At this time, your application remains incomplete pursuant to Government Code Section 65943 and the additional information listed below is needed to enable the County to continue with the review of your application. I have also identified supplemental environmental information that has been determined to be necessary for the County to adequately evaluate potentially significant impacts pursuant to CEQA (California Environmental Quality Act).

Planning Division:

1. Please submit the following information so that we may complete our environmental review of the proposal:
 - a. Biological Survey – The project site is identified by the California Natural Diversity Database as being within the Showy Rancheria Clover habitat area. Please submit a biological survey prepared by a qualified biologist which addresses this issue. Note that the survey only needs to focus on the areas proposed for construction (i.e., hospitality center, water system permit improvements, demolition of the two existing residences, etc.)
 - b. Water Availability Analysis – Please revise the analysis to address existing water usage for employees and current visitation/events. A copy of the Final Water Availability Analysis policy document adopted by the Board of Supervisors on May 12, 2015 will be sent to you for reference via email.

Project Issues:

While not completeness items, the issues identified below are provided for your information and to be addressed at time of building permit submittal.

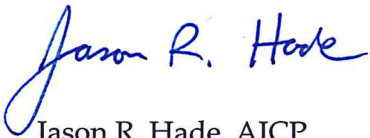
Building Division:

1. Plans do not indicate compliance with separation of occupancies in the hospitality wine areas.
2. Assembly (A) needs to be 1 hour separation (sprinklered) from office (B) , 2 hours (non sprinklered). B from storage (S-2), 2 hour separation (non-sprinklered) and 1 hour (sprinklered).
3. Men's restroom needs two water closets for hospitality center and one urinal is required.
4. In the wine club, two water closets are required for the women's restroom.
5. Describe the type of storage in the hospitality center. Will any hazardous materials be stored?
6. An accessible van parking space is needed for the production area with an accessible path of travel.

Thank you in advance for providing the above material. In order to expedite review of your resubmittal by the County, I would appreciate it if you would submit all materials required for completeness at one time directly to me. In addition, please insure that all revised plans, reports, or other resubmitted documents are clearly marked "revised" and dated.

If you have any questions about this letter or other matters relating to your application, feel free to contact me at 707-259-8757 or via email at jason.hade@countyofnapa.org.

Sincerely,



Jason R. Hade, AICP
Planner III

Attachment B – Plant Species Observed in the Project Area, May 20, 2015

Plant Species Observed on May 20, 2015

Family	Scientific Name	Common Name	Phenology and Form	Origin	Rare Status	Invasive Status
Amaranthaceae	<i>Amaranthus aff. albus</i>	pigweed amaranth	annual forb	non-native	--	--
Apiaceae	<i>Foeniculum vulgare</i>	fennel	perennial forb	non-native	--	high
Araceae	<i>Zantedeschia aethiopica</i>	calla lily	perennial forb	non-native	--	limited
Asteraceae	<i>Calendula arvensis</i>	field marigold	annual forb	non-native	--	--
Asteraceae	<i>Carduus pycnocephalus</i>	Italian thistle	annual forb	non-native	--	moderate
Asteraceae	<i>Cirsium vulgare</i>	bull thistle	perennial forb	non-native	--	moderate
Asteraceae	<i>Erigeron karvinskianus</i>	Latin American fleabane	perennial forb	non-native	--	assessed
Asteraceae	<i>Helminthotheca echioides</i>	bristly ox-tongue	perennial forb	non-native	--	limited
Asteraceae	<i>Hypochaeris radicata</i>	hairy catsear	perennial forb	non-native	--	moderate
Asteraceae	<i>Lactuca serriola</i>	prickly lettuce	annual forb	non-native	--	assessed
Asteraceae	<i>Pseudognaphalium luteoalbum</i>	Jersey cudweed	annual forb	non-native	--	--
Asteraceae	<i>Senecio vulgaris</i>	old man in the Spring	annual forb	non-native	--	--
Asteraceae	<i>Sonchus oleraceus</i>	common sow thistle	annual forb	non-native	--	--
Berberidaceae	<i>Berberis</i> sp. (ornamental)	Oregon grape	evergreen shrub	non-native	--	--
Brassicaceae	<i>Brassica rapa</i>	field mustard	annual forb	non-native	--	limited
Brassicaceae	<i>Lepidium nitidum</i>	shining pepperweed	annual forb	native	--	--
Brassicaceae	<i>Raphanus sativus</i>	wild radish	perennial forb	non-native	--	limited
Cactaceae	<i>Opuntia ficus-indica</i> (ornamental)	tuna cactus	evergreen shrub	non-native	--	--
Caryophyllaceae	<i>Spergularia rubra</i>	red sandspurry	perennial forb	non-native	--	--
Convolvulaceae	<i>Convolvulus arvensis</i>	field bindweed	perennial forb	non-native	--	assessed
Ericaceae	<i>Arctostaphylos</i> (ornamental)	manzanita	evergreen shrub	native	--	--
Euphorbiaceae	<i>Euphorbia maculata</i>	spotted spurge	annual forb	non-native	--	--
Fabaceae	<i>Acacia</i> sp. (ornamental)	acacia	evergreen tree	non-native	--	--
Fabaceae	<i>Cercis</i> sp. (ornamental)	redbud	deciduous shrub	non-native	--	--
Fabaceae	<i>Medicago polymorpha</i>	bur medic	annual forb	non-native	--	limited
Fabaceae	<i>Trifolium repens</i>	white clover	perennial forb	non-native	--	--
Fabaceae	<i>Vicia sativa</i> ssp. <i>nigra</i>	garden vetch	annual forb	non-native	--	--
Fabaceae	<i>Vicia villosa</i> ssp. <i>varia</i>	woollypod vetch	annual forb	non-native	--	--
Fagaceae	<i>Quercus agrifolia</i> var. <i>agrifolia</i>	coast live oak	evergreen tree	native	--	--
Fagaceae	<i>Quercus suber</i> (ornamental)	cork oak	evergreen tree	non-native	--	--
Geraniaceae	<i>Erodium cicutarium</i>	redstem stork's bill	annual forb	non-native	--	limited
Geraniaceae	<i>Geranium dissectum</i>	cutleaf geranium	annual forb	non-native	--	moderate

