BOTANICAL REPORT OF SPECIAL STATUS NATIVE PLANT POPULATIONS AND NATURAL COMMUNITIES

APN: 217-391-012

Blocksburg, Humboldt County, CA

Prepared For:

Whipsawson LLC
2555 Sunset Ridge Rd
Blocksburg, CA 95514

Prepared by:

Sarah Mason
Consulting Botanist
1198 P Street
Arcata, CA 95521
(406) 499-1075

In Conjunction with:

PO Box 121
Samoa, CA 95564

Date Prepared:

August 27, 2023

Table of Contents

Summary Information

Legal description:	Portions of section 13 of T2S, R4E, H.B. &M.
APN:	217-391-012
USGS 7.5' Quad:	Blocksburg (4012336)
Parcel size:	40.0 Acres
Dates of survey:	April 28th and July 2nd, 2023
Surveyed by:	Sarah Mason
Field survey effort:	7 hours
Results:	**No CRPR 1 or 2 plants were observed**

Introduction and Project Description

Purpose and Need

This botanical survey report was prepared to assess potential impacts to botanical resources and summarizes the results of a survey conducted in Eureka, California (APN: 217-391-012). The survey was performed to identify special status plants and sensitive plant communities that could be impacted by operations associated with cannabis cultivation operations in accordance with the California Environmental Quality Act (CEQA) using the California Department of Fish and Wildlife's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018).

Project Description and Setting

The proposed project includes 15,000sf expansion of outdoor cannabis cultivation at two pre-existing flats on a 40.0-acre parcel. The upper project site is located on a cleared landing that was previously used as a logging deck. The lower site is located 312 meters southwest of the upper site, in a perennial grassland with a slight swale running down to the north. The project area and adjacent land was historically utilized for logging and grazing.

The parcel address is located at 2555 Sunset Ridge Rd, Blocksburg, California 95514, within the Blocksburg USGS 7.5-minute quadrangle (Quad code: 4012336), section 13, T2S, R4E, H.B.&M. The center location of the parcel is 40°17'08.41" N 123°40'15.37"' W at an elevation of 2094 feet (638 meters) above sea level (Google Earth Pro, 2023).

Soil, Topography, and Hydrology

Data from *Web Soil Survey* for the project area do not indicate any unique soil types that would provide habitat for rare plants such as serpentinite or peat. The soil consists of silty to gravelly loams

with the parent materials composed of colluvium, residuum, and/or earthflow deposits derived from sandstone, mudstone, and schist.

The project area is situated along a ridgetop located 49 miles southeast of Fortuna and 31 miles northeast of Garberville. The project area lies within the Basin Creek watershed which drains into the Pacific Ocean via the Eel River. Refer to Figure 1 (Appendix C) for locator map.

The project area has a mostly southwest facing aspect ranging from ~1920 to ~2240 feet in elevation. A class II watercourse exist within the project area and is ~270 feet north of the lower project site.

Definitions

Special Status Plants and Plant Communities

Special status plants include taxa that are listed under the Endangered Species Act (ESA) and/or the California Endangered Species Act (CESA) in addition to plants which meet the definition of rare or endangered under the California Environmental Quality Act (CEQA). CDFW recommends that plants on California Rare Plant Ranks (CRPR) Lists 1A (presumed extinct or extirpated), 1B (rare, threatened, or endangered in California and elsewhere), 2A (presumed extirpated) and 2B (rare, threatened, or endangered in California but more common elsewhere), or other species that warrant consideration based on local or biological significance, be addressed during California Environmental Quality Act (CEQA) review of proposed projects. Plants of rank 3 and 4, which are under review and watch lists respectively, are addressed by Naiad Biological Consulting, and may warrant consideration under CEQA if potential or cumulative impacts to the plant exist.

CDFW's natural community rarity rankings follow NatureServes's 2012 *NatureServe Conservation Status Assessment: Methodology for Assigning Ranks*, in which all alliances are listed with a global (G) and (S) rank. NCSC are those natural communities that are ranked S1 to S3 (CDFW, 2023), where 1 is critically imperiled, 2 is imperiled, and 3 is vulnerable. However, they may not warrant protection under CEQA unless they are considered high quality. Human disturbance, invasive species, logging, and grazing are common factors considered when judging whether the stand is high quality and warrants protection.

Methods

Pre-Site Visit Data Compilation and Preparation

Prior to conducting the field surveys, the following database information was reviewed to determine the location and types of botanical resources that possibly exist in the survey area. This pre-field investigation included searches of the California Natural Diversity Database (CNDDB, 2023) and the California Native Plant Society's *Inventory of Rare and Endangered Plants* (CNPS, 2023). This list includes CRPR (California Rare Plant Rank) species that have been observed within a 9-quad search centered on the Blocksburg quadrangle. USGS quadrangles within the search area include Bridgeville (4012347), Larabee Valley (4012346), Dinsmore (4012345), Myers Flat (4012337), Blocksburg (4012336), Black Lassic (4012335), Miranda (4012327), Fort Seward (4012326), and Alder Point (4012325). The results of the project's scoping are presented below in Table 1 (Appendix 1).

