

Floristic Survey
of
Clearpath Canyon, LLC
2050 and 2122 Ogulin Canyon Road
Clearlake, CA
10-24-23

Prepared for:

Clearpath Canyon, LLC
637 Lindaro Street, Suite 201
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Prepared by:

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Photos: 1,2 attached.

1.0 PROJECT DESCRIPTION

Proposed Project: This survey covers two legal parcels of approximately 302.45 acres located in S.W. Lake County proposed for 25.8-acres of cannabis cultivation. **Lake County Tax Assessor Parcel (APN) 010-053-01 and 010-053-02.** Proposed Cultivation Areas are delineated in **Figure 1 attached.**

Figure 1: Proposed Cultivation Areas, Figure 5-9; Grow Sites attached.

These are portions of the property that appear to have been used for agricultural purposes in the past. A remnant orchard of approximately 5.51 acres in size and four (4) agricultural fields once utilized for hops production of approximately 18.29 acres in size. The fifth area (E on Figure 1 above) is currently native habitat, Chamise chaparral #2 described in the CNPS Vegetation Alliance Section 3.4 of this report. Evidence of pasture improvement is also present. There does not appear to be evidence of a recent fire. Historic fires that appear on Appendix E, Lake County Wildfire History compiled by Cal Fire list two fires in the area. One in June 1961 Dump Fire #2 and Dump Fire #12 in June 1966.

The local permitting agency is requesting completion of a botanical survey on the property as part of the California Environmental Quality Act (CEQA) review required for new development. The initial phase of this assessment evaluates the potential of the property to contain sensitive plant habitat. The second phase consists of field surveys, including a botanical survey listing all plant taxa. The biological resource assessment will determine whether the property contains sensitive plants requiring mitigation under the California Environmental Quality Act (CEQA) as well as other activities. As used here, the terms sensitive plant includes all state or federal rare, threatened, or endangered species as well as CA Native Plant Society plant status designations. This includes all species listed in the California Natural Diversity Database (CNDDDB) list of “Special Vascular Plants, Bryophytes, and Lichens List,” April 2021.

CLEARPATH CANYON, LLC MAJOR USE PERMIT

APN: 010-053-01 & 010-053-02

DIRECTIONS TO SITE:

- FROM CLEARLAKE, CA
- TAKE CA-53 N (0.8 MI)
- TURN RIGHT ONTO OQUILIN CANYON RD. (0.8 MI)
- TURN RIGHT ONTO UNNAMED ROAD (0.3 MI)



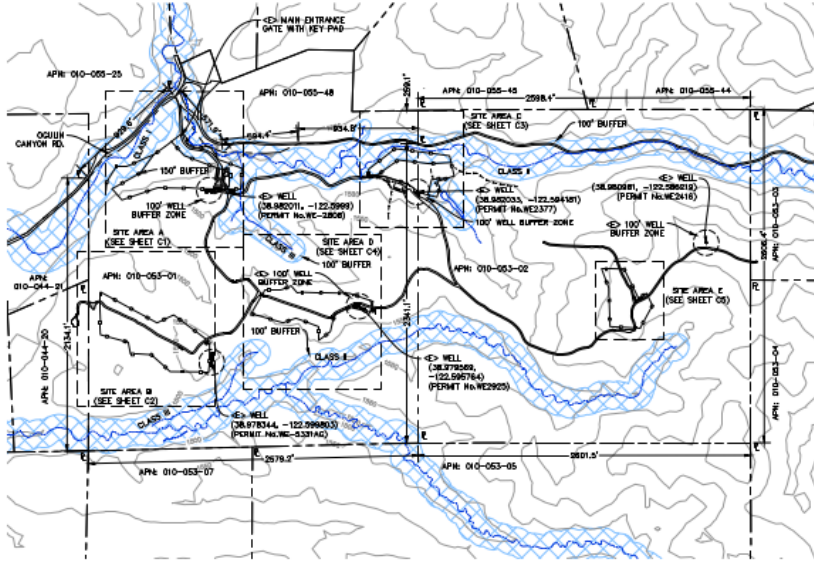
VICINITY MAP
NOT TO SCALE

PROJECT DESCRIPTION:

THE PROPOSED PROJECT IS TO PERMIT COMMERCIAL CANNABIS CULTIVATION IN ACCORDANCE WITH THE LAKE COUNTY ZONING ORDINANCE (ARTICLE 27). THE PROPOSAL IS FOR A TOTAL OF 653,400 SQ. FT. (15 ACRES) OF OUTDOOR CANOPY AREA AND A TYPE 13 SELF-DISTRIBUTION. THE PROJECT PROPOSES 15-ACRES OF OUTDOOR CANNABIS CULTIVATION. THE PROPOSAL INCLUDES THE DEVELOPMENT OF FACILITIES APPURTENANT TO OUTDOOR CANNABIS CULTIVATION, INCLUDING FACILITIES FOR DRYING AND CURING OF HARVESTED CANNABIS, ANCILLARY NURSERY, STORAGE SHEDS, AND IRRIGATION INFRASTRUCTURE.

GENERAL NOTES:

- DRAWING SCALE AS NOTED. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS.
- THIS IS NOT A BOUNDARY SURVEY. BOUNDARY INFORMATION DERIVED HAS BEEN OBTAINED FROM LAKE COUNTY 2015 GIS DATA. NORTHPOINT CONSULTING GROUP, INC. HAS NOT VERIFIED THIS PROPERTY BOUNDARY.
- THERE ARE NO NEARBY SCHOOLS, SCHOOL BUS STOPS, PLACES OF WORKSHIP, PUBLIC PARKS OR TRIBAL RESOURCES WITHIN 1,000 FEET OF THE PROPOSED CULTIVATION AREA.
- THERE ARE NO RESIDENCES ON ADJOINING PARCELS WITHIN 200 FEET OF THE PROPOSED CULTIVATION AREAS.
- ANY EXISTING DEVELOPMENT CONSTRUCTED WITHOUT THE BENEFIT OF COUNTY REVIEW WILL BE SUBJECT TO THE LAKE COUNTY BUILDING DEPARTMENT UPON APPROVAL OF THE USE PERMIT.
- THE PROJECT SITE IS W/IN 1,000 FEET OF THE CITY OF CLEARLAKE SPHERE OF INFLUENCE. CANNABIS CULTIVATION IS PROHIBITED WITHIN 1,000 FEET OF AN INCORPORATED CITY SPHERE OF INFLUENCE UNLESS THE APPLICANT CAN PROVIDE A LETTER OF SUPPORT FROM THE CITY. A LETTER OF SUPPORT HAS BEEN OBTAINED FROM THE CITY.
- POWER SOURCE: THE PROPOSED PROJECT WOULD USE A COMBINATION OF EXISTING POWER SUPPLIED BY PG&E AND SOLAR POWER. THE OUTDOOR CULTIVATION AREAS WOULD HAVE MINIMAL NEED FOR POWER. THE PROPOSED ANCILLARY NURSERY AND ANCILLARY DRYING WOULD REQUIRE POWER FOR LIGHTING AND CLIMATE CONTROL. OTHER USES THAT WOULD REQUIRE POWER INCLUDE THE SECURITY SYSTEM, SECURITY LIGHTING, AND WELL PUMPS. NO GENERATORS ARE PROPOSED, EXCEPT FOR BACKUP POWER DURING POWER OUTAGES OR AN EMERGENCY. A POWER UPGRADE IS NOT NEEDED FOR OPERATIONS. THE EXISTING PG&E SERVICE IS SUFFICIENT.