Family	Scientific Name	Common Name	Phenology and Form	Origin	Rare Status	Invasive Status
Lamiaceae	<i>Salvia</i> sp. (ornamental)	sage	evergreen shrub	non-native	--	
Lythraceae	<i>Lythrum hyssopifolia</i>	hyssop loosestrife	annual forb	non-native	--	moderate
Malvaceae	<i>Malva nicaeensis</i>	bull mallow	annual forb	non-native	--	--
Myrsinaceae [Primulaceae]	<i>Lysimachia arvensis</i> [<i>Anagallis a.</i>]	scarlet pimpernel	annual forb	non-native	--	--
Onagraceae	<i>Epilobium brachycarpum</i>	annual willowherb	annual forb	native	--	--
Onagraceae	<i>Epilobium ciliatum</i>	fringed willowherb	perennial forb	native	--	--
Papaveraceae	<i>Eschscholzia californica</i>	California poppy	perennial forb	native	--	--
Papaveraceae	<i>Romneya</i> sp.	matilija poppy	perennial forb	native	--	--
Plantaginaceae	<i>Plantago lanceolata</i>	English plantain	perennial forb	non-native	--	limited
Platanaceae	<i>Platanus</i> sp. (ornamental)	sycamore	deciduous tree	non-native	--	--
Poaceae	<i>Avena barbata</i>	slender oat	annual graminoid	non-native	--	moderate
Poaceae	<i>Avena sativa</i>	cultivated oats	perennial graminoid	non-native	--	--
Poaceae	<i>Briza minor</i>	little quakinggrass	annual graminoid	non-native	--	--
Poaceae	<i>Bromus catharticus</i>	rescuegrass	perennial graminoid	non-native	--	--
Poaceae	<i>Bromus diandrus</i>	riggut brome	annual graminoid	non-native	--	moderate
Poaceae	<i>Bromus hordeaceus</i>	soft chess	annual graminoid	non-native	--	limited
Poaceae	<i>Cynodon dactylon</i>	Bermuda grass	perennial graminoid	non-native	--	moderate
Poaceae	<i>Festuca arundinacea</i>	tall fescue	perennial graminoid	non-native	--	moderate
Poaceae	<i>Festuca bromoides</i> [<i>Vulpia b.</i>]	brome fescue	perennial graminoid	non-native	--	--
Poaceae	<i>Festuca perennis</i> [<i>Lolium multiflorum</i> ; <i>L. perenne</i>]	Italian rye grass	annual graminoid	non-native	--	moderate
Poaceae	<i>Hordeum brachyantherum</i> ssp. <i>brachyantherum</i>	meadow barley	perennial graminoid	native	--	--
Poaceae	<i>Hordeum marinum</i> ssp. <i>gussoneanum</i>	Mediterranean barley	annual graminoid	non-native	--	moderate
Poaceae	<i>Hordeum murinum</i>	mouse barley	annual graminoid	non-native	--	moderate
Poaceae	<i>Phalaris aquatica</i>	harding grass	perennial graminoid	non-native	--	moderate
Poaceae	<i>Triticum aestivum</i>	bread wheat	annual graminoid	non-native	--	--
Polygonaceae	<i>Polygonum aviculare</i> [<i>P. arenastrum</i>]	dooryard knotweed	perennial forb	non-native	--	--
Polygonaceae	<i>Rumex acetosella</i>	common sheep sorrel	perennial forb	non-native	--	moderate
Polygonaceae	<i>Rumex crispus</i>	curly dock	perennial forb	non-native	--	limited
Polygonaceae	<i>Rumex pulcher</i>	fiddle dock	perennial forb	non-native	--	--
Rosaceae	<i>Prunus cerasifera</i>	cherry plum	deciduous tree	non-native	--	limited
Rosaceae	<i>Rosa</i> sp. (ornamental)	rose	evergreen shrub	non-native	--	--
Rosaceae	<i>Rubus armeniacus</i> [<i>R. discolor</i>]	Himalayan blackberry	evergreen shrub	non-native	--	high
Salicaceae	<i>Salix babylonica</i>	weeping willow	deciduous tree	non-native	--	--

Family	Scientific Name	Common Name	Phenology and Form	Origin	Rare Status	Invasive Status
Sapindaceae [Aceraceae]	<i>Acer saccharinum</i> (ornamental)	silver maple	deciduous tree	non-native	--	--
Vitaceae	<i>Vitis</i> sp.	grape	deciduous vine	non-native	--	--
Moraceae	<i>Morus alba</i> (ornamental)	white mulberry	deciduous tree	non-native	--	--