EXHIBIT B-2

September 26, 2019

Donald Barrella, Planner III
County of Napa
Planning, Building, and Environmental Services
1195 Third Street, Suite 210
Napa, California 94559

RE: Response to Comments (Biology) – V. Sattui Hibbard Ranch Vineyard Conversion Agricultural Erosion Control Plan Application (ECPA) File No. P19-00069-ECPA; Terminus of Henry Road: APN 050-380-014

Dear Mr. Barrella:

This letter provides a response to a request from Napa County for additional information/analysis regarding biological resources for the property located at the terminus of Henry Road (APN 050-380-014) in Napa County, California. The request for additional information is outlined in a letter from the Planning, Building, and Environmental Services Department, *Application Review Determination – V. Sattui Hibbard Ranch Vineyard Conversion Agricultural Erosion Control Plan (ECPA) File #P19-00069-ECPA*.

The proposed project is the installation of 9 vineyard blocks totaling approximately 34.0 net acres[1] (54.3 gross acres including maximum clearing limits). WRA analyzed the potential impacts to sensitive biological resources. The following addresses the County of Napa's follow-up requests for additional information.

Response to County Request – Letter

The following section directly addresses the comments from the County point-by-point (with text from the County in *italics*).

1. Agricultural Erosion Control Plan Application Completeness Items

c. ECPA Plans

iii. Revised block boundaries avoiding and providing a minimum 50 foot buffer from all Purple needle-grass grassland mapped within the property…

> The Napa County General Plan Conservation Element Policy CON-17 requires preservation at 2:1 ratio or greater of native grassland where avoidance, restoration, or replacement is not feasible. The Study Area contains 0.62 acre of purple needlegrass

[1] These acreages reflect the revised ECP dated October 2019, which was modified to avoid constraints such as landslides and seasonal wetlands.

grassland, 0.20 of which is within the Project Area. The December 2018 Biological Resources Reconnaissance Survey Report drafted by WRA recommends setting aside of 0.42 acres of purple needlegrass grassland to meet the 2:1 ratio for preservation.

Purple needlegrass is believed to be an opportunistic grass species, typically growing in areas of California with higher precipitation amounts (CNPS 2019). One of the biggest threats to purple needlegrass are non-native annual grasses due to competition of resources and alteration of environmental conditions at the soil surface (Hamilton et. al. 1999). Therefore, reduction or control of annual non-native grasses is important in maintaining the viability of existing stands of purple needlegrass grasslands.

Purple needlegrass is adapted to disturbance, indicated by increased growth and recruitment following fires and grazing (when conducted appropriately), activities which reduce biomass of the non-native annual species and provide bare soil for seed germination (CNPS 2019). Disturbance (grazing, mowing) during appropriate times of the year is also known to reduce recruitment and growth of invasive annual grasses, one of the biggest threats to purple needlegrass. Therefore, appropriately timed and type of disturbance within and around purple needlegrass is sufficient to maintain the viability of populations.

Within the proposed vineyard blocks, the purple needlegrass grasslands are highly impacted by aggressive non-native grasses, including wild oats (*Avena* spp.), ripgut brome (*Bromus diandrus*), and soft chess (*Bromus hordeaceus*) and additional non-native species, which comprise at least 80 percent cover within the purple needlegrass grassland patches observed in the proposed vineyard blocks.

The placement of a 25-foot vegetated vineyard avenue adjacent to the purple needlegrass grassland patches is a sufficient buffer to allow the grasslands to maintain viability and populations, as the vegetated vineyard avenues are regularly disturbed, which reduces the recruitment and biomass of annual non-native grasses, major threats to purple needlegrass grassland. A no-disturbance buffer around the purple needlegrass grassland would likely be detrimental to the native grass as the absence of disturbance would allow for the continued recruitment of annual non-native grasses.

Therefore, no buffer between the purple needlegrass grassland and the vegetated vineyard avenue is necessary. However, it is recommended a cover crop blend utilizing primarily native species, such as the “Native, No Till Blend” listed in the Napa Resource Conservation District BMP report, be used within the vegetated vineyard avenue to the greatest extent practical, or, at a minimum, within the portions of the vegetated vineyard avenue adjacent to the purple needlegrass grasslands.

The edge of the grasslands within the vicinity of proposed vineyard be should be flagged or otherwise delineated prior to construction to avoid accidental impacts.

