NORTHWEST BIOSURVEY
Environmental & Planning Services
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May 10, 2023

Mr. Richard Paxton
Bartelt Engineering
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RE: Request From Napa County (Pam Arifian) for Assessment of Woodland and Forest Cover Preservation Sites for the Winrod Vineyard Project (#P20-00247-ECPA)

Dear Mr. Paxton,

At your request, Northwest Biosurvey has assessed the availability of woodland and forest preservation sites for the Winrod Vineyard Project.

In their letter dated 5-2-23, the county determined that 6.5 acres of vegetative canopy cover (tree cover) would be lost as a result of project development. In conformance with Napa County Ordinance Code Section 8.80.130B this canopy loss would require preservation or permanent replacement of 19.5 acres of forest and woodland canopy.

Based on the "VCC Cover Type Analysis Map" prepared by Napa County PBES dated 10-11-2023, the county determined that 9.5 acres of less than 30-percent slope existed on the property outside of the proposed project boundaries and outside of required riparian setbacks. They determined that 22.8 acres of similar property occurred on terrain varying in slope between 30 and 50-percent. Acreage in both categories would be available for canopy preservation if it supports qualifying tree canopy pursuant to Napa Ordinance Code Section 18.108.020(D)(1&2).

Northwest Biosurvey overlayed the county's qualifying slope map on the vegetation map we prepared and updated for the project in 2021. In conformance with Napa Ordinance Code Section 8.80.130B, the vegetation was assessed in its condition prior to June 19, 2018, which was its condition prior to the Tubbs Fire. The map (**Figure 1**) is provided below. As noted on the map, red polygons represent slopes of 30-percent or less while blue polygons represent slopes ranging from 30-50 percent. Pursuant to Ordinance Section 18.108.020(D)(2), slopes ranging from 30-50-percent are allowed to be used for preservation once all slopes of 30-percent or less are used for preservation.

The cumulative area of each vegetation type was calculated within each of the county's qualifying slope polygons. The results are provided in **Table 1** Below:

Table 1. Area of Vegetation Types Occurring within Qualifying Slope Polygons

COVER TYPE	Pre-Tubbs Fire Vegetation		Total Acres of Cover Types in Approved Pre-fire Areas with Slopes Ranging From 0-50%
	Approved* Acres < 30% Slope	Approved Acres 30-50% Slope	
Coast Redwood Forest	-	0.346	0.346
Douglas Fir Forest	2.015	14.444	16.459
Knobcone Pine Forest	0.237	0.045	0.282
Mixed Oak Woodland	4.000	7.568	11.568
Blue Oak Woodland	0.164	0.002	0.166
Pacific Madrone Forest	0.032	0.097	0.129
Combined Woodland/Forest	**6.448**	**22.502**	**28.95**
Chamise Chaparral	-	-	-
Wild Oat Grassland	0.028	0.26	0.288
Vineyard	0.012	-	0.012
Ruderal (disturbed)	0.023	0.041	0.064
Total Acres of Cover Types	**6.511**	**22.803**	**29.314**

*Approved based on 30% and 30-50% Slope Polygons provided in Napa County PBES Map Dated 10-11-2022

As shown in **Table 1**, a total of 28.95 acres of diverse forest and woodland cover types occur within areas outside of the project footprint and riparian setbacks with slopes ranging from 0-50 percent based on the County "VCC Cover Type Analysis Map". As shown in **Table 1**, a total of 6.448 acres occur on slopes of 30-percent or less while 22.502 acres occur on slopes ranging from 30 to 50-percent.

