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Botanical Survey Report
Young Jacobsen
Cannabis Cultivation Project

Prepared by
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8/13/21

For
Hohman and Associates
Hydesville, CA

Signature: Caitlyn Allchin **Date: 8/13/21**

Setting

The Young Jacobsen Cannabis Cultivation Project (APN: 221-011-021) is located in Section 1, Township 3 South, Range 2 East HB&M; Humboldt County, on the Ettersburg USGS 7.5' quadrangle. Multiple unnamed tributaries of Salmon Creek run north – south through the property. The property is approximately 2.5 miles southwest of the town of Myers Flat, CA, off Salmon Creek Road, and lies within the Salmon Creek watershed. The biogeographic region can be described using a three-tiered hierarchy of province, region, and sub-region. This site lies within the California Floristic Province, Northwestern California region, and Outer North Coast Ranges (NCoRO) sub-region. The property is in an area of Agriculture Exclusive (AE) and Timber Production Zone (TPZ) zoning under the Humboldt County General Plan. There are gentle to moderate slopes on the property that are primarily west facing, and an elevation ranging from 840 – 1440 ft. The geology consists of ultramafic rocks, mostly serpentine, with minor peridotite, gabbro, and diabase. The parcel has mixed coniferous forests dominated by Douglas fir (*Pseudotsuga menziesii*) (S4 G5) with madrone (*Arbutus menziesii*), California bay (*Umbellularia californica*), buckeye (*Aesculus californica*), canyon live oak (*Quercus chrysolepis*), black oak (Quercus kelloggii), and Oregon white oak (*Quercus garryana*). The central portion of the property is dominated by Douglas fir (*Pseudotsuga menziesii*), with Jeffrey pine (*Pinus jeffreyi*) and incense cedar (*Calocedrus decurrens*) (S3 G3). The parcel is approximately 80 acres, and the project area is approximately 3 acres.

Methods

The botanical surveys for this project were conducted by Caitlyn Allchin on April 17, 2021, June 1, 2021, and July 7, 2021. Caitlyn holds a B.S. in Botany from Humboldt State University, where she is currently a biology graduate student. Caitlyn has taken relevant courses including plant taxonomy, lichens and bryophytes, and principles of ecology, and conducted her senior directed study on the pollination biology of Western coltsfoot (*Petasites frigidus* var. *palmatus)* in Arcata, CA. She has 3 years of botany experience in Northern California.

The surveys were floristic in nature and seasonally appropriate, with an initial survey conducted during the spring to catch early blooming species, a mid-season survey, and a follow-up during the summer for later-blooming species. For the 2021 field season, approximately 7 field hours were spent conducting field surveys, with a survey rate of 2.3 acres/hour. Surveys included systematic assessment of all potential habitats in the area based on maps, aerial photos, and visible environmental features such as canopy cover, slope, soil texture, aspect, hydrologic features, and associated vegetation. This survey protocol is based on the Protocol for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018). A list of potential rare plants found within the 9-quad area as listed in CDFW BIOS and CNPS Inventory of Rare and Endangered Plants is available in Attachment A. Attachment B provides details on potential state or federally listed plants and those on CNPS lists 1 – 4. Attachment C contains invasive species and habitat photos. Attachment D lists all plants identified from botanical surveys. Attachment E contains a map of the botanical survey routes and the proposed cannabis cultivation footprint. Attachment F contains Cal-IPC Weed Alert Information. Attachment G contains rare plant rank definitions. Attachment H contains a

soil map of the project area. Attachment I contains relevé forms for select Sensitive Natural Communities.

Results

There were no rare, threatened, or endangered plants found in the Young Jacobsen Cannabis Cultivation Project area. Three Sensitive Natural Communities were found on the property. The central area on the property was dominated by Douglas fir (*Pseudotsuga menziesii*) with Jeffrey pine (*Pinus jeffreyi*) and incense cedar (*Calocedrus decurrens*) (S3 G3) which is considered a Sensitive Natural Community (SNC) in the state of California. Additionally, a blue wild rye (*Elymus glaucus*) (S3 G3) as well as a California oatgrass (*Danthonia californica*) (S3 GNR) SNC were found in the central and northernmost areas of the property. The California oatgrass SNC also had a small population of twotooth sedge seeps (*Carex serratodens*) (S3? G3) growing to the northeast of it.

Grasslands on the property consisted of many native and non-native annuals and perennials, including *Aira caryophyllea*, *Anthoxanthum odoratum*, *Avena barbata*, *Briza maxima*, *Briza minor*, *Bromus diandrus*, *Bromus hordeaceus*, *Cynosurus echinatus*, *Danthonia californica*, *Elymus caput-medusae*, *Elymus glaucus*, *Festuca perennis*, *Holcus lanatus*, and *Poa pratense*.

A *Piperia sp.* was found and recorded on GPS on April 17, 2021, and returned to on the July 7, 2021, botanical survey. It was characterized as the mountain piperia (*Piperia transversa*), which is distinct from the rare, white-flowered rein orchid (*Piperia candida*) in that the spur is 6 – 12 mm in length and perpendicular to the stem.

There were minor areas being populated by invasive and non-native Himalayan blackberry (*Rubus armeniacus*, Cal-IPC *High* rating) and French broom (*Genista monspessulana*, Cal-IPC *High* rating). The Himalayan blackberry was present to the west of the southernmost cultivation site (Figure 3A), as well as in the ditch along the dirt road leading to the water storage tanks on the northern area of the property (Figure 3B). The French broom was also found on the dirt road leading to the northern area, as well as behind the southernmost structure on the property (Figure 4). All occurrences of non-native and invasive plant species should be mitigated prior to cultivation activities on site, to prevent their spread into the natural environment.

The property is Douglas fir (*Pseudotsuga menziesii*) (S4 G4) dominant, with California bay (*Umbellularia californica*), madrone (*Arbutus menziesii*), buckeye (*Aesculus californica*), black oak (*Quercus kelloggii*), Oregon white oak (*Quercus garryana*), and canyon live oak (*Quercus chrysolepis*) (Figures 1A, 1B & 2A). The central area of the property was dominated by Douglas fir (*Pseudotsuga menziesii*) with Jeffrey pine (*Pinus jeffreyi*) and incense cedar (*Calocedrus decurrens*) (S3 G3) with a blue wild rye (*Elymus glaucus*) (S3 G3) SNC adjacent to it (Figure 2B).

Mitigations

The SNC's on the property should be avoided during cultivation activities to reduce any impact on them. The non-native and invasive plant populations should be contained and removed to prevent impact on the native habitat surrounding the cultivation areas.

Himalayan blackberry (*Rubus armeniacus*) can be identified by its thick angular canes and thick-based prickles (DiTomaso et al., 2013). Repeated, regular mowing of the aboveground biomass will suppress growth and may eventually kill Himalayan blackberry over a period of many years of retreatment, however, it is more effective to remove the canes by digging out the roots (DiTomaso et al., 2013). Canes may re-root if left on the ground, and it is important that cut canes are gathered and taken to the dump, fully composted in a covered pile to prevent re-sprouts, or burned appropriately with a regional air quality management district burn permit (DiTomaso et al., 2013). Please see the Weed Alerts attached on page 28 for more identification details and photos of this species.

French broom (*Genista monspessulana*) is identifiable by its long silky hairy stems and leaves, persistent leaflets, hairy seed pods, and clusters of yellow, pea-like flowers (DiTomaso et al., 2013). French broom thrives in disturbed areas, where it may out-compete native plants and alter the soil (DiTomaso et al., 2013). Since French broom fixes nitrogen, it can provide an advantage to other non-native weeds. This aggressive invasive shrub is best removed by the roots because any rootstalks left behind will easily re-sprout (DiTomaso et al., 2013). Weed wrenches may be used to remove shrubs before they become well-established on the property (DiTomaso et al., 2013). It is not recommended to mow young French broom since it will resprout if the underground biomass is not removed, unless mowed repeatedly throughout the growing season. Seeds can remain viable in the soil for up to 30 years, making established stands difficult to remove (DiTomaso et al., 2013). Treatment is required for several years to fully eradicate a broom population. Please see the Weed Alerts attached on page 27 for more identification details and photos of this species.

All potential rare plant habitats were surveyed, and false negative surveys are unlikely. Additional surveys are recommended in 5 years to evaluate the invasive species that have been documented on the property and to reassess the area for rare, threatened, and endangered plants and sensitive natural communities.

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Attachment A: List of Potentially Occurring Sensitive Plant Species

Scientific Name	Common Name	CRPR	CESA	FESA	Flowering Period	Habitat in Project Area
Antennaria suffrutescens	evergreen everlasting	4.3	None	None	Jan-Jul	Potential
Astragalus agnicidus	Humboldt County milk-vetch	1B.1	CE	None	Apr-Sep	Potential
Calamagrostis foliosa	leafy reed grass	4.2	CR	None	May-Sep	Potential
Carex arcta	northern clustered sedge	2B.2	None	None	Jun-Sep	Potential
Castilleja litoralis	Oregon coast paintbrush	2B.2	None	None	Jun	No Coastal Areas
Ceanothus gloriosus var. exaltatus	glory brush	4.3	None	None	Mar-Jun(Aug)	No Chaparral
Clarkia amoena ssp. whitneyi	Whitney's farewell-to-spring	1B.1	None	None	Jun-Aug	No Coastal Areas
Coptis laciniata	Oregon goldthread	4.2	None	None	(Feb)Mar-May(Sep-Nov)	Potential
Epilobium septentrionale	Humboldt County fuchsia	4.3	None	None	Jul-Sep	Potential
Erigeron biolettii	streamside daisy	3	None	None	Jun-Oct	Potential
Erythronium oregonum	giant fawn lily	2B.2	None	None	Mar-Jun(Jul)	Potential
Erythronium revolutum	coast fawn lily	2B.2	None	None	Mar-Jul(Aug)	Potential
Gilia capitata ssp. pacifica	Pacific gilia	1B.2	None	None	Apr-Aug	No Potential
Hemizonia congesta ssp. tracyi	Tracy's tarplant	4.3	None	None	May-Oct	Potential
Kopsiopsis hookeri	small groundcone	2B.3	None	None	Apr-Aug	Potential
Lasthenia californica ssp. macrantha	perennial goldfields	1B.2	None	None	Jan-Nov	No Potential
Lathyrus glandulosus	sticky pea	4.3	None	None	Apr-Jun	Potential
Lathyrus palustris	marsh pea	2B.2	None	None	Mar-Aug	Potential
Leptosiphon acicularis	bristly leptosiphon	4.2	None	None	Apr-Jul	Potential
Leptosiphon latisectus	broad-lobed leptosiphon	4.3	None	None	Apr-Jun	Potential
Lilium rubescens	redwood lily	4.2	None	None	Apr-Aug(Sep)	Potential
Listera cordata	heart-leaved twayblade	4.2	None	None	Feb-Jul	Potential
Lycopodium clavatum	running-pine	4.1	None	None	Jun-Aug(Sep)	Potential

Lycopus uniflorus	northern bugleweed	4.3	None	None	Jul-Sep	No Potential
Mitellastra caulescens	leafy-stemmed mitrewort	4.2	None	None	(Mar)Apr-Oct	Potential
Montia howellii	Howell's montia	2B.2	None	None	(Feb)Mar-May	Potential
Packera bolanderi var. bolanderi	seacoast ragwort	2B.2	None	None	(Jan-Apr)May-Jul(Aug)	Potential
Piperia candida	white-flowered rein orchid	1B.2	None	None	(Mar)May-Sep	Potential
Pityopus californicus	California pinefoot	4.2	None	None	(Mar-Apr)May-Aug	Potential
Pleuropogon hooverianus	North Coast semaphore grass	1B.1	CT	None	Apr-Jun	Potential
Pleuropogon refractus	nodding semaphore grass	4.2	None	None	(Mar)Apr-Aug	Potential
Ribes roezlii var. amictum	hoary gooseberry	4.3	None	None	Mar-Apr	Potential
Sidalcea malachroides	maple-leaved checkerbloom	4.2	None	None	(Mar)Apr-Aug	Potential
Sidalcea malviflora ssp. patula	Siskiyou checkerbloom	1B.2	None	None	May-Aug	Potential
Usnea longissima	Methuselah's beard lichen	4.2	None	None	--	Potential

Attachment B: Potential Rare Plant Details

1. **Evergreen everlasting** (*Antennaria suffrutescens*)
   Status: CNPS List 4.3, Plants of limited distribution, a watch list; .3 Not very threatened in California. No state or federal listing. State Rank S3: Vulnerable; Global Rank G4: Apparently Secure.
   Family: Asteraceae
   Lifeform: perennial stoloniferous herb
   Flowering: January – July
   Elevation: 500 – 1600 meters, 1640 – 5250 feet
   Habitat: lower montane coniferous forest (serpentinite).
   Status within project area: potential habitat exists in the forested areas.

2. **Humboldt County milk-vetch** (*Astragalus agnicidus*)
   Status: CNPS List 1B.1, Plants rare, threatened, or endangered in California and elsewhere; .1 Seriously threatened in California. State Listed as Endangered (CE), no federal listing. State Rank S2: Imperiled, Global Rank G2: Imperiled.
   Family: Fabaceae
   Lifeform: perennial herb
   Flowering: April – September
   Elevation: 120 – 800 meters, 395 – 2625 feet
   Habitat: openings, disturbed areas, sometimes roadsides; broadleaved upland forest, North Coast coniferous forest.
   Status within project area: potential habitat exists within disturbed and forested habitats within the project area.

3. **Leafy reed grass** (*Calamagrostis foliosa*)
   Status: CNPS List 4.2, Plants of limited distribution, a watch list; .2 Moderately threatened in California. State Listed as Rare (CR), no federal listing. State Rank S3: Vulnerable, Global Rank G3: Vulnerable.
   Family: Poaceae
   Lifeform: perennial herb
   Flowering: May – September
   Elevation: 0 – 1220 meters, 0 – 4005 feet
   Habitat: rocky; coastal bluff scrub, North Coast coniferous forest.
   Status within project area: potential habitat exists within the forested habitat of the project area.

4. **Northern clustered sedge** (*Carex arcta*)
   Status: CNPS List 2B.2, Plants rare, threatened, or endangered in California but common elsewhere; .2 Moderately threatened in California. No state or federal listing. State Rank S1: Critically Imperiled, Global Rank G5: Secure.
   Family: Cyperaceae
   Lifeform: perennial herb
   Flowering: June - September
   Elevation: 60 – 1400 meters, 195 – 4595 feet

Habitat: bogs and fens, North Coast coniferous forest (mesic).
Status within project area: potential habitat exists within the forested habitat of the project area.