PLOT PLAN

22x34 SHEET: 1"=400'
11x17 SHEET: 1"=800'



PROJECT INFORMATION:

APPLICANT:
CLEARPATH CANYON, LLC
637 LINDARO STREET, SUITE 201
SAN RAFAEL, CA 94901-6027

PROPERTY OWNER:
CLEARPATH CANYON, LLC
637 LINDARO STREET, SUITE 201
SAN RAFAEL, CA 94901-6027

APPLICANT'S AGENT:
NORTHPOINT CONSULTING GROUP, INC
1177 SANDRA BLVD.
ARCATA, CA 95521
(707) 798-8438

SITE ADDRESS:
APN 010-053-01 & 010-053-02
2090/2122 OQUILIN CANYON ROAD,
CLEARLAKE, CA 95422

WATER = PRIVATE
SEWER = PRIVATE

PROPERTY SIZE:
APN: 010-053-01 = ±145.81 ACRES
APN: 010-053-02 = ±156.64 ACRES
TOTAL = ±302.45 ACRES

ZONING = RL-WW
GENERAL PLAN DESIGNATION = RL

SHEET INDEX:

- C0 - PLOT PLAN, VICINITY MAP, & PROJECT NOTES
- C1 - SITE "A" DETAILED AREA
- C2 - SITE "B" DETAILED AREA
- C3 - SITE "C" DETAILED AREA
- C4 - SITE "D" DETAILED AREA
- C5 - SITE "E" DETAILED AREA
- C6 - SECURITY PLAN
- C7 - STRUCTURE ELEVATIONS

NORTHPOINT CONSULTING GROUP, INC.
 1177 Sandra Blvd., Arcata, CA 95521
 CLEARPATH CANYON, LLC.
 APN 010-053-01 & 010-053-02
 PLOT PLAN, VICINITY MAP & PROJECT NOTES
 SHEET
C0
 00-008

Figure 1: Proposed Project Areas

1.0 Location: The project site is located along Ogulin Canyon Road North east of Clearlake, California. A location map is provided in **Figure 2.**