Reference Populations

Reference populations were used to determine the timing of seasonally appropriate surveys. The following reference populations of rare plants were used for this project:

- *Montia howellii* located 63 miles east of the project area, near the Baxter Environmental Camp in Humboldt Redwoods State Park, was observed in bloom April 15th.
- *Erythronium revolutum* located 63 miles east of the project area, near the Baxter Environmental Camp in Humboldt Redwoods State Park, was observed in bloom April 24th, 2023.
- *Lilium rubescens* located 65 miles east of the project area, along Pole Line Road in Humboldt Redwoods State Park, was observed in bloom on June 27th.
- *Lathyrus glandulosa* located 70 miles east of the project area, along Mattole Road in Humboldt Redwoods State Park, was observed in bloom April 24th.
- *Gilia capitata* ssp. *pacifica* located 35 miles north of the project area, near Lone Star Junction along Kneeland Road, was observed in bloom on June 25th.

Botanical Field Survey and Habitat Investigation

The botanical field survey for this project was completed by Sarah Mason. Sarah holds a BS in Botany from Humboldt State University and is currently employed as an Environmental Services Intern with California State Parks, in the North Coast Redwoods District. Sarah has worked as an assistant botanist with Caltrans, a Botanical Technician for the Bitterroot and Klamath National Forests, and studied bumble bee communities in the Marble Mountains. Sarah has experience in rare plant identification, protection and monitoring of rare plants, and teaching plant taxonomy at the university level.

Surveys were floristic in nature and conducted in a manner consistent with the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018). Plants were identified to the lowest taxonomic level necessary to ensure that they were not a species of concern. Plants not identifiable in the field were identified off site with the use of *The Jepson Manual, Vascular Plants of California*. Other resources used to identify plants can be found in the reference section towards the end of this report.

Botanical surveys were conducted throughout the areas proposed for development operations and the associated road system. Surveys were conducted in an intuitive meander focused on areas likely to provide habitat for rare plant species and/or potentially affected (directly or indirectly) by construction operations. These areas include but are not limited to existing permanent and seasonal roads, new road construction, road points and crossings, forest openings (i.e., meadows, landings, and cut banks), springs and watercourses. Refer to Figure 2 (Appendix C) for the survey routes.

Results

Habitats Observed

The project area habitat is typical of a mixed evergreen forest and Northern oak woodlands intermixed with perennial grasslands and scattered pockets of chaparral. The northeast portion of the project area is dominated by second growth Douglas-fir and co-dominated by tanoak (*Notholithocarpus densiflorus*) and madrone (Arbutus menziesii), with sparse understory of poison oak (*Toxicodendron diversilobum*) and Western sword fern (*Polystichum munitum*). Moving southwest through the project area the canopy begins to open more and the habitat transitions to oak woodlands and perennial grasslands, which are dominated by Oregon white oak (*Quercus garryana*), pockets of blue wild rye (*Elymus glaucus*), and several invasive grass species.

The upper project site, located in the northeast corner of the parcel, is dominated by coyoted brush (*Baccharis pilularis*), velvet grass (*Holcus lanatus*), sweet vernal grass (*Anthoxanthum odoratum*), slender wild oats (*Avena barbata*), and tall fescue (*Festuca arundinacea*). The lower project site, located in the southwest portion of the parcel, is a perennial grassland dominated by several invasive species, including velvet grass (*Holcus lanatus*), sweet vernal grass (*Anthoxanthum odoratum*), and slender wild oats (*Avena barbata*). Native graminoids are present, including small bracted sedge (*Carex subbracteata*) and Western rush (Juncus occidentalis), but have relatively low percent cover. Blue wild rye (*Elymus glaucus*) was observed outside of the proposed project site and only along the oak woodland edges. See figures 4, 5, 6, and 8 (Appendix D) for photos of the project sites and habitats present.

Species Observed

Botanical surveys documented a total of 134 plant taxa in the project area, of which approximately 16% are invasive species. Refer to Table 2 (Appendix B) for a list of species observed in the project area. No CRPR 1 or 2 plants were encountered in the project area. Two CRPR 4 species, redwood lily (*Lilium rubescens*) and sticky pea (*Lathyrus glandulosus*) (both CRPR 4.3), were observed within the project area. See figures 7 and 8 for photos of rare species encountered.