2. Supplemental Environmental Information:

a. <u>Biological Resource Reconnaissance Survey Report</u>:

i. Identify the anticipated number of trees, including species and diameter at breast height (DBH), of trees being removed as part of the project. This information can also be provided as part of the ESPA plans rather than in a Survey addendum/update.

On August 8, 2019, two biologists (wetland/plant biologist and wildlife biologist) traversed the Project Area[2] to perform a survey of those trees within and on the immediate edge of the Project Area (proposed vineyard blocks). As a result there are 35 trees scheduled for removal as part of the project: one (1) California bay (*Umbellularia californica*), seven (7) coast live oak (*Quercus agrifolia*), and twenty seven (27) valley oak (*Q. lobata*). The trees are located in proposed Vineyard Blocks 1C, 2A, 6E, 7A-2, 7B, and 7C. The tree locations are illustrated in Figure A-1 and summarized in Table A-1 attached at the end of this letter.

ii. Provide a targeted bat habitat assessment that identifies potential bat habitat trees located with the project area and extent of potential bat habitat trees within parcel.

Bats are typically considered during environmental review by Napa County and also protected by California Fish and Game Code, i.e., Sections 86, 2000, 2014, 3007, and 4150, along with Title 14 of California Code of Regulations. Bats are typically considered during environmental review by Napa County and also protected by California Fish and Game Code, i.e., Sections 86, 2000, 2014, 3007, and 4150, along with Title 14 of California Code of Regulations.

Methods

A daytime roost survey was performed on August 8, 2019. The survey assessed all trees and substrates within the proposed vineyard blocks to determine if bat roosting habitat was present. This survey was completed by walking the entire Project Area, and surveying each tree scheduled for removal. During the survey the biologist noted conditions that may be favorable or unfavorable for bat use such as thermal conditions, frequency of disturbance, and evidence of potential predators. All trees were also investigated for fissures, cracks, or hollows that could provide roosting substrate for bats.

Results

Most of the trees scheduled for removal have no potential to support bats. The majority of trees are healthy valley oak and coast live oak, with solid limbs, no or few holes, and intact, strength bark. Many are small diameter which do not provide suitable mass to maintain stable thermal conditions required by roosting bats.

Two large valley oak trees located in the Project Area have the potential to support roosting bats. These trees have large cavities which were investigated to the extent practical; however, there was no way to fully investigate the upper sections these trees which contained fissures and basal cavities that appear to be suitable for bat roosting. The trees are located in proposed Vineyard Blocks 1C and 7A-2.

Recommendations

The trees should be removed using a two-phase cut system described below to allow for bats to escape the tree.

[2] The Project Area is here intended to reflect the proposed grading limit for the vineyard development.

- Day 1, Any surrounding trees should be removed, and any external limbs can also be removed. If any exfoliating bark has developed it may also be partially peeled off to cause disturbance to the tree.
- Day 2, The tree should be felled in sections and lowered to the ground under the observation of a bat biologist. The sections should be allowed to lie for 24 hours before being processed or off-hauled.

iii. A discussion of the quality and value of foraging and nesting habitat for special-status bird species the property and project area grassland provide, and an analysis of potential impacts associated with the loss of foraging and nesting habitat due to the conversion of the grassland to vineyard.

Grassland within the Study Area is relatively uniform in character and quality as regards special-status bird species, and the vegetative distinction between native and non-native dominated grassland is presumably irrelevant in this context. Based on WRA's experience in Napa County, the Study Area's grasslands are similar to those found in southern Napa County and adjacent areas with similar conditions (topography, soils) and land uses, including presumably those on neighboring properties/lands. As such, the Study Area's grasslands do not appear to be particularly unique or valuable.

Grasshopper sparrow (*Ammodramus savannarum*) and Bryant's savannah sparrow (*Passerculus sandwichensis alaudinus*), both state Species of Special Concern, are the primary examples of special-status, grassland-affiliated bird species with the potential to be present in the Study Area, specifically as nesters. It is worth noting that these species were included in WRA's analysis within the context of avoiding any potential impacts to nesting birds, and neither species has been observed on-site to date (though focused bird surveys at the time[s] of year when detection is most likely have not been performed). At the state level, available literature indicates that the loss and fragmentation of grasslands (due to land conversion) is a primary factor in declines of both taxa (Shuford and Gardali 2008, Vickery 1996). The proposed project will remove existing grassland within the Study Area, while leaving intact various grassland blocks and variable levels of connectivity across both on-site blocks and off-site grassland areas. In and of itself, the proposed project is unlikely to result in significant impacts or local declines of either species (assuming that either or both is present within the Study Area). Cumulatively, however, ongoing local grassland conversions (whether for vineyards or other purposes) will presumably results in significant impacts; the relevant thresholds for such are beyond the scope of this study. Of these taxa, grasshopper sparrow may have a higher likelihood of localized impacts (assuming it is present) due to its seeming preference for larger areas of contiguous grassland.