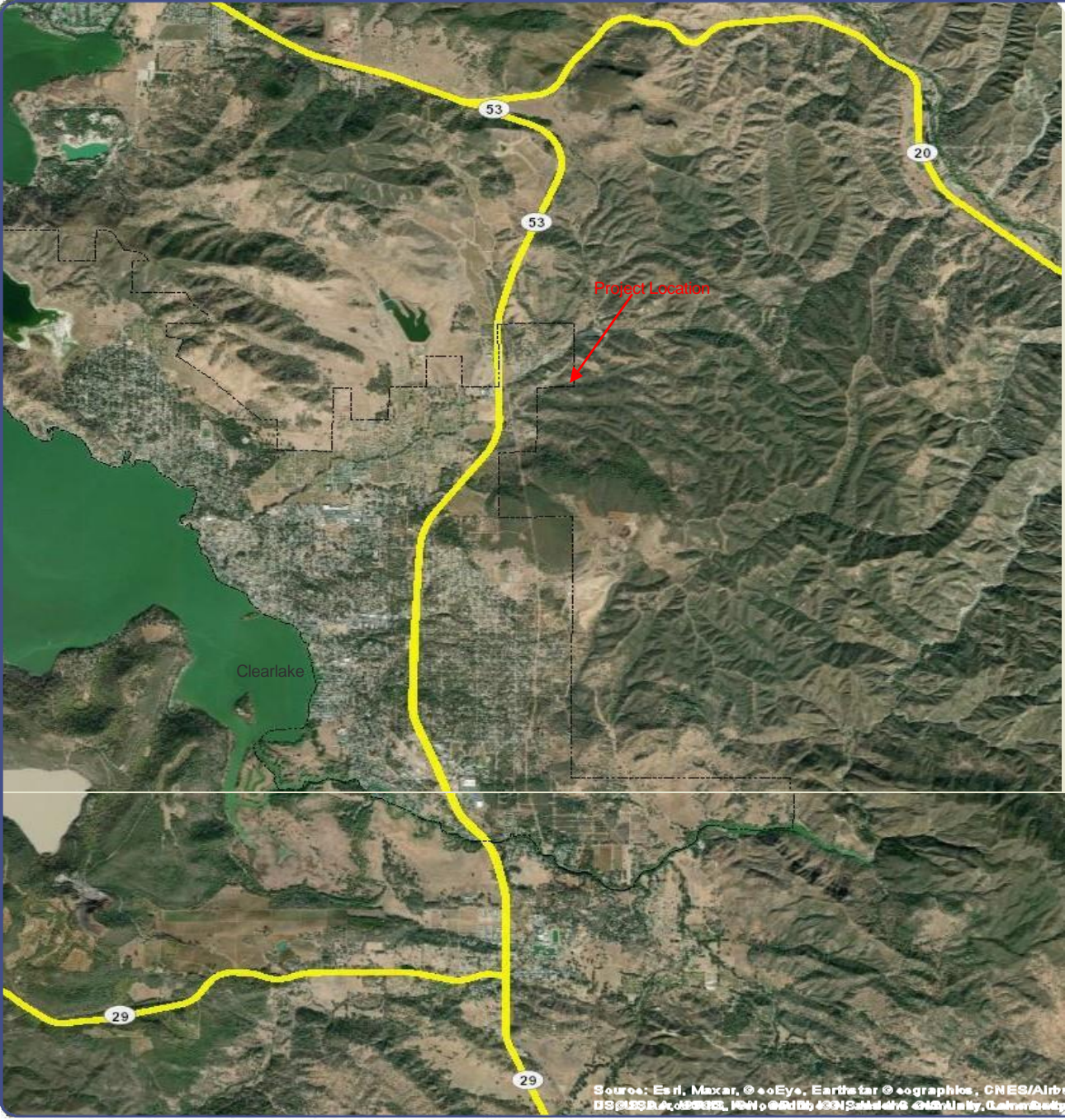


Figure 2: Project Location

2.0 PRE-SURVEY RESEARCH

2.1 A pre-site survey was conducted prior to on-site field surveys. CNPS On- Line Electronic Inventory Analysis. A California Native Plant Society (CNPS) analysis was conducted for all plants with federal and state regulatory status, and all non-status plants on the CNPS Lists 1B through 4. The query included all plants within this area of the county occurring within the plant communities identified on the project site. The inventory lists species potentially occurring at the site; these are listed in **Table 1**. These species were included in the list of potentially sensitive species specifically searched for during field surveys. It is important to note that this list includes species for which appropriate habitat is not present on the parcel. The CNPS database search does not allow fine tuning for specific soil types and many specific habitats.

2.2 California Natural Diversity Database: The California Natural Diversity Database (CNDDDB) and CDFW Rare Find 5 data and maps for Lake County were reviewed for this project.

Table 2

presents a list of sensitive plant and wildlife species known to occur within this county. In addition to listing the species present within the county, the table provides a brief descriptor of the habitat requirements and blooming season, along with an assessment of whether the project area contains the necessary habitat requirements for each species.

An in-season field survey of the parcel was performed utilizing the California Native Plant Society Vegetation Rapid Assessment Protocol (revised Feb 21, 2007). The basis of the botanical assessment is a comparison of existing habitat conditions within the project boundaries to the geographic range and habitat requirements of sensitive plants. It includes all sensitive species that occupy habitats like those found in the project area and whose known geographic ranges encompass this parcel. The approach is conservative in that it tends to over-estimate the actual number of species present. The analysis includes the following site characteristics:

- Location of the project area about the geographic range of sensitive plant species.
- Location(s) of known populations of sensitive plant species as mapped in the California Natural Diversity Database (CNDDDB).
- The presence or absence of distinctive features such as vernal pools and serpentine soils.

In addition to knowledge of the local plants and habitats, the following computer databases were used to analyze the suitability of the site for sensitive species:

- California Department of Fish and Wildlife (CDFW), *California Natural Diversity Database (CNDDDB)*; Rare Find 5, 2021
- California Native Plant Society, Rare Plant Program. 2021. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website <http://www.rareplants.cnps.org> [accessed 22 May 2021].

The CNDDDB and Rare Find 5 databases consist of maps and records of all known populations of sensitive plants and wildlife in California. This data is continually updated by the CDFW with new sensitive species population data.

The CNPS database produces a list of sensitive plants potentially occurring at a site based on the various site characteristics listed above. While use of the CNPS inventory does not in itself eliminate the need for an in-season botanical survey, it can, when used in conjunction with other information, provide an exceptionally good indication of the suitability of a site as habitat for sensitive plant species.

3.1 Survey Dates: Site visits for the plant surveys and vegetation mapping were conducted in April 19th, 27th, May 20th and 21st, 2021, March 6th, 2022, and September 13, 2023.

Botanical Assessment Staff: The field surveys, plant taxonomy, and vegetation mapping, were conducted by Lawrence Ray principal biologist. Mr. Ray has a Master of Science Degree in Ecology from Antioch University/UC Berkeley and a Bachelor of Science Degree in Environmental Studies from Antioch University. He has over 35 years of experience as a biologist in the government and private sectors. Support staff was provided by Austin Ray who holds an AA Degree in Horticulture from Cabrillo College.

Botanical Survey Analysis Methods: An in-season botanical survey was conducted for the project site. The CNDDDB report and maps for the Lake County and the project area was referenced prior to the survey. Vegetation communities were identified based on the nomenclature of *A Manual of California Vegetation* (Sawyer, Keeler-Wolf, and Evens, Second Edition, 2009), and mapped using ARC GIS formatting. Vegetation type names are based on an assessment of dominant cover species.

3.2 CNPS Vegetation Alliance Descriptions: Six distinct Vegetation Alliances were encountered during the site visits. Acreage is illustrated in **Table 3**.

COVER TYPE	Total Acres of Cover Type on Property	Percent of Property Supporting Cover Type
Blue Oak Woodland-Quercus douglasii Woodland Alliance	101.97	33.75
Ghost pine woodland-Pinus sabiniana Woodland Alliance	40.43	13.37
Chamise chaparral- Adenostoma fasciculatum Shrubland Alliance	67.71	22.4
Annual brome grasslands - Bromus (diandrus, hordeaceus)	26.88	8.85
Quercus wislizeni Woodland Alliance	40.54	13.4
Salix lasiolepis Shrubland Alliance	2.5	0.84
Total	280.03	92.6
Table 3: Vegetation Alliance		

1. Blue Oak Woodland/*Quercus douglasii* Woodland Alliance. *Quercus douglasii* is dominant or co-dominant in the tree canopy with *Aesculus californica*, *Juniperus californica*, *Pinus sabiniana*, *Quercus agrifolia*, *Q. lobata*, and *Q. wislizeni*. Trees < 20 m; with conifers 35m; canopy is intermittent to continuous, or savanna-like; it may be one or two tiered. The shrub layer is sparse to intermittent. Herbaceous layer is sparse or grassy, and forbs are present seasonally. **Habitats:** Valley bottoms, foothills, rocky outcroppings. Soils are shallow, low in fertility, moderately to excessively drained with extensive rock fragments. **Elevation:** 30-1900 m.

2. Chamise chaparral/*Adenostoma fasciculatum* Shrub Alliance. *Adenostoma fasciculatum* is dominant in the shrub canopy with *A. sparsifolium*, *Arctostaphylos glandulosa*, *A. manzanita*, *A. viscida*, *Ceanothus spp.*, *Diplacus aurantiacus*, *Eroidictyon californicum*, *Eriogonum fasciculatum*, *Hesper yucca whipplei*, *Heteromeles arbutifolia*, *Quercus berberidifolia*, *Q. wislizeni*, *Salvia apiana*, *S. leucophylla*, *S. mellifera*, and *Toxicodendron diversilobum*. Emergent trees may be present at low cover. Shrubs < 4 m; canopy is intermittent to continuous. Herbaceous layer is sparse to intermittent. **Habitats:** Varied topography. Soils are commonly shallow over colluvium and many kinds of bedrock. **Elevation:** 10-1800 m.