5. **Oregon coast paintbrush** (*Castilleja litoralis*)
Status: CNPS List 2B.2, Plants rare, threatened, or endangered in California but common elsewhere; .2 Moderately threatened in California. No federal or state listing. State Rank S3: Vulnerable, Global Rank G3: Vulnerable.
Family: Orobanchaceae
Lifeform: perennial herb (hemiparasitic)
Flowering: June
Elevation: 15 – 100 meters, 50 – 330 feet
Habitat: sandy; coastal bluff scrub, coastal dunes, coastal scrub.
Status within project area: no coastal habitat within the project area, no potential habitat exists.

6. **Glory brush** (*Ceanothus gloriosus var. exaltatus*)
Status: CNPS List 4.3, Plants of limited distribution, a watch list; .3 Not very threatened in California. No state or federal listing. State Rank S4: Apparently Secure, Global Rank G4T4: Apparently Secure/Apparently Secure.
Family: Rhamnaceae
Lifeform: perennial evergreen shrub
Flowering: March – June (August)
Elevation: 30 – 610 meters, 100 – 2000 feet
Habitat: chaparral.
Status within project area: no chaparral habitat within the project area, no potential habitat exists.

7. **Whitney's farewell-to-spring** (*Clarkia amoena ssp. whitneyi*)
Status: CNPS List 1B.1, Plants rare, threatened, or endangered in California and elsewhere; .1 Seriously threatened in California. No state or federal listing. State Rank S1: Critically Imperiled, Global Rank G5T1: Secure/Critically Imperiled.
Family: Onagraceae
Lifeform: annual herb
Flowering: June – August
Elevation: 10 – 100 meters, 35 – 330 feet
Habitat: coastal bluff scrub, coastal scrub.
Status within project area: no coastal habitat within the project area, no potential habitat exists.

8. **Oregon goldthread** (*Coptis laciniata*)
Status: CNPS List 4.2, Plants of limited distribution, a watch list; .2 Moderately threatened in California. No federal or state listing. State Rank S3?: Vulnerable, Inexact or Uncertain, Global Rank G4?: Apparently secure, Inexact or Uncertain.
Family: Ranunculaceae
Lifeform: perennial rhizomatous herb
Flowering: (February) March – May (September – November)

Elevation: 0 – 1000 meters, 0 – 3280 feet
Habitat: mesic; meadows and seeps, North Coast coniferous forest (streambanks).
Status within project area: potential habitat exists along streambanks in the forested area.

9. **Humboldt County fuchsia** (*Epilobium septrentionale*)
Status: CNPS List 4.3, Plants of limited distribution, a watch list; .3 Not very threatened in California. No federal or state listing. State Rank S4: Apparently Secure, Global Rank G4: Apparently Secure.
Family: Onagraceae
Lifeform: perennial herb
Flowering: July – September
Elevation: 45 – 1800 meters, 150 – 5905 feet
Habitat: sandy or rocky; broadleaved upland forest, North Coast coniferous forest.
Status within project area: potential habitat exists within the forested area.

10. **Streamside daisy** (*Erigeron biolettii*)
Status: CNPS List 3, Plants about which more information is needed. No federal or state listing. State Rank S3?: Vulnerable, Inexact or Uncertain, Global Rank G3?: Vulnerable, Inexact or Uncertain.
Family: Asteraceae
Lifeform: perennial herb
Flowering: June – October
Elevation: 30 – 1100 meters, 100 – 3610 feet
Habitat: rocky, mesic; broadleaved upland forest, cismontane woodland, North Coast coniferous forest.
Status within project area: potential habitat exists within the forested habitat of the project area.

11. **Giant fawn lily** (*Erythronium oregonum*)
Status: CNPS List 2B.2, Plants rare, threatened, or endangered in California but common elsewhere; .2 Moderately threatened in California. No state or federal listing. State Rank S2: Imperiled, Global Rank G4G5: Apparently Secure/Secure.
Family: Liliaceae
Lifeform: perennial herb
Flowering: March – June (July)
Elevation: 100 – 1150 meters, 330 – 3775 feet
Habitat: sometimes serpentinite, rocky, openings; cismontane woodland, meadows and seeps.
Status within project area: potential habitat exists in rocky openings, meadows and seeps.

12. **Coast fawn lily** (*Erythronium revolutum*)
Status: CNPS List 2B.2, Plants rare, threatened, or endangered in California but common elsewhere; .2 Moderately threatened in California. No state or federal listing. State Rank S3: Vulnerable, Global Rank G4G5: Apparently Secure/Secure.
Family: Liliaceae
Lifeform: perennial bulbiferous herb
Flowering: March – July (August)

Elevation: 0 – 1600 meters, 0 – 5250 feet
Habitat: mesic, streambanks; bogs and fens, broadleaved upland forest, North Coast coniferous forest.
Status within project area: potential habitat exists along the streams and within the forested habitat of the project area.

13. **Pacific gilia** (*Gilia capitata ssp. pacifica*)
Status: CNPS List 1B.2, Plants rare, threatened, or endangered in California and elsewhere; .2 Moderately threatened in California. No state or federal listing. State Rank S2: Imperiled, Global Rank G5T3: Secure/Vulnerable.
Family: Polemoniaceae
Lifeform: annual herb
Flowering: April – August
Elevation: 5 – 1665 meters, 15 – 5465 feet
Habitat: coastal bluff scrub, chaparral (openings), coastal prairie, valley and foothill grassland.
Status within project area: no coastal bluff scrub, no chaparral, no coastal prairie, and no valley and foothill grassland habitats within the project area; no potential habitat exists.

14. **Tracy's tarplant** (*Hemizonia congesta ssp. tracyi*)
Status: CNPS List 4.3, Plants of limited distribution, a watch list; .3 Not very threatened in California. No state or federal listing. State Rank S4: Apparently Secure, Global Rank G5T4: Secure/Apparently Secure.
Family: Asteraceae
Lifeform: annual herb
Flowering: May – October
Elevation: 120 – 1200 meters, 395 – 3935 feet
Habitat: openings, sometimes serpentinite; coastal prairie, lower montane coniferous forest, North Coast coniferous forest.
Status within project area: potential habitat exists within the openings of the forested area.

15. **Small groundcone** (*Kopsiopsis hookeri*)
Status: CNPS List 2B.3, Plants rare, threatened, or endangered in California but common elsewhere; .3 Not very threatened in California. No state or federal listing. State Rank S1S2: Critically Imperiled/Imperiled, Global Rank G4?: Apparently Secure, Inexact or Uncertain.
Family: Orobanchaceae
Lifeform: perennial rhizomatous herb (parasitic)
Flowering: April – August
Elevation: 90 – 885 meters, 295 – 2905 feet
Habitat: Norther Coast coniferous forest.
Status within project area: potential habitat exists within the forested habitat of the project area.

16. **Perennial goldfields** (*Lasthenia californica ssp. macrantha*)
Status: CNPS List 1B.2, Plants rare, threatened, or endangered in California and elsewhere; .2 Moderately threatened in California. No state or federal listing. State Rank S2: Imperiled, Global Rank G3T2: Vulnerable/Imperiled.

Family: Asteraceae
Lifeform: perennial herb
Flowering: January – November
Elevation: 5 – 520 meters, 15 – 1705 feet
Habitat: coastal bluff scrub, coastal dunes, coastal scrub.
Status within project area: no coast habitat within the project area, no potential habitat exists.

17. **Sticky pea** (*Lathyrus glandulosus*)
Status: CNPS List 4.3, Plants of limited distribution, a watch list; .3 Not very threatened in California. No state or federal listing. State Rank S3: Vulnerable, Global Rank G3: Vulnerable.
Family: Fabaceae
Lifeform: perennial rhizomatous herb
Flowering: April – June
Elevation: 300 – 800 meters, 985 – 2625 feet
Habitat: cismontane woodland.
Status within project area: potential habitat exists within the forested areas.

18. **Marsh pea** (*Lathyrus palustris*)
Status: CNPS List 2B.2, Plants rare, threatened, or endangered in California but common elsewhere; .2 Moderately threatened in California. No state or federal listing. State Rank S2: Imperiled, Global Rank G5: Secure.
Family: Fabaceae
Lifeform: perennial herb
Flowering: March – August
Elevation: 1 – 100 meters, 5 – 330 feet
Habitat: mesic; bogs and fens, coastal prairie, coastal scrub, lower montane coniferous forest, marshes and swamps, North Coast coniferous forest.
Status within project area: potential habitat exists within mesic forested habitat within the project area.

19. **Bristly leptosiphon** (*Leptosiphon acicularis*)
Status: CNPS List 4.2, Plants of limited distribution, a watch list; .2 Moderately threatened in California. No state or federal listing. State Rank S4?: Apparently Secure, Inexact or Uncertain, Global Rank G4?: Apparently Secure, Inexact or Uncertain.
Family: Polemoniaceae
Lifeform: annual herb
Flowering: April – July
Elevation: 55 – 1500 meters, 180 – 4920 feet
Habitat: chaparral, cismontane woodland, coastal prairie, valley and foothill grassland.
Status within project area: potential habitat exists within oak woodland areas of the property.

20. **Broad-lobed leptosiphon** (*Leptosiphon latisectus*)
    Status: CNPS List 4.3, Plants of limited distribution, a watch list; .3 Not very threatened in California. No state or federal listing. State Rank S4: Apparently Secure, Global Rank G4: Apparently Secure.
    Family: Polemoniaceae
    Lifeform: annual herb
    Flowering: April – June
    Elevation: 170 – 1500 meters, 560 – 4920 feet
    Habitat: broadleaved upland forest, cismontane woodland.
    Status within project area: potential habitat exists in oak woodland areas of the property.

21. **Redwood lily** (*Lilium rubescens*)
    Status: CNPS List 4.2, Plants of limited distribution, a watch list; .2 Moderately threatened in California. No state or federal listing. State Rank S3: Vulnerable, Global Rank G3: Vulnerable.
    Family: Liliaceae
    Lifeform: perennial bulbiferous herb
    Flowering: April – August (September)
    Elevation: 30 – 1910 meters, 100 – 6265 feet
    Habitat: sometimes serpentinite, sometimes roadsides; broadleaved upland forest, chaparral, lower montane coniferous forest, North Coast coniferous forest, upper montane coniferous forest.
    Status within project area: potential habitat exists within the forested habitat of the project area.

22. **Heart-leaved** twayblade (*Listera cordata*)
    Status: CNPS List 4.2, Plants of limited distribution, a watch list; .2 Moderately threatened in California. No state or federal listing. State Rank S4: Apparently Secure, Global Rank G5: Secure.
    Family: Orchidaceae
    Lifeform: perennial herb
    Flowering: February – July
    Elevation: 5 – 1370 meters, 15 – 4495 feet
    Habitat: bogs and fens, lower montane coniferous forest, North Coast coniferous forest.
    Status within project area: potential habitat exists within the forested habitat of the project area.

23. **Running-pine** (*Lycopodium clavatum*)
    Status: CNPS List 4.1, Plants of limited distribution, a watch list; .1 Seriously threatened in California. No state or federal listing. State Rank S3: Vulnerable, Global Rank G5: Secure.
    Family: Lycopodiaceae
    Lifeform: perennial rhizomatous herb
    Flowering: June – August (September)
    Elevation: 45 – 1225 meters, 150 – 4020 feet
    Habitat: often edges, openings, and roadsides; lower montane coniferous forest (mesic), marshes and swamps, North Coast coniferous forest.

Status within project area: habitat exists in mesic edges, openings, and roadsides of the project area.

24. **Northern bugleweed** (*Lycopus uniflorus*)
    Status: CNPS List 4.3, Limited distribution in California; .3 Not very threatened in California. No state or federal listing. State Rank S4: Apparently Secure, Global Rank G5: Secure.
    Family: Lamiaceae
    Lifeform: perennial herb
    Flowering: July – September
    Elevation: 5 – 2000 meters, 15 – 6560 feet
    Habitat: bogs and fens, marshes and swamps.
    Status within project area: no bogs and fens, marshes, or swamp habitat within the project area; no potential habitat exists.

25. **Leafy-stemmed mitrewort** (*Mitellastra caulescens*)
    Status: CNPS List 4.2, Plants of limited distribution, a watch list; .2 Moderately threatened in California. No state or federal listing. State Rank S4: Apparently Secure, Global Rank G5: Secure.
    Family: Saxifragaceae
    Lifeform: perennial rhizomatous herb
    Flowering: (March) April – October
    Elevation: 5 – 1700 meters, 15 – 5580 feet
    Habitat: mesic, sometimes roadsides; broadleaved upland forest, lower montane coniferous forest, meadows and seeps, North Coast coniferous forest.
    Status within project area: potential habitat exists within the forested habitat of the project area.

26. **Howell's montia** (*Montia howellii*)
    Status: CNPS List 2B.2, Plants rare, threatened, or endangered in California but common elsewhere; .2 Moderately threatened in California. No state or federal listing. State Rank S2: Imperiled, Global Rank G3G4: Vulnerable/Apparently Secure.
    Family: Montiaceae
    Lifeform: annual herb
    Flowering: (February) March – May
    Elevation: 0 – 835 meters, 0 – 2740 feet
    Habitat: vernally mesic, sometimes roadsides; meadows and seeps, North Coast coniferous forest, vernal pools.
    Status within project area: potential habitat exists within the roadsides, meadows and seeps, and forested habitat of the project area.

27. **Sea-coast ragwort** (*Packera bolanderi var. bolanderi*)
    Status: CNPS List 2B.2, Plants rare, threatened, or endangered in California but common elsewhere; .2 Moderately threatened in California. No state or federal listing. State Rank S2S3: Imperiled/Vulnerable, Global Rank G4T4: Apparently Secure/Apparently Secure.
    Family: Asteraceae
    Lifeform: perennial rhizomatous herb

Flowering: (January – April) May – July (August)
Elevation: 30 – 650 meters, 100 – 2135 feet
Habitat: sometimes roadsides; coastal scrub, North Coast coniferous forest.
Status within project area: potential habitat exists within roadsides and in the forested habitat of the project area.

28. **White-flowered rein orchid** (*Piperia candida*)
Status: CNPS List 1B.2, Plants rare, threatened, or endangered in California and elsewhere; .2 Moderately threatened in California. No state or federal listing. State Rank S3: Vulnerable, Global Rank G3: Vulnerable.
Family: Orchidaceae
Lifeform: perennial herb
Flowering: (March) May – September
Elevation: 30 – 1310 meters, 100 – 4300 feet
Habitat: broadleaved upland forest, lower montane coniferous forest, North Coast coniferous forest.
Status within project area: potential habitat exists within the forested habitat of the project area.