One occurrence of redwood lily (*Lilium rubescens*) and one occurrence of sticky pea (*Lathyrus glandulosus*) were both found in the northeast corner of the project area, 90 feet northeast of the upper project site. Both populations were observed on the roadside in a shaded, mixed evergreen forest co-dominated by second growth Douslas-fir (*Pseudotsuga menziesii*), tanoak (*Notholithocarpus densiflorus*) and bay laurel (*Umbellularia californica*). The understory layer is dominated by poison oak (*Toxicodendron diversilobum*), pink honeysuckle (*Lonicera hispidula*), and wood rose (*Rosa gymnocarpa*). The dominant forbs were fetid slinkpod (*Scoliopus bigelovii*), Western sword fern (*Polystichum munitum)*, sweet cicely (*Osmorhiza berteroi)*, and star flower (*Lysimachia latifolia)*.

Conclusion and Discussion

Conclusion

Although no listed species were observed during the field survey, it is possible that previous land use practices and climate and weather patterns may have affected survey results. Heatwaves or drought during the growing season, or in previous years, can affect phenology and detection probability. Spring was unusually cool and wet, with the project area receiving late spring snow, which may have delayed flowering for several species, making them more difficult to detect. Therefore, documented taxa are not necessarily an exhaustive list of special status species growing in the project area.

Recommendations

No sensitive plant species or habitats were encountered during the botanical field survey. If project activities take place within the designated sites (Figure 3), it is unlikely that there will be negative impacts to sensitive species or habitats, nor significant alteration of the already disturbed habitat quality on the site beyond historical land utilization. Considering the existing disturbances and the commitment to not remove any sensitive vegetation within and around the project area, the project's effects on the environment can be mitigated. By adhering to the recommendations from the biological assessment report, effects on botanical resources can be avoided. No further botanical surveys are recommended.

References

Baldwin, B. C., D. H. Goldman, D. J. Keili, R. Patterson, and T. J. Roasatti. Eds. 2012. *The Jepson Manual, Vascular Plants of California, Second Edition.* University of California Press. Berkeley, CA.

California Department of Fish and Wildlife (CDFW). 2023. *California Natural Diversity Database* (CNDDB), Wildlife and Habitat Data Branch, Sacramento, CA. https://apps.wildlife.ca.gov/bios6/ [Accesses April – July 2023]

California Department of Fish and Wildlife (CDFW). 2023. *California Natural Community List.* Biogeographic Branch, Vegetation Classification and Mapping Program, Sacramento, CA.

California Native Plant Society (CNPS). 2023. Inventory of Rare and Endangered Plants (online edition, v8-03 0.39). California Native Plant Society, Sacramento, CA. http://www.rareplants.cnps.org. [Accessed April – July 2023].

Calflora. 2023. Information on California plants for education, research, and conservation. *The Calflora Database*. Berkley, CA. https://www.calflora.org/ [Accessed April-July 2023].

CDFW. 2018. *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities.* California Department of Fish and Wildlife, Sacramento, CA.

County of Humboldt. 2023. *Humboldt Planning & Building: Humboldt GIS Portal*. https://humboldtgov.org/1357/Web-GIS [Accesses April - July 2023].

Jepson Flora Project (eds.) 2023. Jepson eFlora. https://ucjeps.berkeley.edu.eflora/ [accessed April -July 2023].

London, M. 2023. *Biological Reconnaisance and Project Feasibility Assessment Report*. [Unpublished].

Sawyer, J.O., T. Keeler-Wold and J.M. Evans. 2009. *A Manual of California Vegetation, 2nd Edition.* California Native Plant Society. Sacramento, CA.

Smith, J. P. Jr. 2014. *Field Guide to Grasses of California.* University of California Press. Berkeley, CA.

United States Department of Agriculture, Natural Resource Conservation Service (USDA, NRCS). 2023. *Web Soil Survey.* http://websoilsurvey.sc.egov.usda.gov [Accessed July 25, 2023].

Appendix A. Results from database search

Table 1. Special-Status Plant Species –Blocksburg and surrounding 7.5 min quadrangles.