3. Ghost pine woodland/*Pinus sabiniana* Woodland Alliance. *Pinus sabiniana* is dominant or co-dominant in the tree canopy with *Aesculus californica*, *Juniperus californica*, *J. occidentalis*, *P. coulteri*, *Quercus chrysolepis*, *Q. douglasii*, and *Q. wislizeni*. Trees < 20m; canopy open to intermittent and one or two tiered. Shrubs are common or infrequent. The herbaceous layer is sparse or grassy. **Habitats:** Streamside terraces, valleys, slopes, and ridges. Soils are shallow, often stony, infertile, and moderately to excessively drained. **Elevation:** 300-2100

4.0 Annual brome grasslands/*Bromus (diandrus, hordeaceus) – Brachypodium distachyon* *Bromus diandrus*, *B. hordeaceus*, or *Brachypodium distachyon* is dominant or co- dominant with non-natives in the herbaceous layer. Emergent trees and shrubs may be present at low cover. Herbs < 75 cm; cover is intermittent to continuous. **Habitats:** All topographic settings in foothills, waste places, rangelands, openings in woodlands. **Elevation:** 0-2200 m.

5.0 *Salix lasiolepis* Shrubland Alliance. Arroyo willow thickets are small and scattered in the riparian area of the parcel. Also scattered are a few Fremont cottonwood (*Populus fremontii*) as well as a few *Sambucus nigra*. Found along streambanks and benches, slope seeps and stringers along drainages. **The USFWS Wetland Inventory** (1996 national list) recognizes *Salix lasiolepis* as a **FACW plant**. **Elevation: 0-2170**

6.0 *Quercus wislizeni* Woodland Alliance, Interior Live Oak Woodland. *Quercus wislizeni* is dominant or co-dominant in tree canopy with *Aesculus californica*, *Arbutus menziesii*, *Lithocarpus densiflorus*, *Pinus sabiniana*, *Quercus chrysolepis*, *Quercus douglasii* and *Quercus kelloggii*. Trees <20m, canopy is intermittent or continuous, or savanna-like. The shrub layer is open to intermittent. The herbaceous layer is sparse or grassy. Upland slopes, valley bottoms, terraces. Soils are shallow and moderately to excessively drained. **Elevation: 500-4500 m.**

Plants occurring on the site were identified using *The Jepson Manual, Higher Plants of California, Second Edition* 2012. Where necessary, species names were updated based on the sixth edition, *CNPS Inventory of Rare and Endangered Plants of California*.

Botanical Survey Results

A map of the vegetation types at the site is provided in **Figure 3**. A species list of all vegetation types is provided in **Table 4** attached to this report.



Figure 3A; Vegetation Map

Figure 3A: Vegetation Map Parcel 010-053-0101

Legend:

1. Blue Oak Inside **Brown** lines
2. Chamise Inside **Light Blue** lines
3. Ghost Pine Inside **Magenta** lines
4. Annual brome Inside **Yellow** lines
5. Salix lasiolepis Inside **Dark Blue** lines
6. Quercus wislizeni Inside **Black** lines

Remnant orchard is inside **purple** line

Two small seasonal wetlands are in **RED**.