29. **California pinefoot** (*Pityopus californicus*)
Status: CNPS List 4.2, Plants of limited distribution, a watch list; .2 Moderately threatened in California. No state or federal listing. State Rank S4: Apparently Secure, Global Rank G4G5: Apparently Secure/Secure.
Family: Ericaceae
Lifeform: perennial herb (achlorophyllous)
Flowering: (March – April) May – August
Elevation: 15 – 2225 meters, 50 – 7300 feet
Habitat: mesic; broadleaved upland forest, lower montane coniferous, North Coast coniferous forest, upper montane coniferous forest.
Status within project area: potential habitat exists within the forested habitat of the project area.

30. **North Coast semaphore grass** (*Pleuropogon hooverianus*)
Status: CNPS List 1B.1, Plants rare, threatened, or endangered in California and elsewhere; .1 Seriously threatened in California. State Listed as Threatened (CT), no federal listing. State Rank S2: Imperiled, Global Rank G2: Imperiled.
Family: Poaceae
Lifeform: perennial rhizomatous herb
Flowering: April – June
Elevation: 10 – 671 meters, 35 – 2200 feet
Habitat: open areas, mesic; broadleaved upland forest, meadows and seeps, North Coast coniferous forest.
Status within project area: potential habitat exists within the forested habitat of the project area.

31. **Nodding semaphore grass** (*Pleuropogon refractus*)
    Status: CNPS List 4.2, Plants of limited distribution, a watch list; .2 Moderately threatened in California. No state or federal listing. State Rank S4: Apparently Secure, Global Rank G4: Apparently Secure.
    Family: Poaceae
    Lifeform: perennial rhizomatous herb
    Flowering: (March) April – August
    Elevation: 0 – 1600 meters, 0 – 5250 feet
    Habitat: lower montane coniferous forest, meadows and seeps, North Coast coniferous forest, riparian forest.
    Status within project area: potential habitat exists within the forested habitat of the project area.

32. **Hoary gooseberry** (*Ribes roezlii var. amictum*)
    Status: CNPS List 4.3, Plants of limited distribution, a watch list; .3 Not very threatened in California. No state or federal listing. State Rank S4: Apparently Secure, Global Rank G5T4: Secure/Apparently Secure.
    Family: Grossulariaceae
    Lifeform: perennial deciduous shrub
    Flowering: March – April
    Elevation: 120 – 2300 meters, 395 – 7545 feet
    Habitat: broadleaved upland forest, cismontane woodland, lower montane coniferous forest, upper montane coniferous forest.
    Status within project area: potential habitat exists within forested habitat in the project area.

33. **Maple-leaved checkerbloom** (*Sidalcea malachroides*)
    Status: CNPS List 4.2, Plants of limited distribution, a watch list; .2 Moderately threatened in California. No state or federal listing. State Rank S3: Vulnerable, Global Rank G3: Vulnerable.
    Family: Malvaceae
    Lifeform: perennial herb
    Flowering: (March) April – August
    Elevation: 0 – 730 meters, 0 – 2395 feet
    Habitat: often in disturbed areas; broadleaved upland forest, coastal prairie, coastal scrub, North Coast coniferous forest, riparian woodland.
    Status within project area: potential habitat exists within the forested habitat of the project area.

34. **Siskiyou checkerbloom** (*Sidalcea malviflora ssp. patula*)
    Status: CNPS List 1B.2, Plants rare, threatened, or endangered in California and elsewhere; .2 Moderately threatened in California. No state or federal listing. State Rank S2: Imperiled, Global Rank G5T2: Secure/Imperiled.
    Family: Malvaceae
    Lifeform: perennial rhizomatous herb
    Flowering: May – August
    Elevation: 15 – 1230 meters, 50 – 4035 feet

Habitat: coastal bluff scrub, coastal prairie, North Coast coniferous forest.
Status within project area: potential habitat exists within the forested habitat of the project area.

35. **Methuselah's beard lichen** (*Usnea longissima*)
Status: CNPS List 4.2, Plants of limited distribution, a watch list; .2 Moderately threatened in California. No state or federal listing. State Rank S4: Apparently Secure, Global Rank G4: Apparently Secure.
Family: Parmeliaceae
Lifeform: fruticose lichen (epiphytic)
Flowering: --
Elevation: 50 – 1460 meters, 165 – 4790 feet
Habitat: on tree branches; usually on old growth hardwoods and conifers; broadleaved upland forest, North Coast coniferous forest.
Status within project area: potential habitat exists in hardwoods and conifers within the forested habitat in the project area.

Attachment C. Habitat Photos

Figures 1A & 1B. The property was dominated by Douglas fir (*Pseudotsuga menziesii*) with madrone (*Arbutus menziesii*), California bay (*Umbellularia californica*), buckeye (*Aesculus californica*), black oak (*Quercus kelloggii*), Oregon white oak (*Quercus garryana*), and canyon live oak (*Quercus chrysolepis*).

Figures 2A & 2B. The northern area of the property was predominantly Douglas fir (*Pseudotsuga menziesii*) mixed with madrone (*Arbutus menziesii*), black oak (*Quercus kelloggii*), and Oregon white oak (*Quercus garryana*), with minor components of young incense cedar (*Calocedrus decurrens*) beginning to establish in the grasslands. The central area of the property, shown in Figure 2B, was dominated by Douglas fir (*Pseudotsuga menziesii*), with Jeffrey pine (*Pinus jeffreyi*) and incense cedar (*Calocedrus decurrens*) (S3 G3), with an adjacent blue wild rye (*Elymus glaucus*) SNC (S3 G3). Natural Communities with a rank of S3 or lower are considered sensitive in the state of California.

Figures 3A & 3B. Himalayan blackberry (*Rubus armeniacus,* Cal-IPC *High* rating) was present in limited amounts in areas surrounding the cultivation site (Figure 3A) as well as along the dirt road leading to the water tanks on the north side of the property (Figure 3B).

Figure 4. French broom (*Genista monspessulana,* Cal-IPC *High* rating) was starting to dominate the area on the southern perimeter of the structure to the south of the cultivation sites.

Attachment D. Plant Species Observed

Form	Scientific Name	Common Name	Status	Family	Date
Trees	*Aesculus californica*	Buckeye	native	Sapindaceae	4/17/2021
	Alnus rhombifolia	White alder	native	Betulaceae	6/1/2021
	Arbutus menziesii	Madrono	native	Ericaceae	4/17/2021
	Calocedrus decurrens	Incense cedar	native	Cupressaceae	4/17/2021
	Pinus jeffreyi	Jeffrey pine	native	Pinaceae	4/17/2021
	Pseudotsuga menziesii	Douglas fir	native	Pinaceae	4/17/2021
	Quercus chrysolepis	Gold cup live oak	native	Fagaceae	4/17/2021
	Quercus garryana	Oregon oak	native	Fagaceae	4/17/2021
	Quercus kelloggii	California black oak	native	Fagaceae	4/17/2021
	Umbellularia californica	California bay	native	Lauraceae	4/17/2021
Shrubs	*Baccharis pilularis*	Coyote brush	native	Asteraceae	4/17/2021
	Ceanothus cuneatus var. cuneatus	Buck brush	native	Rhamnaceae	4/17/2021
	Genista monspessulana	French broom	invasive non-native	Fabaceae	7/7/2021
	Heteromeles arbutifolia	Toyon	native	Rosaceae	4/17/2021
	Lonicera hispidula	Pink honeysuckle	native	Caprifoliaceae	4/17/2021
	Lupinus albifrons	Silver bush lupine	native	Fabaceae	6/1/2021
	Phoradendron leucarpum var. tomentosum	Pacific mistletoe	native	Santalaceae	4/17/2021
	Rubus armeniacus	Himalayan blackberry	invasive non-native	Rosaceae	4/17/2021
Herbaceous	*Acmispon americanus*	Spanish clover	native	Fabaceae	7/7/2021
	Acmispon wrangelianus	Chilean trefoil	native	Fabaceae	6/1/2021
	Adiantum jordanii	California maidenhair fern	native	Pteridaceae	6/1/2021
	Agoseris heterophylla	Annual Agoseris	native	Asteraceae	7/7/2021
	Aira caryophyllea	Silvery hairgrass	non-native	Poaceae	6/1/2021
	Anisocarpus madioides	Woodland madia	native	Asteraceae	4/17/2021
	Anthoxanthum odoratum	Sweet vernal grass	invasive non-native	Poaceae	6/1/2021
	Artemisia douglasiana	California mugwort	native	Asteraceae	4/17/2021
	Aspidotis densa	Lace fern	native	Pteridaceae	4/17/2021
	Avena barbata	Slim oat	invasive non-native	Poaceae	6/1/2021
	Bellis perennis	English lawn daisy	non-native	Asteraceae	4/17/2021
	Briza maxima	Rattlesnake grass	invasive non-native	Poaceae	6/1/2021
	Briza minor	Little rattlesnake grass	non-native	Poaceae	4/17/2021
	Brodiaea elegans	Harvest brodiaea	native	Themidaceae	7/7/2021
	Bromus diandrus	Ripgut brome	invasive non-native	Poaceae	7/7/2021

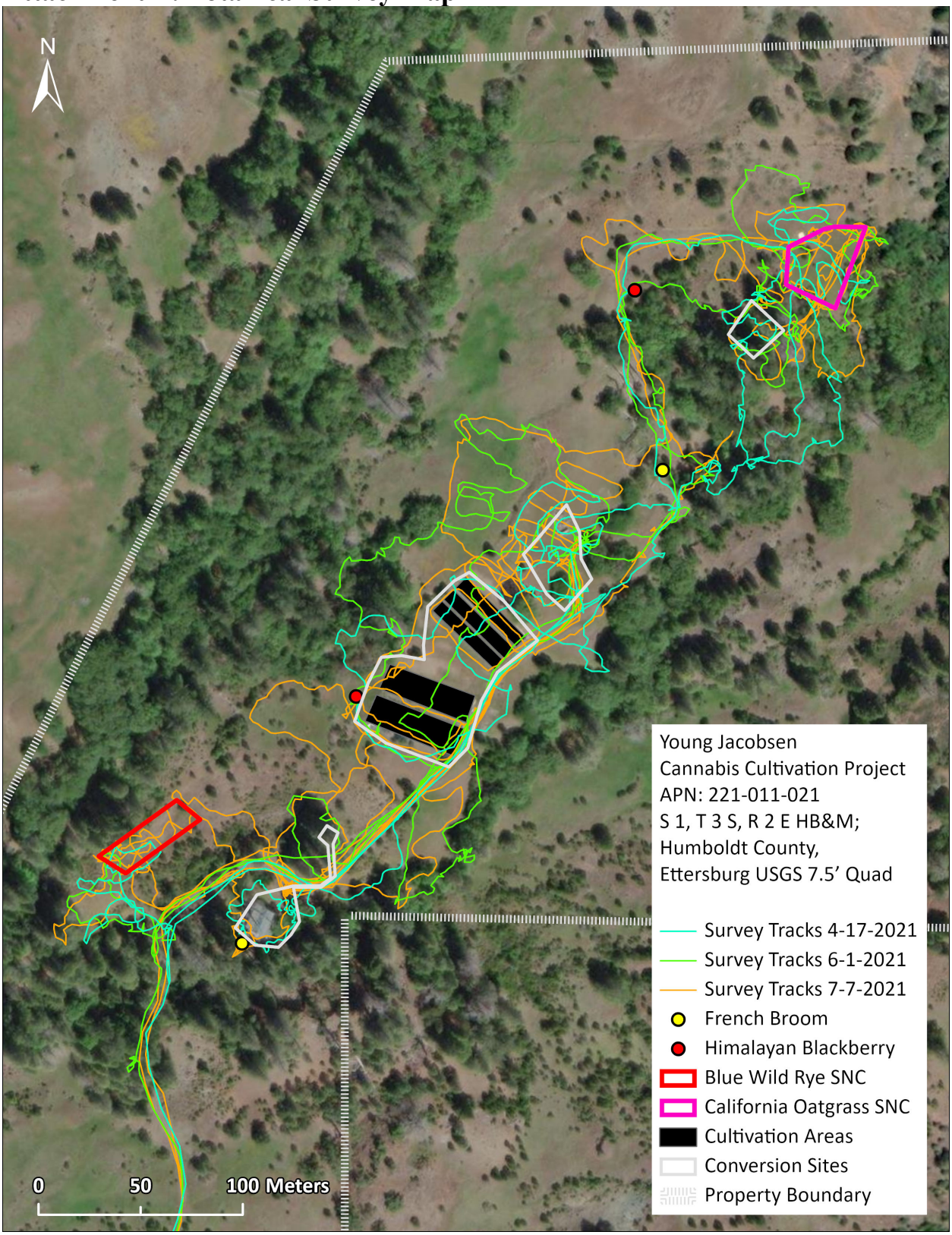
	Bromus hordeaceus	Soft chess	invasive non-native	Poaceae	6/1/2021
	Calochortus tolmiei	hairy star tulip	native	Liliaceae	4/17/2021
	Calochortus vestae	Yellow mariposa	native	Liliaceae	7/7/2021
	Cardamine californica	Bitter cress	native	Brassicaceae	4/17/2021
	Carex serratodens	Twotooth sedge seeps	native	Cyperaceae	6/1/2021
	Cerastium glomeratum	Large mouse ears	non-native	Caryophyllaceae	4/17/2021
	Chlorogalum pomeridianum	Amole	native	Agavaceae	4/17/2021
	Cirsium vulgare	Bullthistle	invasive non-native	Asteraceae	4/17/2021
	Clarkia purpurea	Purple clarkia	native	Onagraceae	6/1/2021
	Claytonia parviflora	Narrow leaved miner's lettuce	native	Montiaceae	4/17/2021
	Claytonia rubra	Red stemmed spring beauty	native	Montiaceae	4/17/2021
	Collomia heterophylla	Varied leaved collomia	native	Polemoniaceae	6/1/2021
	Convolvulus arvensis	Field bindweed	non-native	Convolvulaceae	6/1/2021
	Croton setiger	Turkey-mullein	native	Euphorbiaceae	7/7/2021
	Cynoglossum grande	Houndstongue	native	Boraginaceae	4/17/2021
	Cynosurus echinatus	Dogtail grass	invasive non-native	Poaceae	4/17/2021
	Cyperus eragrostis	Tall cyperus	native	Cyperaceae	6/1/2021
Herbaceous	*Danthonia californica*	California oatgrass	native	Poaceae	6/1/2021
	Daucus pusillus	Wild carrot	native	Apiaceae	4/17/2021
	Dendroalsia abietina	Dendroalsia moss	native	Cryphaeaceae	4/17/2021
	Dichelostemma capitatum	Blue dicks	native	Themidaceae	4/17/2021
	Dichelostemma ida-maia	Firecracker flower	native	Themidaceae	6/1/2021
	Elymus caput-medusae	Medusa head	invasive non-native	Poaceae	6/1/2021
	Elymus glaucus	Blue wildrye	native	Poaceae	6/1/2021
	Epilobium minutum	Minute willowherb	native	Onagraceae	4/17/2021
	Eriogonum luteolum	Wicker buckwheat	native	Polygonaceae	4/17/2021
	Erodium botrys	Big heron bill	non-native	Geraniaceae	7/7/2021
	Erythranthe guttata	seep monkeyflower	native	Phrymaceae	4/17/2021
	Festuca perennis	Italian rye grass	invasive non-native	Poaceae	6/1/2021
	Galium aparine	Cleavers	native	Rubiaceae	4/17/2021
	Galium californicum	California bedstraw	native	Rubiaceae	6/1/2021
	Geranium dissectum	Wild geranium	invasive non-native	Geraniaceae	4/17/2021
	Hieracium albiflorum	White flowered hawkweed	native	Asteraceae	4/17/2021
	Holcus lanatus	Common velvetgrass	invasive non-native	Poaceae	6/1/2021
	Hypericum perforatum	Klamathweed	invasive non-native	Ericaceae	4/17/2021
	Hypochaeris radicata	Hairy cats' ear	invasive non-native	Asteraceae	4/17/2021