Scientific Name	Common Name	CRPR	Blooming Period	Habitat	Microhabitat	Elevation (meters)	Potential of Occurrence
Allium hoffmanii	Beegum onion	4.3	Jun-Jul	Lower montane coniferous forest (serpentinite)		1100-1800	unllikely
Anisocarpus scabridus	scabrid alpine tarplant	1B.3	Jul-Aug(Sep)	Upper montane coniferous forest (metamorphic, rocky)		1650-2300	unllikely
Arctostaphylos hispidula	Howell's manzanita	4.2	Mar-Apr	Chaparral (sandstone, serpentinite)		120-1250	unllikely
Arctostaphylos manzanita ssp. elegans	Konocti manzanita	1B.3	(Jan)Mar-May(Jul)	Chaparral, Cismontane woodland, Lower montane coniferous forest	Volcanic	395-1615	unllikely
Arnica spathulata	Klamath arnica	4.3	May-Aug	Lower montane coniferous forest (serpentinite)		640-1800	unllikely
Astragalus agnicidus	Humboldt County milk-vetch	1B.1	Apr-Sep	Broadleafed upland forest, North Coast coniferous forest	Disturbed areas, Openings, Roadsides (sometimes)	120-800	somewhat likely
Astragalus rattanii var. rattanii	Rattan's milk-vetch	4.3	Apr-Jul	Chaparral, Cismontane woodland, Lower montane coniferous forest	Gravelly, Streambanks	30-825	somewhat likely
Carex praticola	northern meadow sedge	2B.2	May-Jul	Meadows and seeps (mesic)		0-3200	somewhat likely
Carex scabriuscula	Siskiyou sedge	4.3	May-Jul	Lower montane coniferous forest, Meadows and seeps, Upper montane coniferous forest	Mesic, Seeps (sometimes), Serpentinite (sometimes)	710-2345	unllikely

Claytonia serpenticola	serpentine spring beauty	4.3	Apr-Jun(Jul)	Subalpine coniferous forest, Upper montane coniferous forest	Openings (usually), Rocky, Serpentinite (usually)	1000-2450	unllikely
Collomia tracyi	Tracy's collomia	4.3	Jun-Jul	Broadleafed upland forest, Lower montane coniferous forest	Rocky, Serpentinite (sometimes)	300-2100	somewhat likely
Coptis laciniata	Oregon goldthread	4.2	(Feb)Mar-May(Sep-Nov)	Meadows and seeps, North Coast coniferous forest (streambanks)	Mesic	0-1000	somewhat likely
Cypripedium fasciculatum	clustered lady's-slipper	4.2	Mar-Aug	Lower montane coniferous forest, North Coast coniferous forest	Seeps (usually), Serpentinite (usually), Streambanks	100-2435	unllikely
Cypripedium montanum	mountain lady's-slipper	4.2	Mar-Aug	Broadleafed upland forest, Cismontane woodland, Lower montane coniferous forest, North Coast coniferous forest		185-2225	somewhat likely
Epilobium septentrionale	Humboldt County fuchsia	4.3	Jul-Sep	Broadleafed upland forest, North Coast coniferous forest	Rocky (sometimes), Sandy (sometimes)	45-1800	unllikely
Erigeron biolettii	streamside daisy	3	Jun-Oct	Broadleafed upland forest, Cismontane woodland, North Coast coniferous forest	Mesic, Rocky	30-1100	unllikely
Erigeron maniopotamicus	Mad River fleabane daisy	1B.2	May-Aug	Lower montane coniferous forest, Meadows and seeps (openings, dry)	Disturbed areas, Openings, Roadsides, Rocky	1275-1500	somewhat likely
Erigeron robustior	robust daisy	4.3	Jun-Jul	Lower montane coniferous forest, Meadows and seeps	Serpentinite (sometimes)	200-610	somewhat likely

Erythronium oregonum	giant fawn lily	2B.2	Mar-Jun(Jul)	Cismontane woodland, Meadows and seeps	Openings, Rocky, Serpentinite (sometimes)	100-1150	somewhat likely
Erythronium revolutum	coast fawn lily	2B.2	Mar-Jul(Aug)	Bogs and fens, Broadleafed upland forest, North Coast coniferous forest	Mesic, Streambanks	0-1600	likely
Fritillaria glauca	Siskiyou fritillaria	4.2	(Apr-May)Jun-Jul	Alpine boulder and rock field, Subalpine coniferous forest, Upper montane coniferous forest	Serpentinite, Slopes, Talus	1735-2440	unllikely
Fritillaria purdyi	Purdy's fritillary	4.3	Mar-Jun	Chaparral, Cismontane woodland, Lower montane coniferous forest	Serpentinite (usually)	175-2255	unllikely
Gilia capitata ssp. pacifica	Pacific gilia	1B.2	Apr-Aug	Chaparral (openings), Coastal bluff scrub, Coastal prairie, Valley and foothill grassland		5-1665	likely
Hemizonia congesta ssp. tracyi	Tracy's tarplant	4.3	(Mar-Apr)May-Oct	Coastal prairie, Lower montane coniferous forest, North Coast coniferous forest	Openings, Serpentinite (sometimes)	120-1200	somewhat likely
Hosackia yollabolliensis	Yolla Bolly Mtns. bird's-foot trefoil	1B.2	Jun-Aug	Meadows and seeps, Upper montane coniferous forest (openings)	Dry, Gravelly (often), Slopes; dry barren exposed slopes	1645-2135	somewhat likely
Howellia aquatilis	water howellia	2B.2	Jun	Marshes and swamps (freshwater)		1085-1290	unllikely
Kopsiopsis hookeri	small groundcone	2B.3	Apr-Aug	North Coast coniferous forest		90-885	unllikely
Lathyrus biflorus	two-flowered pea	1B.1	Jun-Aug	Lower montane coniferous forest (serpentinite)		1370-1385	unlikely
Lathyrus glandulosus	sticky pea	4.3	Apr-Jun	Cismontane woodland		300-800	likely
Leptosiphon aureus	bristly leptosiphon	4.2	Apr-Jul	Chaparral, Cismontane woodland, Coastal prairie, Valley and foothill grassland		55-1500	somewhat likely