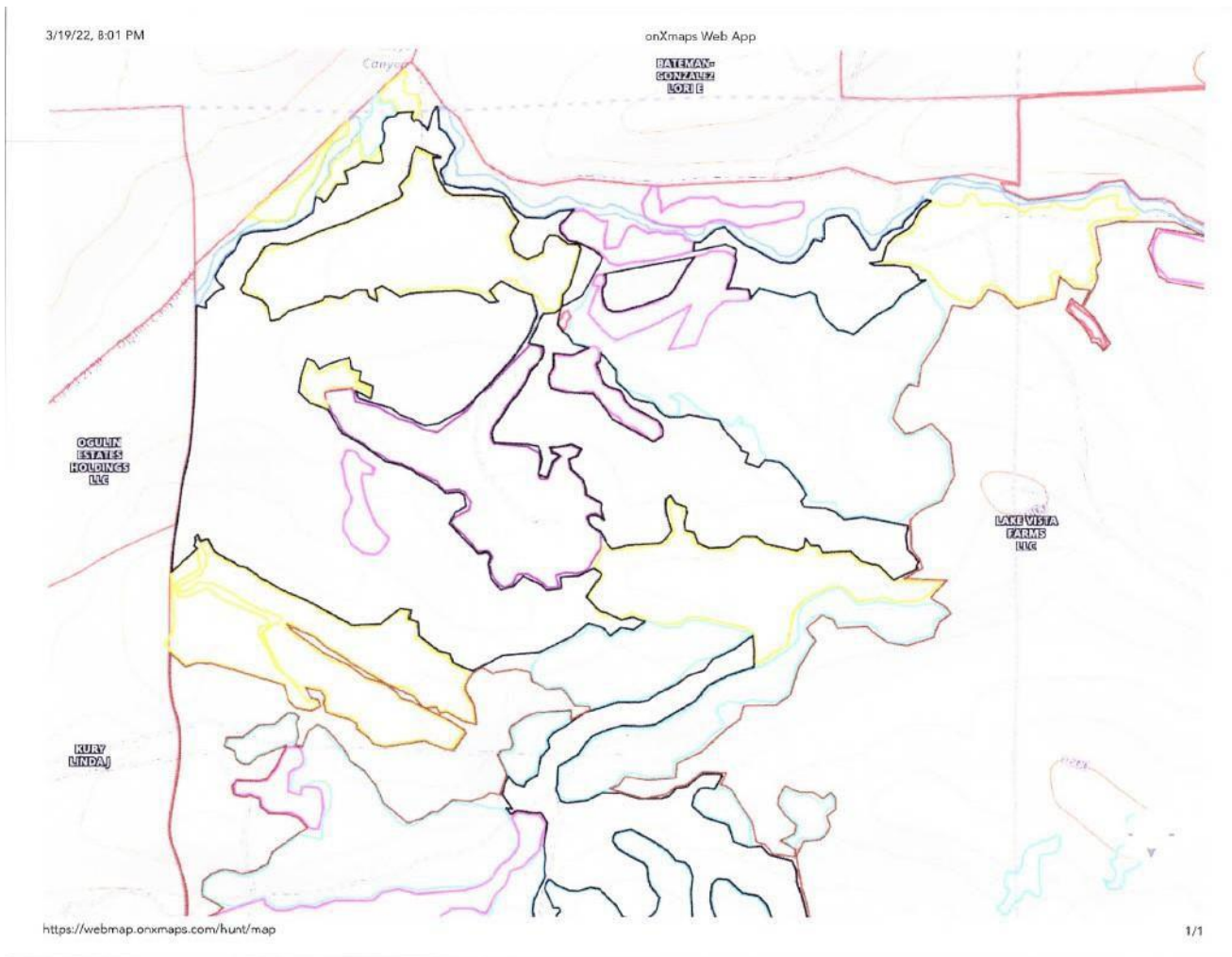


Figure 3B; Vegetation Topography/Map,

Parcel 010- 053-01

Legend

1. Blue Oak Inside **Brown** lines
 2. Chamise Inside **Light Blue** lines
 3. Ghost Pine Inside **Magenta** lines
 4. Annual brome Inside **Yellow** lines
 5. Salix lasiolepis Inside **Dark Blue** lines
 6. Quercus wislizeni Inside **Black** lines
- Note: Remnant orchard is inside **purple**

line.

Two small seasonal wetlands are in RED.

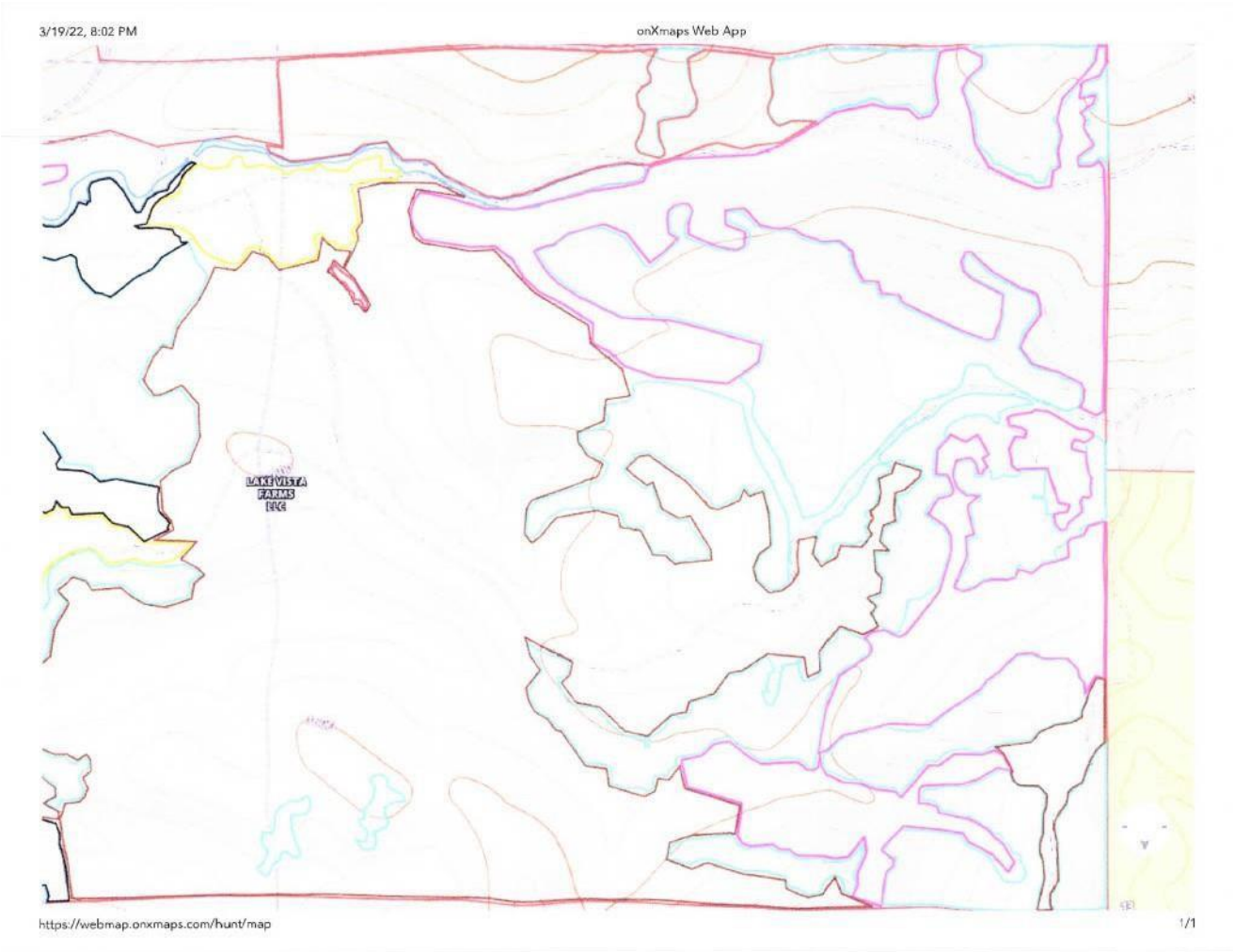


Figure 3c; Vegetation/topography Map, Parcel 010-053-02

4.0 SITE CHARACTERISTICS

Site Topography and Drainage: Clear path Canyon occupies a set of small ridges, northeast-to-southwest trending gullies along the central ridge in the Coast Range Mountains between Clear Lake and Long Valley. Elevations range from 1,610 feet msl (mean sea level) along the ridgetop on the center of the property to 1,540 feet msl at the eastern end of the two gullies. Drainage from the surrounding slopes is to Buckeye Canyon which drains to the southwest via Burns Valley Creek. Burns Valley Creek is a seasonally intermittent waterway flowing to Clear Lake. Topography is shown in **Figures 3b and 3c.**

Wetlands: Two small seasonal wetlands are present, one on each parcel. They are located at 38.98184/211.59908 and 38.98185/122.59329. Both are seasonal without any wetland indicators (No plants, water nor hydric soil). They are formed by artificial earthen structures.