Iris purdyi	Purdy's iris	native	Iridaceae	4/17/2021
Juncus occidentalis	Slender juncus	native	Juncaceae	6/1/2021
Juncus patens	Rush	native	Juncaceae	4/17/2021
Lasthenia californica	Goldfields	native	Asteraceae	4/17/2021
Linum bienne	Flax	non-native	Linaceae	6/1/2021
Lomatium utriculatum	Hog fennel	native	Apiaceae	7/7/2021
Lotus tenuis	Narrow-leaf bird's-foot trefoil	non-native	Fabaceae	6/1/2021
Lupinus bicolor	Lupine	native	Fabaceae	4/17/2021
Luzula comosa	Hairy wood rush	native	Juncaceae	6/1/2021
Lysimachia arvensis	Scarlet pimpernel	non-native	Myrsinaceae	6/1/2021
Lysimachia latifolia	Pacific star flower	native	Myrsinaceae	6/1/2021
Madia gracilis	Gumweed	native	Asteraceae	6/1/2021
Medicago polymorpha	California burclover	invasive non-native	Fabaceae	4/17/2021
Mentha pulegium	Pennyroyal	invasive non-native	Lamiaceae	4/17/2021
Micranthes californica	Greene's saxifrage	native	Saxifragaceae	4/17/2021
Micropus californicus	Q tips	native	Asteraceae	4/17/2021
Minuartia douglasii	Douglas' sandwort	native	Caryophyllaceae	6/1/2021
Modiola caroliniana	Carolina bristle mallow	non-native	Malvaceae	7/7/2021
Navarretia squarrosa	Skunkweed	native	Polemoniaceae	4/17/2021
Nemophila menziesii var. atomaria	Baby blue eyes	native	Boraginaceae	4/17/2021
Nemophila parviflora	Small flowered nemophila	native	Boraginaceae	4/17/2021
Pedicularis densiflora	Indian warrior	native	Orobanchaceae	4/17/2021
Pentagramma triangularis	Gold back fern	native	Pteridaceae	4/17/2021
Piperia transversa	Mountain piperia	native	Orchidaceae	4/17/2021
Plagiobothrys nothofulvus	Rusty haired popcorn flower	native	Boraginaceae	4/17/2021
Plantago lanceolata	Ribwort	invasive non-native	Plantaginaceae	4/17/2021
Platystemon californicus	Cream cups	native	Papaveraceae	4/17/2021
Poa pratense	Kentucky bluegrass	invasive non-native	Poaceae	7/7/2021
Polygala californica	Milkwort	native	Polygalaceae	6/1/2021
Polypodium calirhiza	Licorice fern	native	Polypodiaceae	4/17/2021
Polypodium glycyrrhiza	Licorice fern	native	Polypodiaceae	4/17/2021
Primula hendersonii	Mosquito bill	native	Primulaceae	4/17/2021
Pseudognaphalium luteoalbum	Jersey cudweed	non-native	Asteraceae	6/1/2021
Pseudognaphalium stramineum	Cottonbatting plant	native	Asteraceae	6/1/2021
Pyrola aphylla	leafless wintergreen	native	Ericaceae	6/1/2021
Ranunculus hebecarpus	pubescent fringed buttercup	native	Ranunculaceae	6/1/2021
Rumex acetosella	Sheep sorrel	invasive non-native	Polygonaceae	4/17/2021

Herbaceous

Herbaceous	*Sagina decumbens ssp. occidentalis*	Western pearlwort	native	Caryophyllaceae	7/7/2021
	Sanicula bipinnatifida	Purple sanicle	native	Apiaceae	4/17/2021
	Sherardia arvensis	Field madder	non-native	Rubiaceae	4/17/2021
	Silene laciniata	Cardinal catchfly	native	Caryophyllaceae	6/1/2021
	Silybum marianum	Milk thistle	invasive non-native	Asteraceae	4/17/2021
	Sisyrinchium bellum	Blue eyed grass	native	Iridaceae	4/17/2021
	Stachys rigida	rough hedgenettle	native	Lamiaceae	4/17/2021
	Toxicoscordion fremontii	Fremont's starlily	native	Melanthiaceae	6/1/2021
	Trifolium fragiferum	Strawberry clover	non-native	Fabaceae	4/17/2021
	Trifolium hirtum	Rose clover	invasive non-native	Fabaceae	6/1/2021
	Trifolium repens	White clover	non-native	Fabaceae	4/17/2021
	Trifolium willdenovii	Tomcat clover	native	Fabaceae	4/17/2021
	Vicia hirsuta	Hairy vetch	non-native	Fabaceae	4/17/2021
	Vicia sativa	Spring vetch	non-native	Fabaceae	6/1/2021
	Woodwardia fimbriata	Western chain fern	native	Blechnaceae	4/17/2021
	Yabea microcarpa	Hedge parsley	native	Apiaceae	7/7/2021
	Zeltnera muehlenbergii	Muehlenberg's centaury	native	Gentianaceae	4/17/2021
Cryptogams	*Alectoria sermentosa*	Witch's hair	native	Parmeliaceae	7/7/2021
	Cladonia sp.	pixie cup lichen	native	Cladoniaceae	4/17/2021
	Dicranum sp.	fork mosses	native	Dicranaceae	7/7/2021
	Evernia prunastri	oakmoss	native	Parmeliaceae	4/17/2021
	Funaria hygrometrica	bonfire moss	native	Funariaceae	4/17/2021
	Hypnum cupressiforme	Cypress-leaved Plait-Moss	native	Hypnaceae	7/7/2021
	Hypogymnia enteromorpha	budding tube lichen	native	Parmeliaceae	4/17/2021
	Lepra amara	Bitter wart lichen	native	Pertusariaceae	7/7/2021
	Letharia vulpina	wolf lichen	native	Parmeliaceae	4/17/2021
	Lobaria pulmonaria	tree lungwort	native	Lobariaceae	4/17/2021
	Ochrolechia	crab's eye lichen	native	Ochrolechiaceae	4/17/2021
	Parmelia sulcata	shield lichen	native	Parmeliaceae	7/7/2021
	Parmotrema	ruffle lichens	native	Parmeliaceae	7/7/2021
	Platismatia glauca	varied rag lichen	native	Parmeliaceae	4/17/2021
	Platismatia herrei	Herre's rag lichen	native	Parmeliaceae	7/7/2021
	Pseudisothecium stoloniferum	cat's tail moss	native	Lembophyllaceae	4/17/2021
	Pseudocyphellaria	speckle belly lichen	native	Lobariaceae	4/17/2021
	Racomitrium	woolly fringe moss	native	Grimmiaceae	4/17/2021
	Ramalina sp.	bushy lichens	native	Ramalinaceae	4/17/2021
	Scytinium palmatum	Antlered Jellyskin Lichen	native	Collemataceae	4/17/2021
	Sphaerophorus tuckermanii	coral lichen	native	Sphaerophoraceae	6/1/2021
	Trametes versicolor	turkey tail	native	Polyporaceae	4/17/2021
	Tuckermanopsis orbata	variable wrinkle lichen	native	Parmeliaceae	4/17/2021
	Usnea intermedia	Arizona beard lichen	native	Parmeliaceae	6/1/2021

Attachment E. Botanical Survey Map



Attachment F. Cal-IPC Weed Alert Information

Weed Alert!
French broom

www.cal-ipc.org

French broom

(Genista monsplessulana)

Mature Size Shoulder

Description

- 3-8 ft. perennial shrub with bright yellow pea-like flowers
- Flowers in dense clusters of 4-10 on short branches
- Leaves composed of three leaflets ½-¾ in. long
- Leaves, stems, and seed pods covered with long, silky, silvery to reddish-gold hairs
- Stems green, erect, and typically leafy
- Seed pods brown, slightly flattened at maturity, and ¼-1 ¼ in. long
- Reproduces by seed
- Spread by water, roads, trails, equipment, horticulture, animals
- Native to the Mediterranean region and Azores Islands

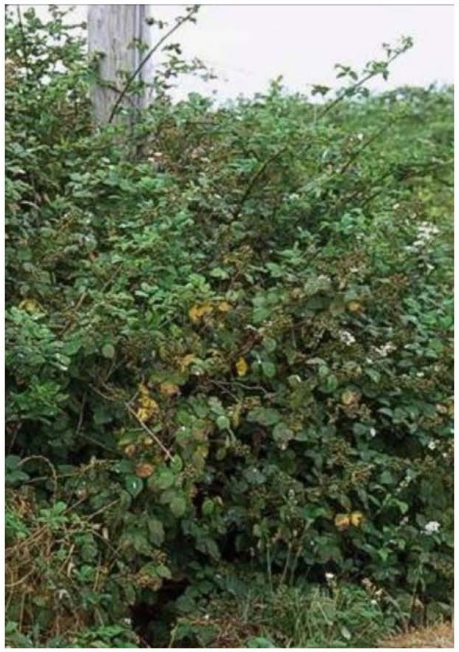
Bloom Period Mar - May

Habitat Coastal scrub and prairie, chaparral, grassland, riparian and cismontane woodland, forest

2-Minute Removal Pull

Image credits: Front and back: J.M. DiTomaso ©2007 The Regents of the University of California; icons by Tim Hyland
These cards were adapted from a design by National Park Service.

Weed Alert!
Himalayan blackberry



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Himalayan blackberry
(Rubus armeniacus)

Mature Size Shoulder

Description

- Prickly perennial shrub that can form impenetrable thickets up to 15 ft. tall
- White to pale pink flowers have 5 petals and are 1 in. wide
- Leaves of 5 leaflets (sometimes 3) with white undersides
- 5-angled stem with stout, curved thorns

- Fruits are blackberries that ripen from green to black, and are ~ ½ in. wide
- Reproduces by seed and by rooting at stem nodes
- Spread by birds or other animals
- Native to Europe

Bloom Period Apr - Aug

Habitat Riparian, scrub, grassland, forest

2-Minute Removal Dig

Image credits: Front top: © Michael Charters; all other images: NPS; icons by Tim Hyland
These cards were adapted from a design by National Park Service.

Attachment G: Rank Definitions

CONSERVATION STATUS DEFINITIONS

Fed List*
This field indicates the plant's legal status under the Federal Endangered Species Act (ESA).

FE **Federally Endangered**: The classification provided to a plant in danger of extinction within the foreseeable future throughout all or a significant portion of its range.
FT **Federally Threatened**: The classification provided to a plant which is likely to become an Endangered species within the foreseeable future throughout all or a significant portion of its range.
PE **Proposed Endangered**: The classification provided to a plant that is proposed for federal listing as Endangered in the Federal Register under Section 4 of the Endangered Species Act.
PT **Proposed Threatened**: The classification provided to a plant that is proposed for federal listing as Threatened in the Federal Register under Section 4 of the Endangered Species Act.
FC **Federal Candidate**: The classification provided to a plant that has been studied by the United States Fish and Wildlife Service, and the Service has concluded that it should be proposed for addition to the list of Federally Endangered and Threatened species.
None The plant has no federal listing status under ESA.
FD **Federally Delisted**: The plant was previously listed as Endangered or Threatened, but is no longer on the list of Federally Endangered and Threatened species.

State List*
This field indicates the plant's legal status under the California Endangered Species Act (CESA).

CE **State Listed as Endangered**: The classification provided to a native species or subspecies in serious danger of becoming extinct throughout all or a significant portion of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.
CT **State Listed as Threatened**: The classification provided to a native species or subspecies that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of special protection and management efforts.
CR **State Listed as Rare**: The classification provided to a native plant species, subspecies, or variety when, although not presently threatened with extinction, it occurs in such small numbers throughout its range that it may become endangered if its present environment worsens. This designation stems from the Native Plant Protection Act of 1977.
CC **Candidate for State Listing**: The classification provided to a native species or subspecies that the Fish and Game Commission has formally noticed as being under review by the Department of Fish and Wildlife for addition to the list of endangered or threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to the list of endangered or threatened species.
None The plant has no state listing status under CESA.
CD **State Delisted**: The plant was previously listed as Endangered, Threatened or Rare but is no longer listed by the State of California.

Global Rank*
The Global Rank (G-rank) is an indication of the overall condition and imperilment of an element throughout its global range. It is a letter+number score that reflects a combination of Rarity, Threat and Trend factors, with weighting being heavier on the rarity factors. The Global Ranks are assigned by NatureServe in coordination with the state program(s) where the element occurs.

GX **Presumed Extinct** — Not located despite intensive searches and virtually no likelihood of rediscovery.
GH **Possibly Extinct** — Known from only historical occurrences but still some hope of rediscovery. There is evidence that the species may be extinct or the ecosystem may be eliminated throughout its range, but not enough to state this with certainty. Examples of such evidence include 1) that a species has not been documented in approximately 20–40 years despite some searching or some evidence of significant habitat loss or degradation; 2) that a species or ecosystem has been searched for unsuccessfully, but not thoroughly enough to presume that it is extinct or eliminated throughout its range.
G1 **Critically Imperiled** — At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
G2 **Imperiled** — At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
G3 **Vulnerable** — At moderate risk of extinction or elimination due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
G4 **Apparently Secure** — Uncommon but not rare; some cause for long-term concern due to declines or other factors.
G5 **Secure** — Common; widespread and abundant.