Leptosiphon latisectus	broad-lobed leptosiphon	4.3	Apr-Jun	Broadleafed upland forest, Cismontane woodland		170-1500	somewhat likely
Lilium rubescens	redwood lily	4.2	(Mar)Apr-Aug(Sep)	Broadleafed upland forest, Chaparral, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest	Roadsides (sometimes), Serpentinite (sometimes)	30-1910	likely
Lilium washingtonianum ssp. purpurascens	purple-flowered Washington lily	4.3	Jun-Aug	Chaparral, Lower montane coniferous forest, Upper montane coniferous forest	Serpentinite (often)	70-2750	likely
Listera cordata	heart-leaved twayblade	4.2	Feb-Jul	Bogs and fens, Lower montane coniferous forest, North Coast coniferous forest		5-1370	somewhat likley
Lupinus constancei	Lassics lupine	1B.1	Jul	Lower montane coniferous forest (serpentinite)		1500-2000	unllikely
Lycopodium clavatum	running-pine	4.1	Jun-Aug(Sep)	Lower montane coniferous forest (mesic), Marshes and swamps, North Coast coniferous forest (mesic)	Edges (often), Openings, Roadsides	45-1225	unllikely
Lycopus uniflorus	northern bugleweed	4.3	Jul-Sep	Bogs and fens, Marshes and swamps		5-2000	unllikely
Meesia triquetra	three-ranked hump moss	4.2	Jul	Bogs and fens, Meadows and seeps, Subalpine coniferous forest, Upper montane coniferous forest (mesic)	soil	1300-2953	unllikely
Mitellastra caulescens	leafy-stemmed mitrewort	4.2	(Mar)Apr-Oct	Broadleafed upland forest, Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest	Mesic, Roadsides (sometimes)	5-1700	unllikely
Montia howellii	Howell's montia	2B.2	(Feb)Mar-May	Meadows and seeps, North Coast coniferous forest, Vernal pools	Roadsides (sometimes), Vernally Mesic	0-835	likely

Navarretia leucocephala ssp. bakeri	Baker's navarretia	1B.1	Apr-Jul	Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Valley and foothill grassland, Vernal pools	Mesic	5-1740	likely
Packera bolanderi var. bolanderi	seacoast ragwort	2B.2	(Jan-Apr)May-Jul(Aug)	Coastal scrub, North Coast coniferous forest	Roadsides (sometimes)	30-650	unllikely
Piperia candida	white-flowered rein orchid	1B.2	(Mar-Apr)May-Sep	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest	Serpentinite (sometimes)	30-1310	likely
Pityopus californicus	California pinefoot	4.2	(Mar-Apr)May-Aug	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest	Mesic	15-2225	likely
Pleuropogon refractus	nodding semaphore grass	4.2	(Feb-Mar)Apr-Aug	Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest, Riparian forest	Mesic	0-1600	unllikely
Ptilidium californicum	Pacific fuzzwort	4.3	May-Aug	Lower montane coniferous forest, Upper montane coniferous forest	Usually epiphytic on trees, fallen and decaying logs, and stumps; rarely on humus over boulders	1140-1800	unllikely
Sabulina decumbens	Lassics sandwort	1B.2	Jul	Lower montane coniferous forest, Upper montane coniferous forest	Serpentinite	1500-1675	unllikely
Sanicula tracyi	Tracy's sanicle	4.2	Apr-Jul	Cismontane woodland, Lower montane coniferous forest, Upper montane coniferous forest	Openings	100-1585	likely

