
WOODLAND LOSS ASSESSMENT AND MITIGATION

Addendum to:

**BIOLOGICAL RESOURCE ASSESSMENT
WITH BOTANICAL SURVEYS
AND DELINEATION OF WATERS OF THE U.S.
FOR
THE VINEYARDIST ESTATE
APNs 020-430-018, 019, & 027
NAPA, CA**

*Original report – July 19, 2023
Addendum – April 5, 2024*

**Prepared by
Northwest Biosurvey**



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1.0 Purpose of Woodland Loss Assessment Addendum:

Northwest Biosurvey completed a Biological Resource Assessment for the Vineyardist Estate for P23-00326-ECPA in July of 2023. That assessment included a woodland loss assessment; however, since the time of submittal of the original report, the project has been modified. One vineyard block has been eliminated and the remaining blocks have been reduced in size to a cumulative area of less than 5 acres.

This assessment will analyze the potential woodland loss of the updated project and will propose the establishment of new woodland preservation areas to comply with the 2:1 preservation ratio required in Napa County Ordinance 1438 Section 17.

2.0 Methodology:

The pre-project map of vegetation and Waters of the U.S. was overlaid on the most currently available aerial photo dated May 13, 2023 (**Figure 1**). The following information was then plotted on the base map:

- Current vineyard block areas
- Stream setbacks
- Existing deed restricted woodland preservation areas established for vineyard development completed in 2016
- All areas with slopes less than 30-percent, and therefore, potentially available as woodland preservation sites.

Potential woodland loss originally calculated in Table 1 of the July 19, 2023, assessment report was recalculated using the new vineyard block areas and locations to produce an updated **Woodland Loss Table (Table 1)**, provided below.

Woodland replacement acreage was then calculated at a ration of 2:1 and is presented in **Table 2** below.

Based on the required preservation acreage required for each impacted woodland or forest type, areas available as preservation sites were then identified and mapped in **Figure 1**.

3.0 Results:

The results of this analysis are provided in **Tables 1 & 2** and **Figure 1** below.

TABLE 1. ESTIMATED WOODLAND LOSS

COVER TYPE	Total Acres of Cover Type on Property	Percent of Property Supporting Cover Type	Vineyard Blocks (Acres)					Acres of Cover Types in Vineyard Blocks	Percent of Cover Types in Vineyard Blocks
			VB 1	VB 2	VB 3	VB 4	VB 5		
Douglas Fir Forest	61.56	57.72	-	0.06	1.41	0.30	0.24	2.01	3.27
California Black Oak Forest	24.23	22.72	2.15	0.28	-	-	-	2.43	10.03
Coast Live Oak Woodland	3.27	3.07	-	-	-	0.40	-	0.40	12.23
Chamise Chaparral	13.73	12.87	-	-	0.04	-	-	0.04	0.29
Wild Oat Grassland	0.42	0.39	-	-	-	-	-	0.00	0.00
Vineyard	2.33	2.18	-	-	-	-	-	0.00	0.00
Ruderal	1.12	1.05	-	-	0.05	0.04	0.01	0.10	8.93
Total Acres of Cover Type	106.66	100.00	2.15	0.34	1.50	0.74	0.25	4.98	4.67*

*Percent of property within proposed new vineyard blocks

TABLE 2. WOODLAND AVAILABLE FOR PRESERVATION VS. AMOUNT REQUIRED

WOODLAND TYPE	Acres of Community Impacted	Preservation Acres Needed	Preservation Acres Available
Douglas fir forest	2.01	4.02	10.52
California black oak forest	2.43	4.86	2.59
Coast live oak woodland	0.40	0.80	0.67

4.0 Analysis and Recommendations:

- A. Coast Live Oak Woodland:** A total of 0.80 acre of this community would be required for mitigation while only 0.67 acre of this community exists outside of proposed vineyard blocks on slopes less than 30-percent. However, the amount of this community within vineyard block VB4 accounts for only 12.23-percent of the community occurring within the property. It is recommended that the remaining 0.13 preservation acre required be made up through preservation of all of the remaining 2.87 acres (87.77-percent) of this community on the property. The proposed preservation area is shown in **Figure 1**.

Should the county determine that more preservation acres are needed, this may be made up at a to-be-determined ratio of preserved Douglas fir forest acres, which are abundantly available (see **Table 2**) and contain a continuous understory of California black oak forest which would provide habitat for many of the same wildlife species present in coast live oak woodland.

- B. California Black Oak Forest:** As shown in **Table 2**, a total of 4.86 acres of this forest would be required for preservation while only 2.59 acres are available on slopes of less than 30-percent. However, the Douglas fir forest here contains a continuous understory of California black oak which is effectively a continuation of the adjacent black oak forest. It should be noted that plant communities are named and categorized based on species dominance. Consequently, two adjacent communities (in this case Douglas fir forest and California black oak forest) may contain the same palate of species yet be categorized differently due to changes in species dominance. As is often the case in the North Coast Range, the Douglas fir forest supports an understory of California black oak while the California black oak forest contains scattered Douglas fir. While these changes in species dominance do result in differences in community ecology, the communities support many of the same wildlife species of both plants and wildlife.

As shown in **Figure 1**, an extensive preservation area is proposed in the northern two-thirds of Parcel 27. This 15.93-acre area contains 2.59 acres of California black oak forest and 10.52 acres of Douglas fir forest. The remaining 2.27 acres of required California black oak preservation area may be made-up at a 1:1 or as-to-be-determined ratio of the abundant Douglas fir forest preservation acres available.

- C. **Douglas Fir Forest**: As shown in **Table 2**, a total of 4.02 acres of preserved Douglas fir forest are needed. A total of 10.52 acres are available in the extensive preservation area proposed in the northern two-thirds of parcel 27 as shown in **Figure 1**.