GNR **Unranked** — Global rank not yet assessed.

GU **Unrankable** — Currently unrankable due to a lack of information or due to substantially conflicting information about status or trends.

G#G# **Range Rank** — A numeric range rank (e.g., G2G3) is used to indicate the range of uncertainty about the exact status of a taxon or community.

G#T# **Infraspecific Taxon** — The status of infraspecific taxa (subspecies or varieties) are indicated by a "T-rank" following the species' Global Rank. Rules for assigning T-ranks follow the same principles as those for Global Ranks. However, a T-rank cannot imply the subspecies or variety is more abundant than the species. In such cases, the G-rank reflects the condition of the entire species, whereas the T-rank reflects the global situation of just the subspecies or variety.

? **Qualifier: Inexact Numeric Rank** — A question mark represents a rank qualifier, denoting an inexact or uncertain numeric rank.

Q **Qualifier: Questionable Taxonomy** — The distinctiveness of this entity as a taxon or community at the current level is questionable; resolution of this uncertainty may result in change from a species to a subspecies or hybrid, or inclusion of this taxon or type in another taxon or type, with the resulting taxon having a lower-priority (numerically higher) conservation status rank.

C **Qualifier: Captive or Cultivated Only** — The taxon or community at present is presumed or possibly extinct or eliminated in the wild across its entire native range but is extant in cultivation, in captivity, as a naturalized population (or populations) outside its native range, or as a reintroduced population or ecosystem restoration, not yet established.

State Rank*

The State Rank (S-rank) is an indication of the condition and imperilment of an element throughout its range within the state. As with the G-rank, it is a letter+number score that reflects a combination of Rarity, Threat and Trend factors, weighted more heavily on rarity. The State Ranks are assigned by the CNDDB biologists using standard natural heritage methodology.

SX **Presumed Extirpated** — Species is believed to be extirpated from the state. Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered.

SH **Possibly Extirpated (Historical)** — Species occurred historically in the state, and there is some possibility that it may be rediscovered. All sites are historical; the element has not been seen for at least 20 years, but suitable habitat still exists.

S1 **Critically Imperiled** — Critically imperiled in the state because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.

S2 **Imperiled** — Imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or state.

S3 **Vulnerable** — Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.

S4 **Apparently Secure** — Uncommon but not rare; some cause for long-term concern due to declines or other factors.

S5 **Secure** — Common, widespread, and abundant in the state.

SNR **Unranked** — State conservation status not yet assessed.

SU **Unrankable** — Currently unrankable due to a lack of information or due to substantially conflicting information about status or trends.

S#S# **Range Rank** — A numeric range rank (e.g., S2S3) is used to indicate any range of uncertainty about the status of the species or community.

? **Qualifier: Inexact or Uncertain** — A question mark represents a rank qualifier, denoting an inexact or uncertain numeric rank.

Note: References to older ranks may contain a decimal "threat" rank of .1, .2, or .3, where .1 indicates very threatened status, .2 indicates moderate threat, and .3 indicates few or no current known threats.

CA Rare Plant Rank (CRPR)

California Rare Plant Ranks (CRPRs) are a ranking system developed by the California Native Plant Society (CNPS) to define and categorize rarity in the California flora. All plants that are assigned to a California Rare Plant Rank category are tracked by the CNDDB; however, element occurrence (EO) information is only maintained for CRPR 1 and 2 plants, and some CRPR 3 plants. Most CRPR 3 and 4 plants that have EO information in this Inventory and the CNDDB were previously assigned to CRPR 1 or 2; their EO data reflect their prior rank and have generally not been updated since the date of their change to CRPR 3 or 4.

Major changes to California Rare Plant Ranks (e.g., additions, changes, and deletions) undergo the CNPS Rare Plant Status Review process. This is a joint effort by CNPS, the CNDDB, Regional Plant Status Review Groups, the Status Review Forum, and botanical experts throughout the world. Once consensus is reached, then additions, changes, or deletions in California Rare Plant Ranks are made to this Inventory and the CNDDB. For a flow chart of the status review process, see Rare Plant Data in California: The Cooperative Relationship between the California Natural Diversity Database and the California Native Plant Society.

1A **Presumed Extirpated or Extinct** — Plants presumed extirpated in California and either rare or extinct elsewhere. These plants have not been seen or collected in the wild in California for many years. A plant is extinct if it no longer

occurs anywhere. A plant that is extirpated from California has been eliminated from California, but may still occur elsewhere in its range.

All of the plants constituting California Rare Plant Rank 1A meet the definitions of the California Endangered Species Act of the California Department of Fish and Game Code, and are eligible for state listing. Should these taxa be rediscovered, any impacts to individual plants or their habitat must be analyzed during preparation of environmental documents relating to the California Environmental Quality Act (CEQA), or those considered to be functionally equivalent to CEQA, as they meet the definition of Rare or Endangered under CEQA Guidelines §15125 (c) and/or §15380.

1B **Rare or Endangered — Plants rare, threatened, or endangered in California and elsewhere.** These plants are rare throughout their entire range with the majority also being endemic to California. Most of the plants that are ranked 1B have declined significantly over the last century. California Rare Plant Rank 1B plants constitute the majority of taxa in the CNPS Inventory, with more than 1,000 plants assigned to this category of rarity.

All of the plants constituting California Rare Plant Rank 1B meet the definitions of the California Endangered Species Act of the California Department of Fish and Game Code, and are eligible for state listing. Impacts to these species or their habitat must be analyzed during preparation of environmental documents relating to CEQA, or those considered to be functionally equivalent to CEQA, as they meet the definition of Rare or Endangered under CEQA Guidelines §15125 (c) and/or §15380.

2A **Extirpated in California — Plants presumed extirpated in California but common elsewhere**. These plants are presumed extirpated because they have not been observed or documented in California for many years. This list only includes plants that are presumed extirpated in California, but are common elsewhere in their range outside of the state.

All of the plants constituting California Rare Plant Rank 2A meet the definitions of the California Endangered Species Act of the California Department of Fish and Game Code, and are eligible for state listing. Should these species be rediscovered, any impacts proposed to individuals or their habitat must be analyzed during preparation of environmental documents relating to CEQA, or those considered to be functionally equivalent to CEQA, as they meet the definition of Rare or Endangered under CEQA Guidelines §15125 (c) and/or §15380.

2B **Rare or Endangered in California — Plants rare, threatened, or endangered in California but common elsewhere.** Except for being common beyond the boundaries of California, 2B plants would have been ranked 1B. From the federal perspective, plants common in other states or countries are not eligible for consideration under the provisions of the Federal Endangered Species Act. With California Rare Plant Rank 2B, we recognize the importance of protecting the geographic range of widespread species. In this way we protect the diversity of our own state's flora and help maintain evolutionary processes and genetic diversity within species.

All of the plants constituting California Rare Plant Rank 2B meet the definitions of the California Endangered Species Act of the California Department of Fish and Game Code, and are eligible for state listing. Impacts to these species or their habitat must be analyzed during preparation of environmental documents relating to CEQA, or those considered to be functionally equivalent to CEQA, as they meet the definition of Rare or Endangered under CEQA Guidelines §15125 (c) and/or §15380.

3 **Needs Review — Plants about which more information is needed.** These plants are united by one common theme—we lack the necessary information to assign them to one of the other ranks or to reject them. Nearly all of the plants constituting California Rare Plant Rank 3 are taxonomically problematic, yet if taxonomically valid would demonstrably qualify for rank 1B or 2B. For each California Rare Plant Rank 3 plant we have provided the known information and indicated in the "Notes" section of the Inventory record where assistance is needed. Data regarding distribution, endangerment, ecology, and taxonomic validity are welcomed and can be submitted by emailing the Rare Plant Program at rareplants@cnps.org.

Many of the plants constituting California Rare Plant Rank 3 meet the definitions of the California Endangered Species Act of the California Department of Fish and Game Code, and are eligible for state listing. Impacts to these species or their habitat should be analyzed during preparation of environmental documents relating to CEQA, or those considered to be functionally equivalent to CEQA, as they may meet the definition of Rare or Endangered under CEQA Guidelines §15125 (c) and/or §15380.

4 **Uncommon in California — Plants of limited distribution, a watch list**. These plants are of limited distribution or infrequent throughout a broader area in California, and their status should be monitored regularly. Should the degree of endangerment or rarity of a California Rare Plant Rank 4 plant change, we will transfer it to a more appropriate rank. Some of the plants constituting California Rare Plant Rank 4 meet the definitions of the California Endangered Species Act of the California Department of Fish and Game Code, and few, if any, are eligible for state listing. Nevertheless, many of them are significant locally, and we strongly recommend that California Rare Plant Rank 4 plants be evaluated

for significant impacts during preparation of environmental documents relating to CEQA, or those considered to be functionally equivalent to CEQA, based on CEQA Guidelines §15125 (c) and/or §15380. This may be particularly appropriate for:

The type locality of a California Rare Plant Rank 4 taxon;
Occurrences at the periphery of a species' range;
Areas where the taxon is especially uncommon;
Areas where the taxon has sustained heavy losses (declining);
Occurrences exhibiting unusual morphology or occurring on unusual substrates;
Species maintained on BLM, USFWS, or USFS sensitive species lists; and
Taxa associated with a habitat that is declining in California at a significant rate.
To assist in evaluating CRPR 4 taxa for CEQA consideration, see the technical memorandum on Considerations for Including CRPR 4 Plant Taxa in CEQA Biological Resource Impact Analysis prepared by the Rare Plant Program Committee.

Threat Rank
California Rare Plant Ranks at each level also include a threat rank (e.g., CRPR 4.3) and are assigned as follows:

0.1 **Seriously threatened in California** — Over 80% of occurrences threatened / high degree and immediacy of threat.
0.2 **Moderately threatened in California** — 20-80% of occurrences threatened / moderate degree and immediacy of threat.
0.3 **Not very threatened in California** — Less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known.

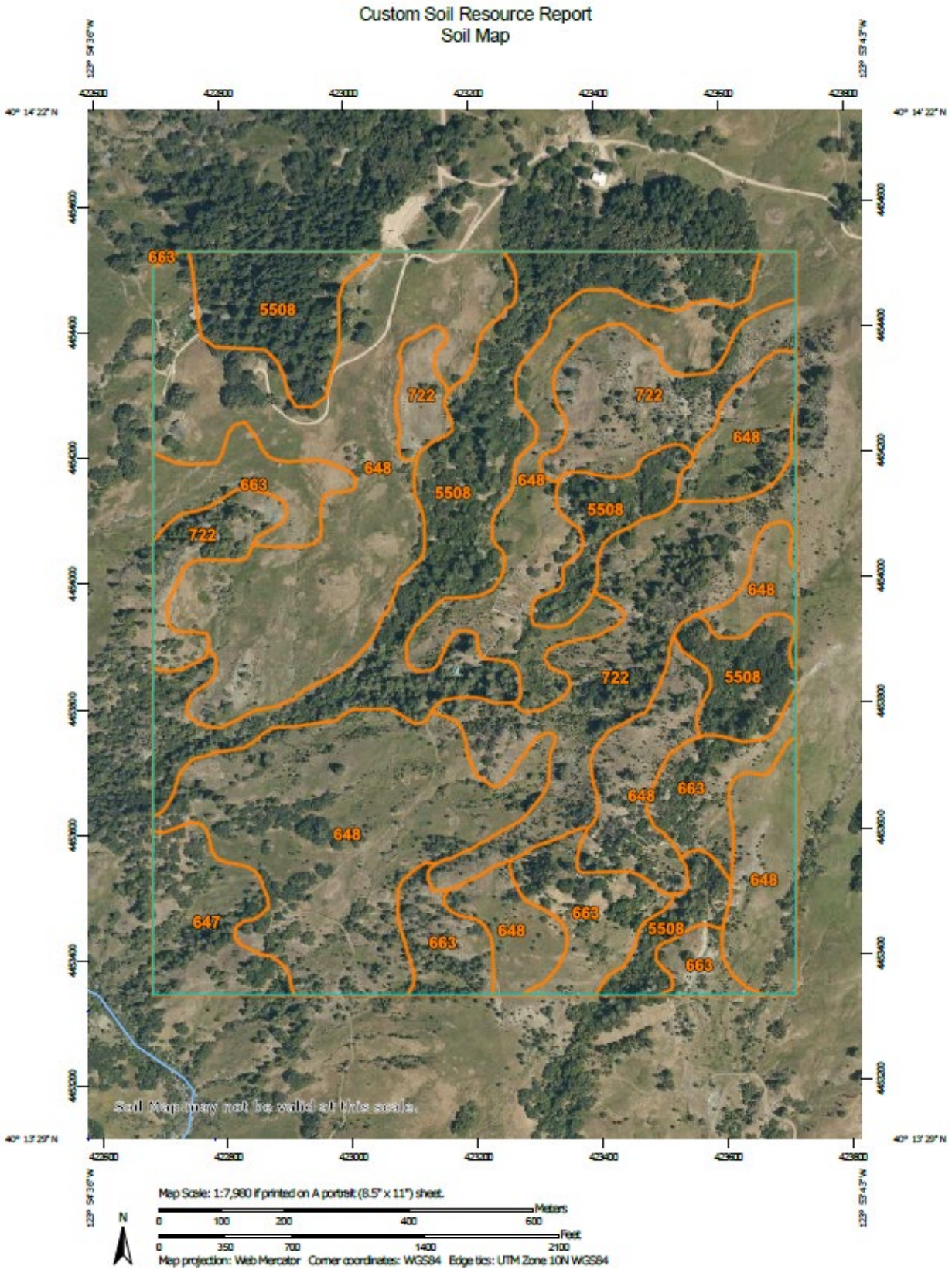
Notes:

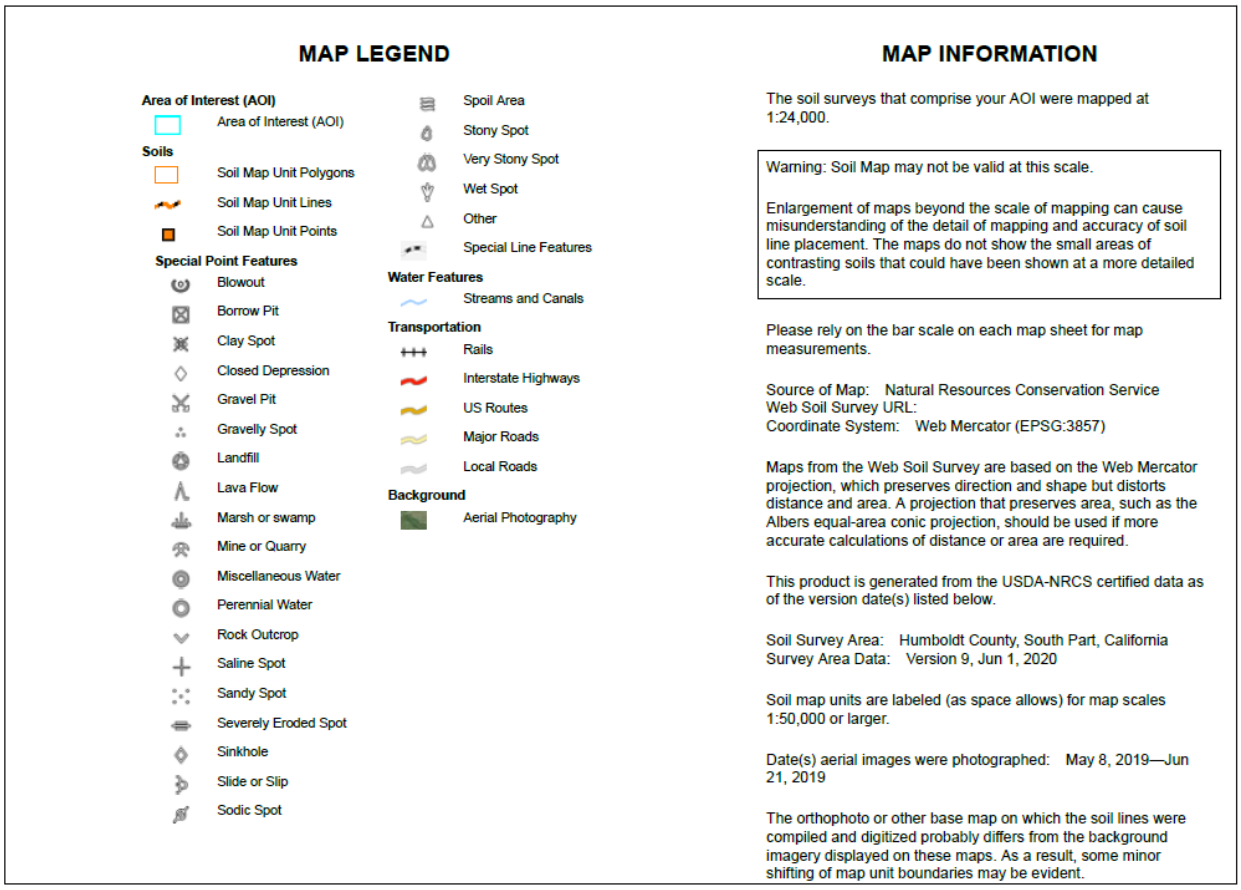
Threat ranks do not are provided for general research purposes only and do not indicate differences in conservation assessment. For example, a CRPR 1B.3 plant has the same conservation status as a CRPR 1B.1 plant, and it is mandatory that both be fully considered during preparation of environmental documents relating to CEQA.

The threat ranking criteria described above represent only the starting point for the assessment of threat level. Other factors, such as habitat vulnerability and specificity, distribution, and condition of occurrences, are also considered in assigning threat ranks.
In many cases, the threat rank has not been reassessed since the date the taxon was first added to this Inventory or underwent its last Status Review. For these taxa, the assigned threat ranking may not accurately reflect the current level of threat.

Considered but Rejected
A category of Considered but Rejected (CBR) exists for plants that either previously had a CRPR, or that were considered for addition to this Inventory but were rejected for one or more reasons. Any plant that is deleted from a CRPR category in this Inventory is not fully removed and is instead changed to the CBR category. Rejected plants are searchable by selecting the "Considered But Rejected" button in the California Rare Plant Rank section of simple and advanced search. A brief description of the reason why the plant was rejected is included for each CBR entry.

Attachment H. Soil Map and Map Unit Descriptions of Project Area





Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
647	Coyoterock-Yorknorth complex, 15 to 50 percent slopes	10.6	3.5%
648	Yorknorth-Devilshole complex, 5 to 30 percent slopes	147.2	48.6%
663	Yorknorth-Windynip complex, 15 to 50 percent slopes	30.7	10.1%
722	Salmonfalls-Cedarflat complex, 5 to 50 percent slopes	50.2	16.6%
5508	Canoecreek-Coyoterock-Sproulish complex, 15 to 50 percent slopes	64.1	21.2%
Totals for Area of Interest		**302.7**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Humboldt County, South Part, California

647—Coyoterock-Yorknorth complex, 15 to 50 percent slopes

Map Unit Setting

National map unit symbol: 2qds3
Elevation: 200 to 3,280 feet
Mean annual precipitation: 60 to 100 inches
Mean annual air temperature: 48 to 57 degrees F
Frost-free period: 240 to 300 days
Farmland classification: Not prime farmland

Map Unit Composition

*Coyoterock and similar soils:*45 percent
*Yorknorth, moist, and similar soils:*40 percent
*Minor components:*15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Coyoterock

Setting

*Landform:*Mountain slopes
*Landform position (two-dimensional):*Backslope
*Landform position (three-dimensional):*Center third of mountainflank
*Down-slope shape:*Linear, concave
*Across-slope shape:*Concave, linear
*Parent material:*Colluvium derived from sandstone and/or mudstone and/or residuum weathered from schist

Typical profile

Oi - 0 to 0 inches: slightly decomposed plant material
A - 0 to 3 inches: loam
BAt - 3 to 11 inches: clay loam
Bt1 - 11 to 20 inches: clay
Bt2 - 20 to 56 inches: clay
C - 56 to 71 inches: gravelly clay

Properties and qualities

*Slope:*15 to 50 percent
*Surface area covered with cobbles, stones or boulders:*0.0 percent
*Depth to restrictive feature:*More than 80 inches
*Drainage class:*Moderately well drained
Runoff class: Very high
*Capacity of the most limiting layer to transmit water (Ksat):*Moderately low to moderately high (0.06 to 0.20 in/hr)
*Depth to water table:*About 20 to 39 inches
*Frequency of flooding:*None
*Frequency of ponding:*None
*Maximum salinity:*Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Hydric soil rating: No

Description of Yorknorth, Moist

Setting

*Landform:*Mountain slopes
*Landform position (two-dimensional):*Backslope
*Landform position (three-dimensional):*Mountainflank
*Down-slope shape:*Concave, linear
*Across-slope shape:*Linear, concave
*Parent material:*Colluvium derived from sandstone and/or residuum weathered from schist and/or earthflow deposits derived from mudstone

Typical profile

A1 - 0 to 7 inches: silt loam
A2 - 7 to 11 inches: silt loam
Bt1 - 11 to 20 inches: silty clay loam
Bt2 - 20 to 39 inches: silty clay loam
C - 39 to 71 inches: clay

Properties and qualities

*Slope:*15 to 50 percent
*Depth to restrictive feature:*More than 80 inches
*Drainage class:*Moderately well drained
Runoff class: Very high
*Capacity of the most limiting layer to transmit water (Ksat):*Moderately low to moderately high (0.06 to 0.20 in/hr)
*Depth to water table:*About 20 to 39 inches
*Frequency of flooding:*None
*Frequency of ponding:*None
*Maximum salinity:*Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Crazycoyote

*Percent of map unit:*10 percent
*Landform:*Mountain slopes
*Landform position (two-dimensional):*Backslope
*Landform position (three-dimensional):*Center third of mountainflank
*Down-slope shape:*Linear, concave, convex
*Across-slope shape:*Linear

Hydric soil rating: No

Devilshole

*Percent of map unit:*5 percent
*Landform:*Mountain slopes
*Landform position (two-dimensional):*Shoulder
*Landform position (three-dimensional):*Upper third of mountainflank
*Down-slope shape:*Convex, linear
*Across-slope shape:*Linear, convex
Hydric soil rating: No

648—Yorknorth-Devilshole complex, 5 to 30 percent slopes

Map Unit Setting

National map unit symbol: 2qds4
Elevation: 200 to 3,280 feet
Mean annual precipitation: 49 to 100 inches
Mean annual air temperature: 48 to 57 degrees F
Frost-free period: 240 to 300 days
Farmland classification: Not prime farmland

Map Unit Composition

*Yorknorth, moist, and similar soils:*70 percent
*Devilshole and similar soils:*15 percent
*Minor components:*15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Yorknorth, Moist

Setting

*Landform:*Mountain slopes
*Landform position (two-dimensional):*Backslope, footslope
*Landform position (three-dimensional):*Mountainflank
*Down-slope shape:*Concave, linear
*Across-slope shape:*Linear, concave
*Parent material:*Colluvium derived from sandstone and/or residuum weathered from schist and/or earthflow deposits derived from mudstone

Typical profile

A1 - 0 to 3 inches: loam
A2 - 3 to 10 inches: silty clay loam
A3 - 10 to 16 inches: silty clay loam
Bt1 - 16 to 37 inches: clay loam
Bt2 - 37 to 47 inches: clay loam
Bt3 - 47 to 71 inches: gravelly clay

Properties and qualities

*Slope:*5 to 30 percent
*Depth to restrictive feature:*More than 80 inches
*Drainage class:*Moderately well drained
Runoff class: Very high

*Capacity of the most limiting layer to transmit water (Ksat):*Moderately low to moderately high (0.06 to 0.20 in/hr)
*Depth to water table:*About 20 to 39 inches
*Frequency of flooding:*None
*Frequency of ponding:*None
*Maximum salinity:*Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Hydric soil rating: No

Description of Devilshole

Setting

*Landform:*Mountain slopes
*Landform position (two-dimensional):*Shoulder
*Landform position (three-dimensional):*Upper third of mountainflank
*Down-slope shape:*Convex, linear
*Across-slope shape:*Linear, convex
*Parent material:*Residuum weathered from sandstone and/or mudstone

Typical profile

A1 - 0 to 6 inches: gravelly loam
A2 - 6 to 22 inches: very gravelly loam
Bw - 22 to 45 inches: very gravelly loam
C - 45 to 71 inches: gravel

Properties and qualities

*Slope:*5 to 30 percent
*Depth to restrictive feature:*39 to 59 inches to strongly contrasting textural stratification
*Drainage class:*Well drained
Runoff class: Medium
*Capacity of the most limiting layer to transmit water (Ksat):*Moderately low to moderately high (0.14 to 1.42 in/hr)
*Depth to water table:*More than 80 inches
*Frequency of flooding:*None
*Frequency of ponding:*None
*Maximum salinity:*Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 5.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Coyoterock

*Percent of map unit:*6 percent

*Landform:*Mountain slopes
*Landform position (two-dimensional):*Backslope
*Landform position (three-dimensional):*Center third of mountainflank
*Down-slope shape:*Linear, concave
*Across-slope shape:*Concave, linear
Hydric soil rating: No

Rainbear

*Percent of map unit:*5 percent
*Landform:*Ridges, mountain slopes
*Landform position (two-dimensional):*Shoulder
*Landform position (three-dimensional):*Mountainflank
*Down-slope shape:*Convex
*Across-slope shape:*Linear
Hydric soil rating: No

Sproulish

*Percent of map unit:*3 percent
*Landform:*Mountain slopes
*Landform position (two-dimensional):*Backslope
*Landform position (three-dimensional):*Mountainflank
*Down-slope shape:*Linear
*Across-slope shape:*Linear
Hydric soil rating: No

Rock outcrop

*Percent of map unit:*1 percent
*Landform:*Mountain slopes
*Landform position (two-dimensional):*Backslope
*Landform position (three-dimensional):*Center third of mountainflank
*Down-slope shape:*Convex
*Across-slope shape:*Convex
Hydric soil rating: No

663—Yorknorth-Windynip complex, 15 to 50 percent slopes

Map Unit Setting

National map unit symbol: 1lpqb
Elevation: 200 to 3,280 feet
Mean annual precipitation: 60 to 90 inches
Mean annual air temperature: 48 to 57 degrees F
Frost-free period: 240 to 280 days
Farmland classification: Not prime farmland

Map Unit Composition

*Yorknorth, moist, and similar soils:*70 percent
*Windynip and similar soils:*15 percent
*Minor components:*15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Yorknorth, Moist

Setting

*Landform:*Mountain slopes
*Landform position (two-dimensional):*Backslope, footslope
*Landform position (three-dimensional):*Mountainflank
*Down-slope shape:*Concave, linear
*Across-slope shape:*Linear, concave
*Parent material:*Colluvium derived from sandstone and/or earthflow deposits derived from schist

Typical profile

A - 0 to 10 inches: silt loam
BAt - 10 to 26 inches: silty clay loam
Bt1 - 26 to 35 inches: silty clay loam
Bt2 - 35 to 51 inches: silty clay loam
BCt - 51 to 71 inches: clay loam

Properties and qualities

*Slope:*15 to 50 percent
*Depth to restrictive feature:*More than 80 inches
*Drainage class:*Moderately well drained
*Capacity of the most limiting layer to transmit water (Ksat):*Moderately low to moderately high (0.06 to 0.60 in/hr)
*Depth to water table:*About 20 to 39 inches
*Frequency of flooding:*None
*Frequency of ponding:*None
*Calcium carbonate, maximum content:*2 percent
*Maximum salinity:*Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Hydric soil rating: No

Description of Windynip

Setting

*Landform:*Mountain slopes
*Landform position (two-dimensional):*Shoulder, backslope
*Landform position (three-dimensional):*Mountainflank
*Down-slope shape:*Linear
*Across-slope shape:*Linear
*Parent material:*Colluvium and residuum derived from sandstone and mudstone

Typical profile

A1 - 0 to 4 inches: loam
A2 - 4 to 20 inches: loam
Bt1 - 20 to 30 inches: gravelly clay loam
Bt2 - 30 to 43 inches: gravelly clay loam
BCt - 43 to 79 inches: paragravelly clay loam

Properties and qualities

*Slope:*15 to 50 percent
*Surface area covered with cobbles, stones or boulders:*0.0 percent
*Depth to restrictive feature:*More than 80 inches
*Drainage class:*Well drained
*Capacity of the most limiting layer to transmit water (Ksat):*Moderately low to moderately high (0.06 to 0.60 in/hr)
*Depth to water table:*More than 80 inches
*Frequency of flooding:*None
*Frequency of ponding:*None
*Maximum salinity:*Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Coyoterock