Soils: Based on the *Soil Surveys of Lake County, California* prepared by the U.S. Resource Conservation Service, the survey area contains the following soil types:

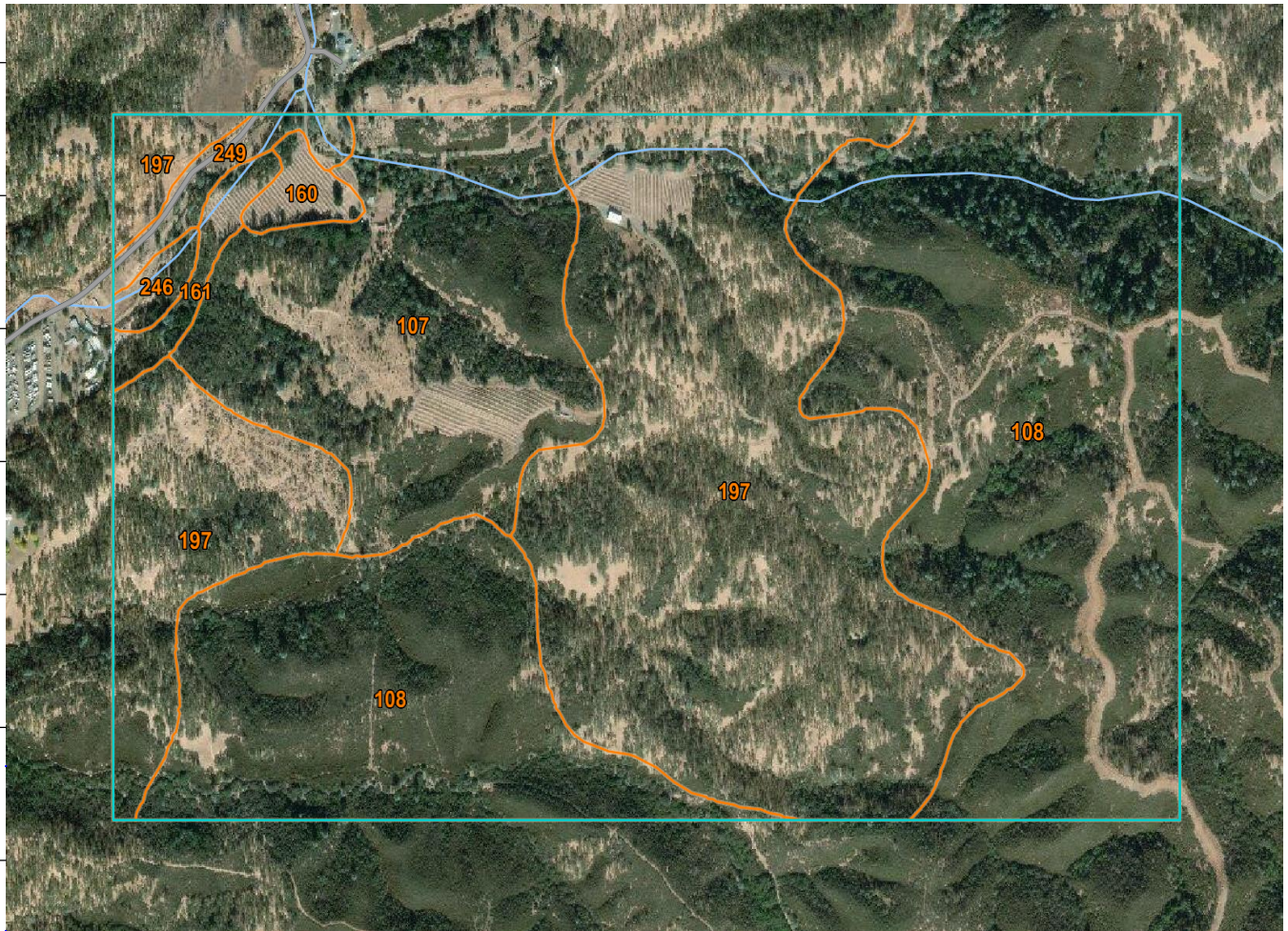


Figure 4; Soils Map

107: Bally-Phipps complex, 15 to 30 percent slopes. This map unit is on uplifted, dissected hills. The vegetation is mainly brush. The elevation is 1,400 to 2,500 feet. The average annual precipitation is 25 to 35 inches, the average annual air temperature is 55 to 59 degrees F, and the average frost-free period is 160 to 200 days. This unit is about 40 percent Bally gravelly sandy clay loam and 35 percent Phipps loam. The components of this unit are so intricately intermingled that it was not practical to map them separately at the scale used.

108: Bally-Phlpps-Haploxeralfs association, 30 to 75 percent slopes. This map unit is on uplifted, dissected hills. The vegetation is mainly brush. Active geologic erosion occurs throughout this unit. The elevation is 1,400 to 2,500 feet. The average annual precipitation is 25 to 35 inches, the average annual air temperature is 55 to 59 degrees F, and the average frost-free period is 160 to 200 days.

This unit is about 35 percent Bally gravelly sandy clay loam, 20 percent Phipps loam, and 20 percent Haploxeralfs. The Bally and Phipps soils have slopes of 30 to 50 percent, and the Haploxeralfs have slopes of 50 to 75 percent. Landslips and active geologic erosion occur on the steeper slopes.

160: Manzanita loam, 5 to 15 percent slopes. This very deep, well-drained soil is on terraces. It is formed in alluvium derived from mixed rock sources. The vegetation in areas not cultivated is oak, manzanita, and annual grasses. The elevation is 1,400 to 1,600 feet. The average annual precipitation is 25 to 35 inches, the average annual air temperature is 55 to 59 degrees F, and the average frost-free period is 160 to 200 days. Typically, the upper five inches of the surface layer is light yellowish-brown loam, and the lower fourteen inches is strong brown loam. The upper nine inches of the subsoil is strong brown loam, and the lower fifty-six inches is variegated strong brown and yellowish red clay loam.

161: Manzanita loam, 15 to 25 percent slopes. This very deep, well-drained soil is on terraces. It is formed in alluvium derived from mixed rock sources. The vegetation is oak, manzanita, and annual grasses. The elevation is 1,400 to 1,600 feet. The average annual precipitation is 25 to 35 inches, the average annual air temperature is 55 to 59 degrees F, and the average frost-free period is 160 to 200 days. Typically, the upper five inches of the surface layer is light yellowish-brown loam, and the lower fourteen inches is strong brown loam. The upper nine inches of the subsoil is strong brown loam, and the lower fifty-six inches is variegated strong brown and yellowish red clay loam.

197: Phipps complex, 30 to 50 percent slopes.

This map unit is on uplifted, dissected hills. These soils are susceptible to slumping and gulying. The vegetation is mainly oak and annual grasses. The elevation is 1,100 to 2,000 feet. The average annual precipitation is about 25 to 35 inches, the average annual air temperature is about 55 to 59 degrees F, and the average frost-free period is about 160 to 200 days.

This unit is about 50 percent Phipps clay loam, loamy substratum, and 15 percent Phipps loam. The components of this unit are so intricately

intermingled that it was not practical to map them separately at the scale used.