iv. Confirmation that all seasonal wetlands have been mapped. Based on the site inspection it appears that wetlands may be within Vineyard Block 6B/6C above the wetlands shown east of this block, and within northern portion of Vineyard Block 7A above the large gully that has formed in the last 7 to 10 years located along the western periphery of Vineyard Block 7A.

The August 8, 2019 survey revisited the areas mentioned by the County and indeed there is an expansion of aquatic resources (wetlands) between the 2018 and 2019 site visits. Water year 2019 was much wetter, with extensive rains late into the season which may account for a more readily identified wetland characteristics. These wetlands total approximately 0.33 acre (0.26 acre and 0.07 acre); the project engineers have been

informed of these expansions and have amended the proposed Vineyard Block boundaries. The updated wetlands are included in Figure A-1.

Please contact us if you have questions or require additional information.

Sincerely,

Aaron Arthur
Associate Plant Biologist
Certified California Consulting Botanist #0016
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ENCLOSURES: Attachment A – Tree Figure and Table

CITATIONS

California Native Plant Society. 2019. Manual of California Vegetation, Online Edition. Available at: http://vegetation.cnps.org/

Hamilton, J., Holzapfel, C., Mahall, B. Coexistence and interference between a native perennial grass and non-native annual grasses in California. Oecologia 1999 121:518-526.

Shuford, W.D. and T. Gardali, editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

Vickery, P. D. (1996). Grasshopper Sparrow (*Ammodramus savannarum*), version 2.0. In The Birds of North America (A. F. Poole and F. B. Gill, Editors). Cornell Lab of Ornithology, Ithaca, NY, USA. https://doi.org/10.2173/bna.239.

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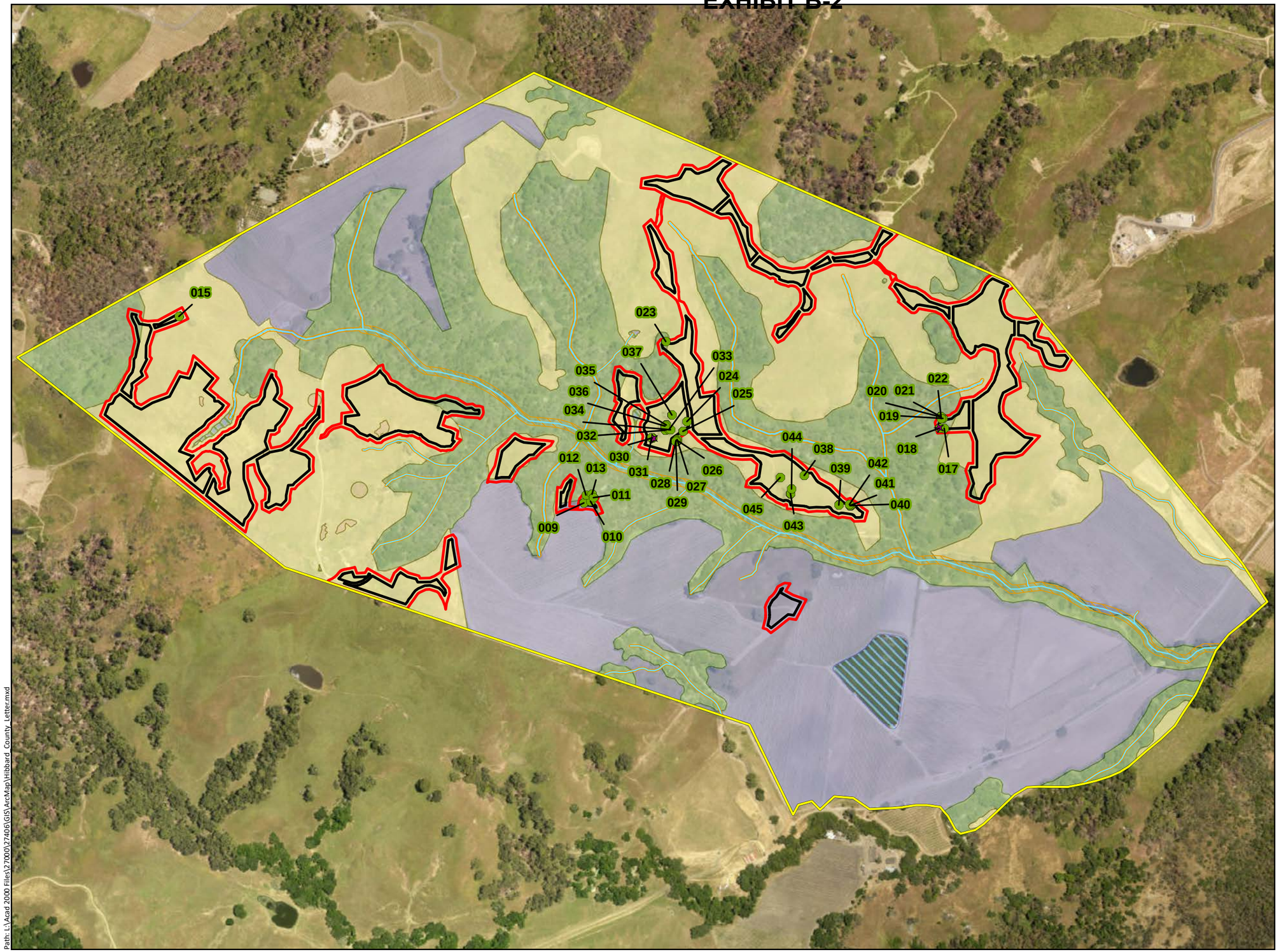
Figure A-1.
Updated Land Cover & Tree Survey