*Percent of map unit:*8 percent
*Landform:*Mountain slopes
*Landform position (two-dimensional):*Backslope
*Landform position (three-dimensional):*Center third of mountainflank
*Down-slope shape:*Linear, concave
*Across-slope shape:*Concave, linear
Hydric soil rating: No

Crazycoyote

*Percent of map unit:*3 percent
*Landform:*Mountain slopes
*Landform position (two-dimensional):*Backslope
*Landform position (three-dimensional):*Center third of mountainflank
*Down-slope shape:*Linear, concave, convex
*Across-slope shape:*Linear
Hydric soil rating: No

Devilshole

*Percent of map unit:*2 percent
*Landform:*Mountain slopes
*Landform position (two-dimensional):*Shoulder
*Landform position (three-dimensional):*Upper third of mountainflank
*Down-slope shape:*Convex, linear
*Across-slope shape:*Linear, convex
Hydric soil rating: No

Rock outcrop

*Percent of map unit:*2 percent
*Landform:*Mountain slopes
*Landform position (two-dimensional):*Backslope

*Landform position (three-dimensional):*Center third of mountainflank
*Down-slope shape:*Convex
*Across-slope shape:*Convex
Hydric soil rating: No

722—Salmonfalls-Cedarflat complex, 5 to 50 percent slopes

Map Unit Setting

National map unit symbol: 223kl
Elevation: 980 to 3,280 feet
Mean annual precipitation: 49 to 100 inches
Mean annual air temperature: 48 to 57 degrees F
Frost-free period: 240 to 280 days
Farmland classification: Not prime farmland

Map Unit Composition

*Salmonfalls and similar soils:*65 percent
*Cedarflat and similar soils:*20 percent
*Minor components:*15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Salmonfalls

Setting

*Landform:*Ridges, mountain slopes
*Landform position (two-dimensional):*Backslope, summit
*Landform position (three-dimensional):*Upper third of mountainflank, mountainflank
*Down-slope shape:*Convex, linear
*Across-slope shape:*Linear
*Parent material:*Colluvium derived from serpentinite and/or residuum weathered from serpentinite

Typical profile

A1 - 0 to 4 inches: loam
A2 - 4 to 15 inches: loam
Cd1 - 15 to 29 inches: extremely paragravelly loam
Cd2 - 29 to 43 inches: very paragravelly loam
Cd3 - 43 to 63 inches: paragravelly loam

Properties and qualities

*Slope:*5 to 50 percent
*Surface area covered with cobbles, stones or boulders:*5.0 percent
*Depth to restrictive feature:*10 to 39 inches to densic material
*Drainage class:*Well drained
*Capacity of the most limiting layer to transmit water (Ksat):*Moderately high to high (0.60 to 2.00 in/hr)
*Depth to water table:*More than 80 inches
*Frequency of flooding:*None
*Frequency of ponding:*None
*Maximum salinity:*Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 2.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: D
Hydric soil rating: No

Description of Cedarflat

Setting

*Landform:*Ridges
*Landform position (two-dimensional):*Shoulder
*Landform position (three-dimensional):*Upper third of mountainflank
*Down-slope shape:*Convex
*Across-slope shape:*Linear
*Parent material:*Colluvium derived from serpentinite and/or residuum weathered from serpentinite

Typical profile

A1 - 0 to 8 inches: gravelly loam
A2 - 8 to 20 inches: gravelly loam
Bw - 20 to 31 inches: extremely cobbly loam
Cd1 - 31 to 47 inches: very cobbly sandy clay loam
Cd2 - 47 to 79 inches: very cobbly loam

Properties and qualities

*Slope:*5 to 50 percent
*Surface area covered with cobbles, stones or boulders:*10.0 percent
*Depth to restrictive feature:*20 to 39 inches to densic material
*Drainage class:*Well drained
*Capacity of the most limiting layer to transmit water (Ksat):*Moderately high to high (0.60 to 2.00 in/hr)
*Depth to water table:*More than 80 inches
*Frequency of flooding:*None
*Frequency of ponding:*None
*Maximum salinity:*Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Yorknorth, moist

*Percent of map unit:*5 percent
*Landform:*Mountain slopes
*Landform position (two-dimensional):*Backslope, footslope
*Landform position (three-dimensional):*Mountainflank
*Down-slope shape:*Concave, linear
*Across-slope shape:*Linear, concave
Hydric soil rating: No

Windynip

*Percent of map unit:*4 percent
*Landform:*Mountain slopes
*Landform position (two-dimensional):*Shoulder, backslope
*Landform position (three-dimensional):*Mountainflank
*Down-slope shape:*Linear
*Across-slope shape:*Linear
Hydric soil rating: No

Canoecreek

*Percent of map unit:*2 percent
*Landform:*Mountain slopes
*Landform position (two-dimensional):*Shoulder
*Landform position (three-dimensional):*Mountainflank
*Down-slope shape:*Linear
*Across-slope shape:*Convex
Hydric soil rating: No

Coyoterock

*Percent of map unit:*2 percent
*Landform:*Mountain slopes
*Landform position (two-dimensional):*Backslope
*Landform position (three-dimensional):*Mountainflank
*Down-slope shape:*Concave
*Across-slope shape:*Concave
Hydric soil rating: No

Rock outcrop

*Percent of map unit:*2 percent
*Landform:*Mountain slopes
*Landform position (two-dimensional):*Backslope
*Landform position (three-dimensional):*Center third of mountainflank
*Down-slope shape:*Convex
*Across-slope shape:*Convex
Hydric soil rating: No

5508—Canoecreek-Coyoterock-Sproulish complex, 15 to 50 percent slopes

Map Unit Setting

National map unit symbol: 2qds2
Elevation: 200 to 2,790 feet
Mean annual precipitation: 49 to 100 inches
Mean annual air temperature: 48 to 57 degrees F
Frost-free period: 240 to 300 days
Farmland classification: Not prime farmland

Map Unit Composition

*Canoecreek and similar soils:*35 percent
*Sproulish and similar soils:*25 percent
*Coyoterock and similar soils:*25 percent

*Minor components:*15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Canoecreek

Setting

*Landform:*Mountain slopes, ridges
*Landform position (two-dimensional):*Backslope, summit, shoulder
*Landform position (three-dimensional):*Mountainflank, mountaintop
*Down-slope shape:*Convex
*Across-slope shape:*Linear
*Parent material:*Colluvium derived from sandstone and/or mudstone and/or residuum weathered from mudstone and/or sandstone

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A1 - 1 to 4 inches: gravelly loam
A2 - 4 to 8 inches: gravelly loam
Bt1 - 8 to 16 inches: very gravelly loam
Bt2 - 16 to 37 inches: very gravelly loam
C - 37 to 79 inches: extremely gravelly sandy loam

Properties and qualities

*Slope:*15 to 50 percent
*Depth to restrictive feature:*More than 80 inches
*Drainage class:*Well drained
Runoff class: High
*Capacity of the most limiting layer to transmit water (Ksat):*Moderately high to high (0.60 to 2.00 in/hr)
*Depth to water table:*More than 80 inches
*Frequency of flooding:*None
*Frequency of ponding:*None
*Maximum salinity:*Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 6.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B
Hydric soil rating: No

Description of Sproulish

Setting

*Landform:*Mountain slopes, ridges
*Landform position (two-dimensional):*Backslope, summit, shoulder
*Landform position (three-dimensional):*Mountainflank, mountaintop
*Down-slope shape:*Linear, convex
*Across-slope shape:*Linear
*Parent material:*Colluvium derived from mudstone and/or sandstone and/or residuum weathered from mudstone and/or sandstone

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A - 1 to 5 inches: loam
Bt1 - 5 to 15 inches: loam
Bt2 - 15 to 33 inches: loam
Bt3 - 33 to 40 inches: loam
BCt - 40 to 71 inches: very paragravelly clay loam

Properties and qualities

*Slope:*15 to 50 percent
*Depth to restrictive feature:*More than 80 inches
*Drainage class:*Well drained
Runoff class: High
*Capacity of the most limiting layer to transmit water (Ksat):*Moderately high to high (0.20 to 2.00 in/hr)
*Depth to water table:*More than 80 inches
*Frequency of flooding:*None
*Frequency of ponding:*None
*Maximum salinity:*Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B
Hydric soil rating: No

Description of Coyoterock

Setting

*Landform:*Mountain slopes
*Landform position (two-dimensional):*Backslope
*Landform position (three-dimensional):*Mountainflank
*Down-slope shape:*Concave
*Across-slope shape:*Concave
*Parent material:*Colluvium derived from mudstone and/or sandstone

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A1 - 1 to 7 inches: loam
A2 - 7 to 11 inches: loam
Bt1 - 11 to 22 inches: clay loam
Bt2 - 22 to 35 inches: clay loam
Bt3 - 35 to 51 inches: clay loam
BCt - 51 to 71 inches: paragravelly clay loam

Properties and qualities

*Slope:*15 to 50 percent
*Depth to restrictive feature:*More than 80 inches
*Drainage class:*Moderately well drained
Runoff class: Very high
*Capacity of the most limiting layer to transmit water (Ksat):*Moderately low to moderately high (0.06 to 0.20 in/hr)

*Depth to water table:*About 28 to 39 inches
*Frequency of flooding:*None
*Frequency of ponding:*None
*Maximum salinity:*Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Yorknorth, moist

*Percent of map unit:*7 percent
*Landform:*Mountain slopes
*Landform position (two-dimensional):*Backslope, footslope
*Landform position (three-dimensional):*Mountainflank
*Down-slope shape:*Concave, linear
*Across-slope shape:*Linear, concave
Hydric soil rating: No

Kingrange

*Percent of map unit:*5 percent
*Landform:*Mountain slopes
*Landform position (two-dimensional):*Shoulder
*Landform position (three-dimensional):*Mountainflank
*Down-slope shape:*Convex
*Across-slope shape:*Convex
Hydric soil rating: No

Rock outcrop

*Percent of map unit:*3 percent
*Landform:*Mountain slopes
*Landform position (two-dimensional):*Backslope
*Landform position (three-dimensional):*Center third of mountainflank
*Down-slope shape:*Convex
*Across-slope shape:*Convex
Hydric soil rating: No

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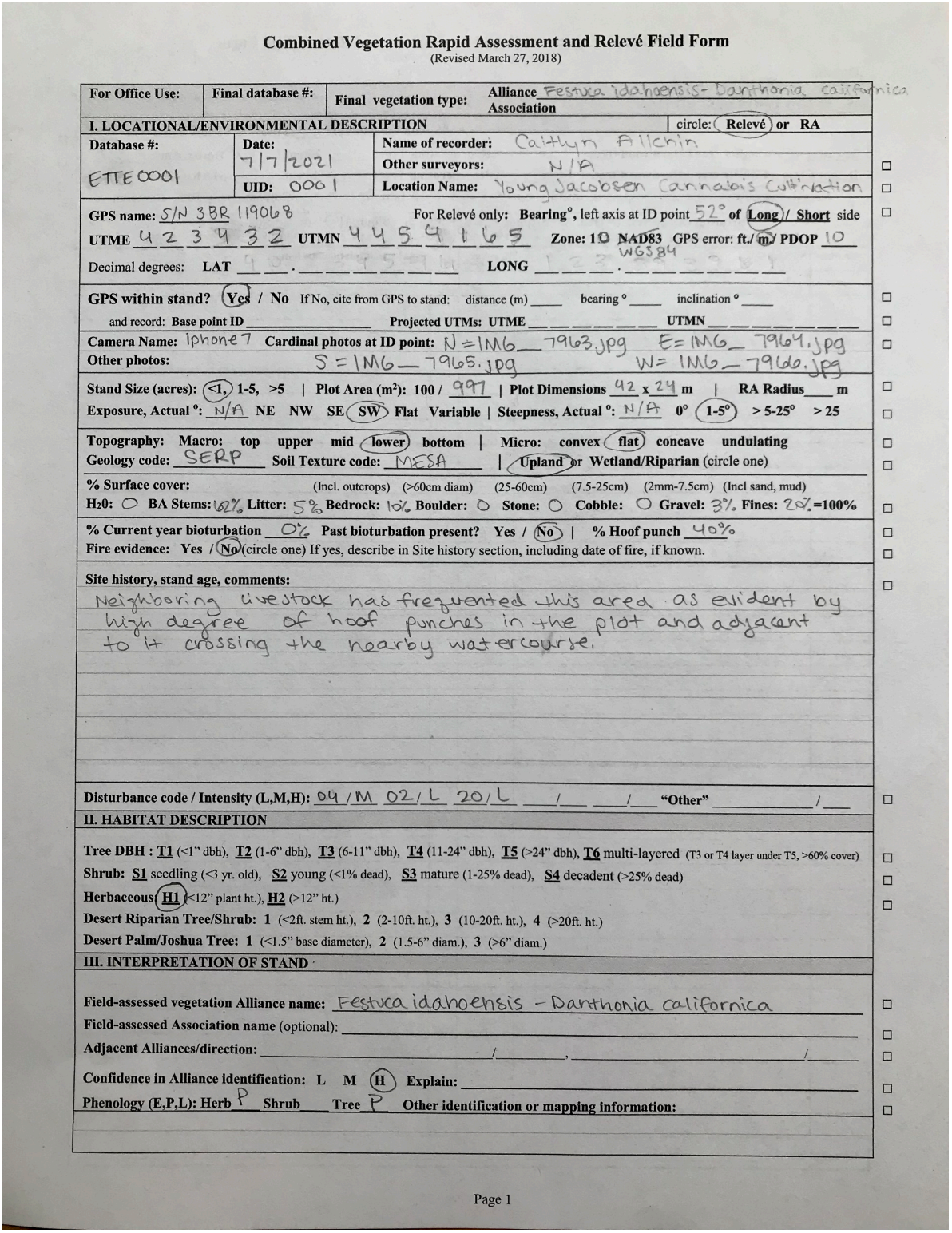
Attachment I. Relevé forms for Select SNC's Documented



Combined Vegetation Rapid Assessment and Relevé Field Form
(Revised March 27, 2018)

For Office Use:	Final database #:	Final vegetation type:	Alliance Festuca idahoensis - Danthonia californica Association

I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION — circle: (Relevé) or RA

Database #:	Date:	Name of recorder: Caitlyn Allchin
ETTE0001	7/7/2021	Other surveyors: N/A
	UID: 0001	Location Name: Young Jacobsen Cannabis Cultivation

GPS name: S/N 3BR 119068 — For Relevé only: Bearing°, left axis at ID point 52° of (Long) / Short side

UTME 423432 UTMN 4454165 Zone: 10 NAD83 GPS error: ft./ m./ PDOP 10 WGS84

Decimal degrees: LAT __.____ LONG ___.____

GPS within stand? (Yes) / No If No, cite from GPS to stand: distance (m) ____ bearing ° ____ inclination ° ____

and record: Base point ID _____ Projected UTMs: UTME _____ UTMN _____

Camera Name: iphone7 Cardinal photos at ID point: N=IMG_7963.jpg E=IMG_7964.jpg

Other photos: S=IMG_7965.jpg W=IMG_7966.jpg

Stand Size (acres): (<1,) 1-5, >5 | Plot Area (m^2): 100 / 997 | Plot Dimensions 42 x 24 m | RA Radius ____ m

Exposure, Actual °: N/A NE NW SE (SW) Flat Variable | Steepness, Actual °: N/A 0° (1-5°) >5-25° >25

Topography: Macro: top upper mid (lower) bottom | Micro: convex (flat) concave undulating

Geology code: SERP Soil Texture code: MESA | (Upland) or Wetland/Riparian (circle one)

% Surface cover: (Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud)

H_20: ○ BA Stems: 62% Litter: 5% Bedrock: 10% Boulder: ○ Stone: ○ Cobble: ○ Gravel: 3% Fines: 20% =100%

% Current year bioturbation 0% Past bioturbation present? Yes / (No) | % Hoof punch 40%

Fire evidence: Yes / (No) (circle one) If yes, describe in Site history section, including date of fire, if known.