Included in this unit are small areas of Bally and Forbesville soils.

Also included are small areas of olive gray clayey soils that form deep, wide cracks when dry and are 20 to 40 inches deep over unconsolidated sediment; highly eroded or gullied soils in steep ravines; soils on north-facing slopes that are similar to these Phipps soils but are cooler or have slopes of 50 to 75 percent; and soils that are similar to these Phipps soils but have a thick, dark-colored surface layer, have more clay throughout the profile, or have less clay in the subsoil. Included areas make up about 35 percent of the total acreage. The percentage varies from one area to another.

The Phipps clay loam is very deep and well drained. It is formed in alluvium derived from mixed rock sources.

Typically, the surface layer is pale brown clay loam about seven inches thick. The upper eleven inches of the subsoil is pale brown and light yellowish-brown clay loam, and the lower twenty-four inches is yellowish brown clay. The substratum to a depth of sixty inches or more is light yellowish-brown clay loam.

246- Wolfcreek gravelly loam. This very deep, well-drained soil is on flood plains. It is formed in alluvium derived from mixed rock sources. Slope is 0 to 2 percent. The vegetation is mainly annual grasses and forbs. The elevation is 1,300 to 2,600 feet. The average annual precipitation is 25 to 40 inches, the average annual air temperature is 55 to 59 degrees F, and the average frost-free period is 150 to 205 days. Typically, the surface layer is pale brown gravelly loam 10 inches thick. The underlying material to a depth of 72 inches is stratified, brown clay loam, sandy clay loam, and very gravelly sandy clay loam.

Included in this unit are small areas of Talmage soil. Also included are small areas of soil that are similar to this Wolfcreek soil but are non-gravelly, have a darker colored surface layer and more clay, or are in low areas that are subject to occasional flooding. Included areas make up about 15 percent of the total acreage. The percentage varies from one area to another.

Permeability of this Wolfcreek soil is moderately slow. Available water capacity is 7.5 to 10.0 inches. Effective rooting depth is sixty inches or more. Surface runoff is slow, and the hazard of erosion is slight. This soil is subject to rare periods of flooding during prolonged, high-intensity storms.

249-Xerofluents-Riverwash complex. This map unit is on narrow flood plains adjacent to stream channels and in active stream channels. Slope is 0 to 2 percent. The vegetation is mainly sparse annual grasses and forbs. The elevation is 750 to 2,800 feet. The average annual precipitation is 25 to 40 inches, the average annual air temperature is 54 to 59 degrees F, and the average frost-free period is 135 to 200 days.

This unit is about 55 percent Xerofluents and 30 percent River wash. The components of this unit are so intricately intermingled that it was not practical to map them separately at the scale used.

Included in this unit are small areas of Kelsey, Maywood Variant, and Talmage soils. Included areas make up about 15 percent of the total acreage. The percentage varies from one area to another.

Xerofluents consist of very deep, excessively drained soils that formed in alluvium derived from mixed rock sources. No single profile of Xerofluents is typical, but one commonly observed in the survey area has a surface layer of grayish brown very gravelly sandy loam 5 inches thick. The underlying material to a depth of eighty-four inches is stratified, light brownish gray very gravelly loamy coarse sand and very gravelly coarse sand.

Conclusion

The proposed project is small in scope relative to acreage and is mostly located in highly disturbed cleared agricultural areas. The cultivation sites are relatively level and soils are well drained. The habitat in the cultivation areas is low in value and is primarily comprised of non-native grasslands. The surrounding areas have intermittent stands of native habitat of higher value which will remain intact. There are two small wetlands that are seasonal in nature. Neither will be affected by the cultivation activities. All required setbacks for riparian areas have been incorporated into the site plans (Figures 5-9 attached).

There is however, one area that could potentially sustain some impacts. It is Area E on Parcel 010-053-02 - Figure 9. The area was initially proposed to be approximately 8.4 acres in size and would have potentially removed native habitat to create a cannabis cultivation area. However the updated site plan has substantially reduced the size of this area to 1.54 acres. While no rare or endangered plants were found during surveys, there is a potential for seven species identified in Table 1 and 2 to have a potential to be present. It is not likely any of these species are on site, however it is recommended that a qualified biologist be present prior to and during Area E clearing activities to ensure no rare plants are removed.

TABLE 1. CALIFORNIA NATIVE PLANT SOCIETY'S INVENTORY OF RARE AND ENDANGERED PLANTS

Selected CNPS Plants by Scientific Name

Clear path Canyon

Scientific Name	Common Name	Family	Lifeform	CRPR	CESA	FESA	Blooming Period	Habitat
<i>Amsinckia lunaris</i>	bent-flowered fiddleneck	Boraginaceae	annual herb	1B.2	None	None	Mar-Jun	Coastal bluff scrub, Cismontane woodland, Valley and foothill grassland
<i>Antirrhinum virga</i>	twig-like snap drag on	Plantaginaceae	perennial herb	4.3	None	None	Jun-Jul	Chaparral, Lower montane coniferous forest; rocky, openings, often serpentinite
<i>Arctostaphylos manzanita ssp. elegans</i>	Konocti manzanita	Ericaceae	perennial evergreen shrub	1B.3	None	None	(Jan)Mar-May (Jul)	Chaparral, Cismontane woodland, Lower montane coniferous forest; volcanic
<i>Arctostaphylos stanfordiana ssp. raichei</i>	Raiche's manzanita	Ericaceae	perennial evergreen shrub	1B.1	None	None	Feb-Apr	Chaparral, Lower montane coniferous forest (openings); rocky, often serpentinite
<i>Astragalus breweri</i>	Brewer's milk-vetch	Fabaceae	annual herb	4.2	None	None	Apr-Jun	Chaparral, Cismontane woodland, Meadows and seeps, Valley, and foothill grassland (open, often gravelly); often serpentinite, volcanic
<i>Brasenia schreberi</i>	watershield	Cabombaceae	perennial rhizomatous herb (aquatic)	2B.3	None	None	Jun-Sep	Marshes and swamps (freshwater)
<i>Calystegia collina ssp. oxyphylla</i>	Mt. Saint Helena morning-glory	Convolvulaceae	perennial rhizomatous herb	4.2	None	None	Apr-Jun	Chaparral, Lower montane coniferous forest, Valley and foothill grassland; serpentinite