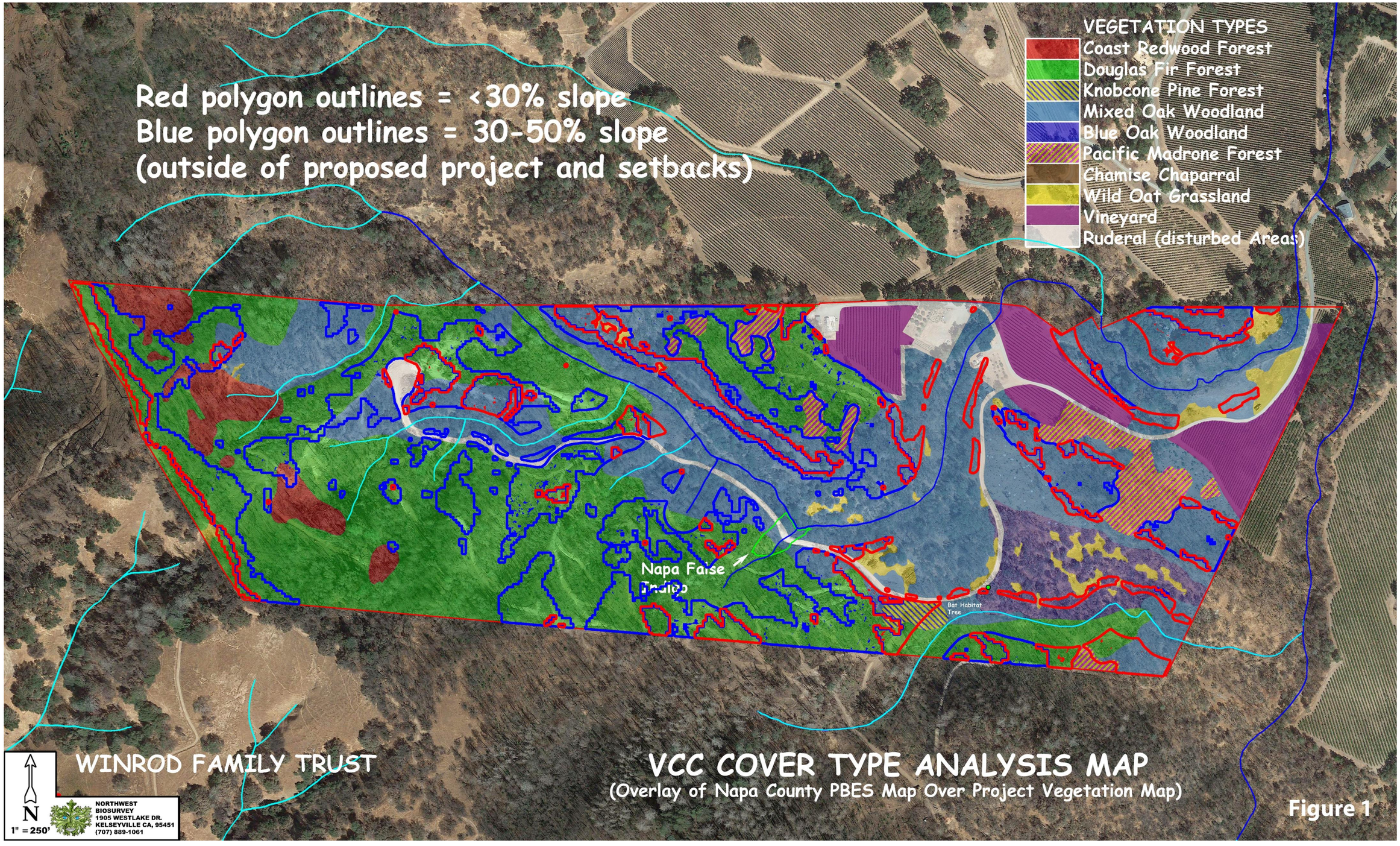
Conclusion and Recommendations: Based on the availability of qualifying woodland and forest acreage in excess of the required 19.5 preservation acres, and particularly on the diverse set of woodland and forest types included, we believe that the mitigation requirements for this project are met based on onsite preservation.

The vineyard operator and project engineer have requested that, at least in part, mitigation of lost vegetative canopy be made up with replanting in riparian setbacks in a manner compliant with Napa County Ordinance Section NC 18.108.020(D)(4) in order to minimize channel sedimentation and improve water quality. Northwest Biosurvey concurs with this request with the following caveats:

- That the plan be prepared by a professional restoration specialist,
- That it incorporates riparian species (willow, cottonwood, ash, etc.) listed in the floristic table included in the biological resource assessment completed for this project, and that it be planted in a similar woodland structure as occurs on site.
- That the restoration site be regularly maintained and inspected by the professional restoration expert during establishment and on at least a yearly basis for five years following initial planting.

Sincerely,

Steve Zalusky
Principal Biologist


Red polygon outlines = <30% slope
Blue polygon outlines = 30-50% slope
(outside of proposed project and setbacks)
VEGETATION TYPES
Coast Redwood Forest
Douglas Fir Forest
Knobcone Pine Forest
Mixed Oak Woodland
Blue Oak Woodland
Pacific Madrone Forest
Chamise Chaparral
Wild Oat Grassland
Vineyard
Ruderal (disturbed Areas)
Napa False Indigo
Bat Habitat Tree
WINROD FAMILY TRUST
N
1" = 250'
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VCC COVER TYPE ANALYSIS MAP
(Overlay of Napa County PBES Map Over Project Vegetation Map)

Figure 1