Site history, stand age, comments:

Neighboring livestock has frequented this area as evident by high degree of hoof punches in the plot and adjacent to it crossing the nearby watercourse.

Disturbance code / Intensity (L,M,H): 04/M 02/L 20/L ___/___ ___/___ "Other" _____/___

II. HABITAT DESCRIPTION

Tree DBH : T1 (<1" dbh), T2 (1-6" dbh), T3 (6-11" dbh), T4 (11-24" dbh), T5 (>24" dbh), T6 multi-layered (T3 or T4 layer under T5, >60% cover)

Shrub: S1 seedling (<3 yr. old), S2 young (<1% dead), S3 mature (1-25% dead), S4 decadent (>25% dead)

Herbaceous: (H1) <12" plant ht.), H2 (>12" ht.)

Desert Riparian Tree/Shrub: 1 (<2ft. stem ht.), 2 (2-10ft. ht.), 3 (10-20ft. ht.), 4 (>20ft. ht.)

Desert Palm/Joshua Tree: 1 (<1.5" base diameter), 2 (1.5-6" diam.), 3 (>6" diam.)

III. INTERPRETATION OF STAND

Field-assessed vegetation Alliance name: Festuca idahoensis - Danthonia californica

Field-assessed Association name (optional): _____

Adjacent Alliances/direction: _____/_____, _____/_____

Confidence in Alliance identification: L M (H) Explain: _____

Phenology (E,P,L): Herb P Shrub ___ Tree P Other identification or mapping information:

Page 1

Figure 5. Relevé form (Page 1) for California oatgrass SNC occurring on the Young Jacobsen's Cannabis Cultivation Project.

Combined Vegetation Rapid Assessment and Relevé Field Form
(Revised March 27, 2018)
SPECIES SHEET

Database #: ETTE0001

IV. VEGETATION DESCRIPTION

% NonVasc cover: 10 **Total % Vasc Veg cover:** 80%

% Cover - (Conifer tree) **Hardwood tree:** 20/ **Regenerating Tree:** 0 **Shrub:** 0 **Herbaceous:** 80 %

Height Class - (Conifer tree) **Hardwood tree:** 4/ **Regenerating Tree:** 0 **Shrub:** 0 **Herbaceous:** 1

Height classes: 1=<1/2m, 2=1/2-1m, 3=1-2m, 4=2-5m, 5=5-10m, 6=10-15m, 7=15-20m, 8=20-35m, 9=35-50m, 10=>50m

Stratum categories: T=Tree, A = SApling, E = SEedling, S = Shrub, H= Herb, N= Non-vascular
% Cover Intervals for reference: r = trace, + = <1%, 1-5%, >5-15%, >15-25%, >25-50%, >50-75%, >75%

Stratum	Species	% cover	C	Final species determination
T	Calocedrus decurrens	20		
N	Micro lichens	5		
N	Bryophytes	5		
H	Danthonia californica	30		
H	Elymus glaucus	8		
H	Bromus hordeaceus	10		
H	Avena barbata	15		
H	Aira caryophyllea	10		
H	Elymus caput-medusae	10		
H	Juncus occidentalis	25		
H	Rumex acetosella	7		
H	Madia gracilis	5		
H	Cynosurus echinatus	10		
H	Luzula comosa	5		
H	Briza maxima	5		
H	Lolium perenne	5		

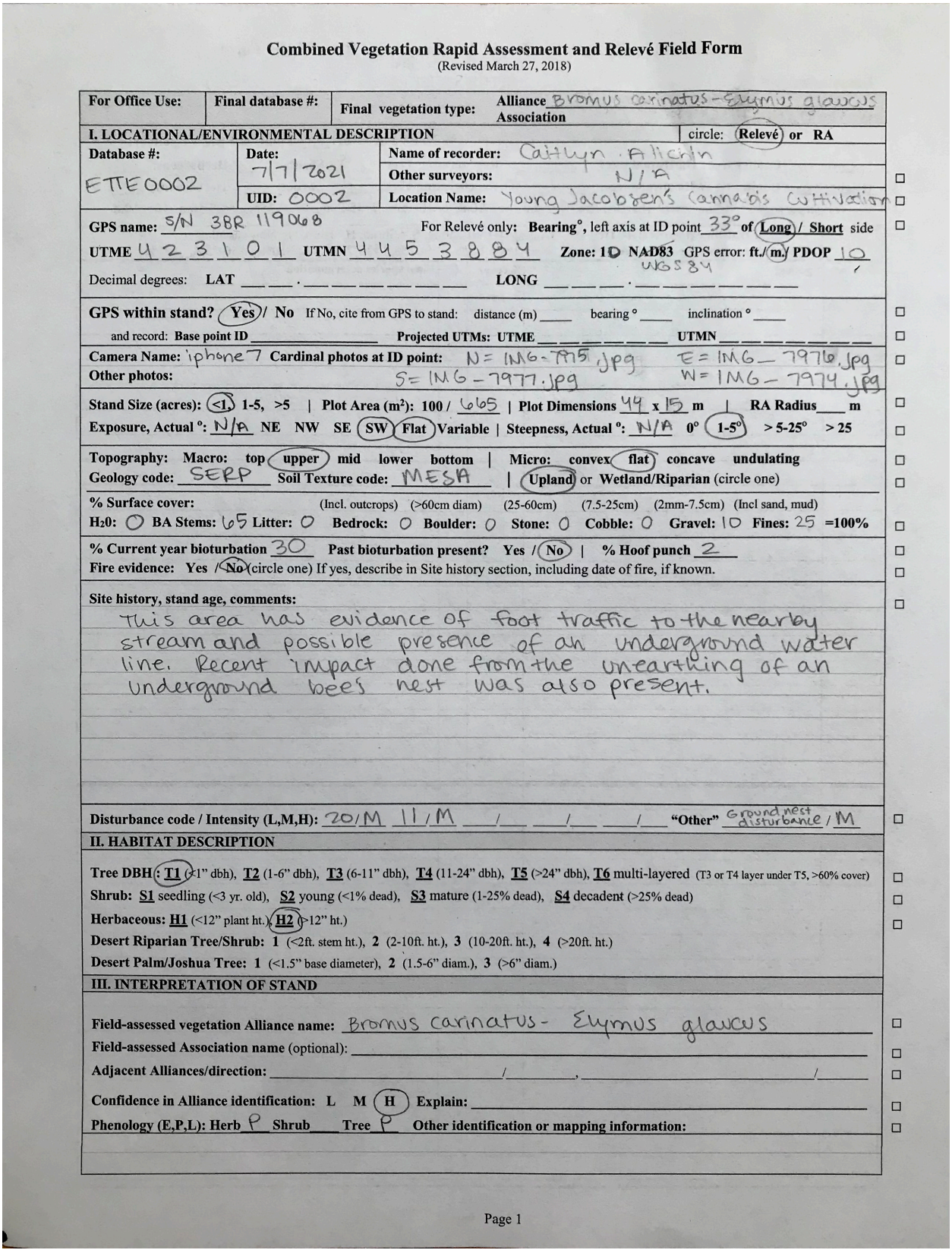
Unusual species: _____

Page 2

Figure 6. Relevé form (Page 2) for California oatgrass SNC occurring on the Young Jacobsen's Cannabis Cultivation Project.

Figures 7A & 7B. California oatgrass (*Danthonia californica*) SNC facing north (Figure 5A) and facing east (Figure 5B).

Figures 8A & 8B. California oatgrass (*Danthonia californica*) SNC facing south (Figure 6A) and facing west (Figure 6B).



Combined Vegetation Rapid Assessment and Relevé Field Form
(Revised March 27, 2018)

For Office Use:	Final database #:	Final vegetation type:	Alliance Bromus carinatus-Elymus glaucus Association

I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION — circle: (Relevé) or RA

Database #:	Date:	Name of recorder: Caitlyn Alicia
ETTE0002	7/7/2021	Other surveyors: N/A
	UID: 0002	Location Name: Young Jacobsen's Cannabis Cultivation

GPS name: S/N 38R 119068 — For Relevé only: Bearing°, left axis at ID point 33° of (Long) / Short side

UTME 423101 UTMN 4453884 Zone: 10 NAD83 (WGS84) GPS error: ft./(m.) PDOP 10

Decimal degrees: LAT ___.___ LONG ___.___

GPS within stand? (Yes) / No If No, cite from GPS to stand: distance (m) ____ bearing ° ____ inclination ° ____

and record: Base point ID ____ Projected UTMs: UTME ____ UTMN ____

Camera Name: iphone7 Cardinal photos at ID point: N = IMG-7975.jpg E = IMG_7976.jpg S = IMG-7977.jpg W = IMG_7974.jpg

Other photos:

Stand Size (acres): (<1) 1-5, >5 | Plot Area (m²): 100 / 665 | Plot Dimensions 44 x 15 m | RA Radius ___ m

Exposure, Actual °: N/A NE NW SE (SW) (Flat) Variable | Steepness, Actual °: N/A 0° (1-5°) >5-25° >25

Topography: Macro: top (upper) mid lower bottom | Micro: convex (flat) concave undulating

Geology code: SERP Soil Texture code: MESA | (Upland) or Wetland/Riparian (circle one)

% Surface cover: (Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud)

H₂0: 0 BA Stems: 65 Litter: 0 Bedrock: 0 Boulder: 0 Stone: 0 Cobble: 0 Gravel: 10 Fines: 25 =100%

% Current year bioturbation 30 Past bioturbation present? Yes / (No) | % Hoof punch 2

Fire evidence: Yes / ~~No~~ (circle one) If yes, describe in Site history section, including date of fire, if known.

Site history, stand age, comments:

This area has evidence of foot traffic to the nearby stream and possible presence of an underground water line. Recent impact done from the unearthing of an underground bees nest was also present.

Disturbance code / Intensity (L,M,H): 20/M 11/M ___/___ ___/___ ___/___ "Other" Ground nest disturbance / M

II. HABITAT DESCRIPTION

Tree DBH: (T1) (<1" dbh), T2 (1-6" dbh), T3 (6-11" dbh), T4 (11-24" dbh), T5 (>24" dbh), T6 multi-layered (T3 or T4 layer under T5, >60% cover)

Shrub: S1 seedling (<3 yr. old), S2 young (<1% dead), S3 mature (1-25% dead), S4 decadent (>25% dead)

Herbaceous: H1 (<12" plant ht.) (H2) (>12" ht.)

Desert Riparian Tree/Shrub: 1 (<2ft. stem ht.), 2 (2-10ft. ht.), 3 (10-20ft. ht.), 4 (>20ft. ht.)

Desert Palm/Joshua Tree: 1 (<1.5" base diameter), 2 (1.5-6" diam.), 3 (>6" diam.)

III. INTERPRETATION OF STAND

Field-assessed vegetation Alliance name: Bromus carinatus - Elymus glaucus

Field-assessed Association name (optional): ____

Adjacent Alliances/direction: ____/____, ____/____

Confidence in Alliance identification: L M (H) Explain: ____

Phenology (E,P,L): Herb P Shrub ___ Tree P Other identification or mapping information:

Page 1

Figure 9. Relevé form (Page 1) for the blue wild rye (*Elymus glaucus*) SNC occurring on Young Jacobsen's Cannabis Cultivation Project.

Combined Vegetation Rapid Assessment and Relevé Field Form

(Revised March 27, 2018)

SPECIES SHEET

Database #: ETTE 0002

IV. VEGETATION DESCRIPTION

% NonVasc cover: 25 **Total % Vasc Veg cover:** 80

% Cover - Conifer tree / Hardwood tree: ___/___ Regenerating Tree: 5 Shrub: 0 Herbaceous: 80

Height Class - Conifer tree / Hardwood tree: ___/___ Regenerating Tree: 2 Shrub: 0 Herbaceous: 2

Height classes: 1=<1/2m, 2=1/2-1m, 3=1-2m, 4=2-5m, 5=5-10m, 6=10-15m, 7=15-20m, 8=20-35m, 9=35-50m, 10=>50m

Stratum categories: T=Tree, A = SApling, E = SEedling, S = Shrub, H= Herb, N= Non-vascular

% Cover Intervals for reference: r = trace, + = <1%, 1-5%, >5-15%, >15-25%, >25-50%, >50-75%, >75%

Stratum	Species	% cover	C	Final species determination
T/A/E	Calocedrus decurrens	0/5/<1		
H	Elymus glaucus	30		
H	Danthonia californica	20		
H	Juncus occidentalis	15		
H	Trifolium fragiferum	25		
H	Eriogonum luteolum	7		
H	Aspidotis densa	5		
H	Epilobium minutum	5		
H	Airacaryophyllea	20		
H	Minuartia douglasii	10		
N	micro lichens	10		
N	bryophytes	15		

Unusual species: _____

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Figure 10. Relevé form (Page 2) for the blue wild rye (*Elymus glaucus*) SNC occurring on Young Jacobsen's Cannabis Cultivation Project.

Figures 11A & 11B. Blue wild rye (*Elymus glaucus*) SNC facing north (Figure 6A) and facing east (Figure 6B).

Figures 12A & 12B. Blue wild rye (*Elymus glaucus*) SNC facing south (Figure 7A) and facing west (Figure 7B).

Figure 13. Blue wild rye (*Elymus glaucus*) SNC facing northeast.