Scytinium siskiyouense	Siskiyou jellyskin lichen	1B.1		Lower montane coniferous forest, North Coast coniferous forest	Epiphytic, usually on the bark of Fagaceae, such as Quercus or Chrysolepis spp.	635-1460	unllikely
Sedum flavidum	pale yellow stonecrop	4.3	May-Jul	Broadleafed upland forest, Chaparral, Lower montane coniferous forest, Upper montane coniferous forest	Openings, Rocky, Serpentinite, Talus, Volcanic	355-2155	somewhat likely
Sedum laxum ssp. heckneri	Heckner's stonecrop	4.3	Jun-Jul	Lower montane coniferous forest, Upper montane coniferous forest	Gabbroic (sometimes), Serpentinite (sometimes)	100-2100	unllikely
Sidalcea malachroides	maple-leaved checkerbloom	4.2	(Mar)Apr-Aug	Broadleafed upland forest, Coastal prairie, Coastal scrub, North Coast coniferous forest, Riparian woodland	Disturbed areas (often)	0-730	unllikely
Sidalcea malviflora ssp. patula	Siskiyou checkerbloom	1B.2	(Mar)May-Aug	Coastal bluff scrub, Coastal prairie, North Coast coniferous forest	Roadsides (often); often roadcuts	15-1230	somewhat likely
Silene bolanderi	Bolander's catchfly	1B.2	May-Jun	Chaparral (edges), Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest	Grassy openings (usually), Roadsides (sometimes), Rocky (sometimes), Serpentinite (sometimes); sometimes dry rocky slopes, canyons or roadsides	420-1150	somewhat likely

Tracyina rostrata	beaked tracyina	1B.2	May-Jun	Chaparral, Cismontane woodland, Valley and foothill grassland		90-1270	likely
Usnea longissima	Methuselah's beard lichen	4.2		Broadleafed upland forest, North Coast coniferous forest	On tree branches; usually on old growth hardwoods and conifers	50-1460	somewhat likely
Veratrum insolitum	Siskiyou false-hellebore	4.3	Jun-Aug	Chaparral, Lower montane coniferous forest	Clay	45-1635	unllikely
Wyethia longicaulis	Humboldt County wyethia	4.3	May-Jul	Broadleafed upland forest, Coastal prairie, Lower montane coniferous forest	Roadsides (sometimes)	750-1525	somewhat likely

Appendix B. Plant Species Observed

Table 2. List of plant species encountered during surveys.

Botanical Name	Common Name	Origin
Trees		
Aesculus californica	California buckeye	Native
Arbutus menziesii	madrone	Native
Notholithocarpus densiflorus	tanoak	Native
Prunus sp.	plum	Non-native
Pseudotsuga menziesii	Douglas-fir	Native
Quercus garryana	Oregon white oak	Native
Quercus kelloggii	black oak	Native
Umbellularia californica	bay laurel	Native
Shrubs		
Arctostaphylos manzanita spp. *manzanita*	common manzanita	Native
Baccharis pilularis	coyote brush	Native
Ceanothus integerrimus	deerbrush	Native
Lonicera hispidula	pink honeysuckle	Native
Rosa gymnocarpa	wood rose	Native
Rubus armeniacus	Himalayan blackberry	Cal IPC: High
Rubus leucodermis	whitebark raspberry	Native
Rubus parviflorus	thimble berry	Native
Toxicodendron diversilobum	poison oak	Native
Whipplea modesta	modesty	Native
Grasses & Graminoids		
Agrostis capillaris	colonial bentgrass	Non-native
Aira caryophyllea	silver hair grass	Non-native
Anthoxanthum odoratum	sweet vernal grass	Cal IPC: Limited
Avena barbata	slender wild oats	Cal-IPC: Moderate
Briza maxima	rattle snake grass	Cal-IPC: Limited
Briza minor	small rattle snake grass	Non-native
Bromus catharticus	rescue grass	Non-native
Bromus hordeaceus	soft chess	Cal-IPC: Limited
Carex stipata var. *stipata*	awl fruited sedge	Native
Carex subbracteata	small-bracted sedge	Native
Cynosurus echinatus	hedgehog dogtail	Cal IPC: Moderate
Danthonia californica	California oat grass	Native
Elymus caput-medusae	medusa head	Cal IPC: High
Elymus glaucus	blue wild rye	Native
Festuca arundinacea	tall fescue	Cal-IPC: Moderate
Festuca bromoides	brome fescue	Non-native