V. Sattui - Hibbard Ranch
Napa County, California



Study
Proposed Block Boundaries
Proposed Clearing Limits
Trees (to be removed)
Bat

Land Cover

Vineyard
Non-native Grassland
Purple needle-grass grassland
Coast live oak - California bay forest
Seasonal Wetland
Agricultural Pond
Streams (centerline)
Streams (TOB)

N

0 500 1,000
Feet

wra
ENVIRONMENTAL CONSULTANTS

Path: L:\Acad 2000 Files\2700\2740\GIS\ArcMap\Hibbard_County_Letter.mxd

Sources: 2016 DigitalGlobe Aerial, WRA | Prepared By: mrochelle, 9/24/2019

Table A-1. Trees Scheduled for Removal **EXHIBIT B-2**

ID	Common Name	Scientific Name	DBH (inches)	Notes
042	California Bay	*Umbellularia californica*	14.75	
017	Coast live oak	*Quercus agrifolia*	43.75	
028	Coast live oak	*Quercus agrifolia*	9.75	
009	Coast live oak	*Quercus agrifolia*	28	
010	Coast live oak	*Quercus agrifolia*	20	
012	Coast live oak	*Quercus agrifolia*	18	
013	Coast live oak	*Quercus agrifolia*	18	
011	Coast live oak	*Quercus agrifolia*		
015	Valley oak	*Quercus lobata*	21.5	
018	Valley oak	*Quercus lobata*	20	Potential bat roost
019	Valley oak	*Quercus lobata*	7.25	
020	Valley oak	*Quercus lobata*	15.25	
021	Valley oak	*Quercus lobata*	9.25	
022	Valley oak	*Quercus lobata*	23	
023	Valley oak	*Quercus lobata*	59	
024	Valley oak	*Quercus lobata*	49.5	
025	Valley oak	*Quercus lobata*	28	
026	Valley oak	*Quercus lobata*	21.5	
027	Valley oak	*Quercus lobata*	8	
029	Valley oak	*Quercus lobata*	27.75, 12	Two trunks
030	Valley oak	*Quercus lobata*	34.5	Potential bat roost
031	Valley oak	*Quercus lobata*	23.5	
032	Valley oak	*Quercus lobata*	28, 11.5	Two trunks
033	Valley oak	*Quercus lobata*	13	
034	Valley oak	*Quercus lobata*	36.5	
035	Valley oak	*Quercus lobata*	29	
036	Valley oak	*Quercus lobata*	15.25	
037	Valley oak	*Quercus lobata*	42.5	
039	Valley oak	*Quercus lobata*	32.25	
040	Valley oak	*Quercus lobata*	15.75	
041	Valley oak	*Quercus lobata*	15.25	
038	Valley oak	*Quercus lobata*	35	
043	Valley oak	*Quercus lobata*	41.5	
044	Valley oak	*Quercus lobata*	41	
045	Valley oak	*Quercus lobata*	36.5	