Festuca occidentalis	Western fescue	Native
Holcus lanatus	velvet grass	Cal IPC: Moderate
Hordeum murinum	foxtail barley	Cal IPC: Moderate
Juncus occidentalis	Western rush	Native
Juncus patens	spreading rush	Native
Poa annua	annual blue grass	Non-native
Trisetum canescens	tall false oats	Native
Forbs		
Achillea millefolium	yarrow	Native
Acmispon parviflorus	hill lotus	Native
Adelinia grandis	adelinia	Native
Adenocaulon bicolor	trail plant	Native
Anisocarpus madioides	woodland madia	Native
Brodiaea elegans	harvest brodiaea	Native
Calypso bulbosa	fairy slipper	Native
Capsella bursa-pastoris	shaepherd's purse	Non-native
Cardamine californica	milk maids	Native
Cardamine oligosperma	Idaho bittercress	Native
Carduus pycnocephalus	Italian thistle	Cal IPC: Moderate
Cephalanthera austiniae	phantom orchid	Native
Cerastium glomeratum	sticky mouse-ear chickweed	Non-native
Chlorogalum pomeridianum	soaproot	Native
Cinchorium intybus	chicory	Non-native
Cirsium vulgare	bull thistle	Cal IPC: Moderate
Claytonia parviflora ssp. *parviflora*	miner's lettuce	Native
Claytonia perfoliata	miner's lettuce	Native
Clinopodium douglasii	yerba buena	Native
Collomia heterophylla	varied leaved collomia	Native
Daucus carota	Queen Anne's lace	Non-native
Dichelostemma ida-maia	firecracker flower	Native
Eriophyllum lanatum var. achilleoides	wooly sunflower	Native
Erodium cicutarium	red stem filaree	Cal IPC: Limited
Eschscholzia californica	California poppy	Native
Foeniculum vulgare	fennel	Cal IPC: Moderate
Fragaria vesca	wood strawberry	Native
Galium aparine	goose grass	Non-native
Galium californicum	California bedstraw	Native
Galium divaricatum	Lamarck's bedstraw	Non-native
Galium triflorum	sweet bedstraw	Native
Gamochaeta ustulata	featherweed	Native

Geranium dissectum	cutleaf geranium	Cal IPC: Limited
Geranium robertianum	stinky bob	Non-native
Hypericum perforatum	Klamathweed	Cal IPC: Limited
Hypochaeris glabra	smooth cat's ear	Cal IPC: Limited
Iris sp.	bearded iris	Non-native
Lactuca serriola	prickly lettuce	Non-native
Lamium purpureum	purple dead nettle	Non-native
Lathyrus glandulosus	sticky pea	Native
Lathyrus sp.	wild pea	Native
Lilium rubescens	redwood lily	Native
Linum bienne	blue flax	Non-native
Logfia gallica	narrowleaf cottonrose	Non-native
Lupinus nanus	sky lupine	Native
Lysimachia arvensis	scarlet pimpernel	Non-native
Lysimachia latifolia	star flower	Native
Madia gracilis	gumweed	Native
Medicago lupulina	black medick	Non-native
Medicago polymorpha	California burclover	Non-native
Mentha pulegium	pennyroyal	Cal IPC: Moderate
Narcissus pseudonarcissus	daffodil	Non-native
Nemophila parviflora	small flowered nemophila	Native
Osmorhiza berteroi	sweet cicely	Native
Oxalis oregana	redwood sorrel	Native
Parentucellia viscosa	yellow parentucellia	Cal IPC: Limited
Plantago lanceolata	English plantain	Non-native
Primula hendersonii	mosquito bill	Native
Prosartes hookeri	fairybells	Native
Prunella vulgaris	self heal	Native
Pseudognaphalium sp.	cudweed	-
Pyrola aphylla	leafless wintergreen	Native
Ranunculus occidentalis	Western buttercup	Native
Rhinotropis californica	California milkwort	Native
Rumex acetosella	sheep sorell	Cal IPC: Moderate
Rumex crispus	curly dock	Cal IPC: Limited
Sanicula crassicaulis	Pacific sanicle	Native
Scoliopus bigelovii	fetid slink pod	Native
Senecio vulgaris	common groundsel	Non-native
Silene laciniata	cardinal catchfly	Native
Silybum marianum	milk thistle	Cal IPC: Limited
Sisyrinchium bellum	blue eyed grass	Native
Sonchus asper	prickly sow thistle	Non-native
Spergularia rubra	red sand spurrey	Non-native

Stachys ajugoides	hedgenettle	Native
Stellaria media	chickweed	Non-native
Taraxacum officinale	dandelion	Non-native
Tellima grandiflora	fringe cups	Native
Tonella tenella	small flowered tonella	Native
Torilis nodosa	short sock destroyer	Non-native
Trifolium repens	creeping buttercup	Non-native
Trifolium subterraneum	subterranean clover	Non-native
Trillium ovatum	Western trillium	Native
Triteleia laxa	Ithuriel's spear	Native
Tryphysaria pusilla	little owl's clover	Native
Vancouveria planipetala	inside out flower	Native
Vicia sativa	spring vetch	Non-native
Vicia sp.	vetch	-
Viola ocellata	Western heart's easoe	Native
Viola sempervirens	redwood violet	Native
Ferns		
Athyrium filix-femina	lady fern	Native
Polystichum munitum	Western sword fern	Native
Pteridium aquilinum	Western brackenfern	Native

Appendix C. Maps

Figure 1. Locator Map of Project Area (blue star) located in Blocksburg, Humboldt County, California.

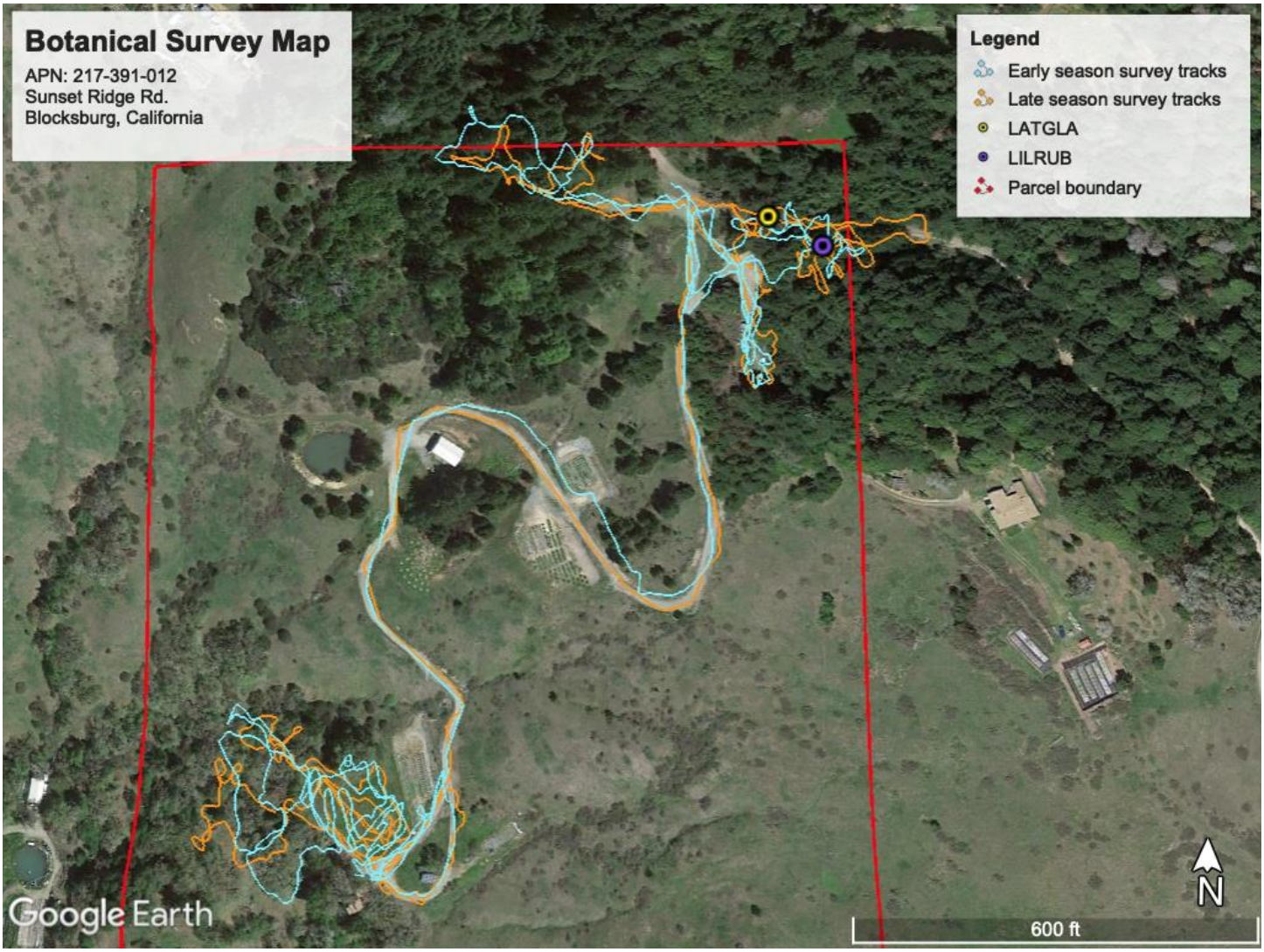

Figure 2. Map of project area and survey tracks.

Figure 3. Sensitive plants in project area. Locations of two project sites, 1 being the lower project site and 2 being the upper project site.

Appendix D. Project Area and Habitat

Figure 4. Lower project site with slight north facing swale. Meadow dominated by several invasive grasses.

Figure 5. Upper project site located in the northeast corner of the parcel. Disturbed clearing in mixed conifer and hardwood forest. Stack of old logs observed on the left.

Figure 6. Oak woodland habitat located near the lower project site, located in the southwestern section of the parcel. *Quercus garryana* and *Q. kelloggiii* overstory with scattered *Pseudotsuga* menziesii saplings and an understory dominated by *Toxixodendron diversilobumn*, *Elymus glaucus,* and *Claytonia parviflora*.

Figure 7. *Lilium rubescens* in flower on July 2, 2023. Population located on the roadside in a shaded mixed conifer and hardwood forest.

Figure 8. *Lathyrsus glandulosus* growing on the roadside in a shaded mixed conifer and hardwood forest.