<i>Carex comosa</i>	bristly sedge	Cyperaceae	perennial rhizomatous herb	2B.1	None	None	May-Sep	Coastal prairie, Marshes and swamps (lake margins), Valley and foothill grassland
<i>Ceanothus confusus</i>	Rincon Ridge ceanothus	Rhamnaceae	perenni al al evergre en shrub	1B.1	None	None	Feb-Jun	Closed-cone coniferous forest, Chaparral, Cismontane woodland; volcanic or serpentinite

Scientific Name	Common Name	Family	Lifeform	CRPR	CESA	FESA	Blooming Period	Habitat
<i>Clarkia gracilis</i> <i>ssp. tracyi</i>	Tracy's clarkia	Onagraceae	annual herb	4.2	None	None	Apr-Jul	Chaparral (openings, usually serpentinite)
<i>Collomia diversifolia</i>	serpentine collomia	Polemoniaceae	annual herb	4.3	None	None	May-Jun	Chaparral, Cismontane woodland serpentinite, rocky or gravelly
<i>Cryptantha dissita</i>	serpentine cryptantha	Boraginaceae	annual herb	1B.2	None	None	Apr-Jun	Chaparral (serpentinite)
<i>Fritillaria purdyi</i>	Purdy's fritillary	Liliaceae	perennial bulbiferous herb	4.3	None	None	Mar-Jun	Chaparral, Cismontane woodland, Lower montane coniferous forest; usually serpentinite
<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	1B.2	CE	None	Apr-Aug	Marshes and swamps (lake margins), Vernal pools; clay
<i>Hesperolinon adenophyllum</i>	glandular western flax	Linaceae	annual herb	1B.2	None	None	May-Aug	Chaparral, Cismontane woodland, Valley and foothill grassland; usually serpentinite
<i>Horkelia bolanderi</i>	Bolander's horkelia	Rosaceae	perennial herb	1B.2	None	None	(May)Jun-Aug	Chaparral, Lower montane coniferous forest, Meadows and seeps, Valley, and foothill grassland; edges, vernal mesic areas
<i>Layia septentrionalis</i>	Colusa layia	Asteraceae	annual herb	1B.2	None	None	Apr-May	Chaparral, Cismontane woodland, Valley and foothill grassland; sandy, serpentinite
<i>Lilium rubescens</i>	redwood lily	Liliaceae	perennial bulbiferous herb	4.2	None	None	Apr-Aug (Sep)	Broad-leaved upland forest, Chaparral, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest. Sometimes serpentinite, sometimes

								roadsides
<i>Monardella viridis</i>	green monardella	Lamiaceae	perennial rhizomatous herb	4.3	None	None	Jun-Sep	Broad-leaved upland forest, Chaparral, Cismontane woodland
<i>Streptanthus glandulosus ssp. hoffmanii</i>	Hoffman's bristly jewelflower	Brassicaceae	annual herb	1B.3	None	None	Mar-Jul	Chaparral, Cismontane woodland, Valley, and foothill grassland (often serpentinite). rocky
<i>Streptanthus hesperidis</i>	green jewelflower	Brassicaceae	annual herb	1B.2	None	None	May-Jul	Chaparral (openings), Cismontane woodland; serpentinite, rocky

Scientific Name	Common Name	Family	Lifeform	CRPR	CESA	FESA	Blooming Period	Habitat
<i>Tracyina rostrata</i>	beaked tracyina	Asteraceae	annual herb	1B.2	None	None	May-Jun	Chaparral, Cismontane woodland, Valley, and foothill grassland
<i>Viburnum ellipticum</i>	oval-leaved viburnum	Adoxaceae	perennial deciduous shrub	2B.3	None	None	May-Jun	Chaparral, Cismontane woodland, Lower montane coniferous forest

KEY FOR TABLE 1:

CNPS Rare Plant-Threat Rank Definitions:

- 1B.1 = Rare, threatened, or endangered in California and elsewhere; seriously threatened in California
- 1B.2 = Rare, threatened, or endangered in California and elsewhere; moderately threatened in California
- 1B.3 = Rare, threatened, or endangered in California and elsewhere; not very threatened in California
- 2A = Presumed extinct in California, but extant elsewhere
- 2B.1 = Rare, threatened, or endangered in Calif., but more common elsewhere; seriously threatened in Calif.
- 2B.2 = Rare, threatened, or endangered in Calif., but more common elsewhere; moderately threatened in Calif.
- 2B.3 = Rare, threatened, or endangered in Calif., but more common elsewhere; not very threatened in Calif.
- 3 = Plants about which we need more information (Review List)
- 3.1 = Plants about which we need more information (Review List); seriously threatened in California
- 3.2 = Plants about which we need more information (Review List); moderately threatened in California
- 3.3 = Plants about which we need more information (Review List), not very threatened in California
- 4.1 = Plants of limited distribution (watch list); seriously threatened in California
- 4.2 = Plants of limited distribution (watch list); moderately threatened in California
- 4.3 = Plants of limited distribution (watch list); not very threatened in California

State and Federal Status:

- CESA = California Endangered Species Act
- FESA = Federal Endangered Species Act
- SR = State. Rare
- ST = State. Threatened
- SSC = CDFW Species of Special Concern
- WL = CDFW Watch List
- FT = Federal Threatened
- SE = State Endangered.
- SD = State Delisted
- FP = CDFW Fully Protected
- FE = Federal Endangered
- FD = Federal Delisted

TABLE 2. CNDDDB SENSITIVE PLANT AND WILDLIFE SPECIES WITHIN Lake County

Habitat Type	Habitat Present
Northern Interior Cypress Forest	No
Serpentine Bunchgrass	No

Plant Species	Common Name	Habitat Requirements/ Fed-State-CNPS* Status	Blooming Season/Form	Habitat Present
<i>Amsinckia lunaris</i>	bent-flowered fiddleneck	Coastal bluff scrub, cismontane woodland, valley & foothill grassland; --/--/1B.2	March- Juneann. herb	Habitat present but not found during surveys
<i>Antirrhinum virga</i>	twig-like snapdragon	Chaparral, lower montane coniferous forest, /rocky, openings, often serpentinite; - -/--/4.3	June- July. herb	Poor habitat present
<i>Arctostaphylos manzanita ssp. elegans</i>	Konocti manzanita	Chaparral, cismontane woodland, lower montane conifer. forest/volcanic; --/--/1B.3	March- Mayeverg. shrub	Poor habitat present
<i>Arctostaphylos stanfordiana ssp. raichei</i>	Raiche's manzanita	Chaparral, lower montane coniferous forest/rocky, often serpentinite; --/--/1B.1	Feb.- April ann. herb	Poor habitat present
<i>Astragalus breweri</i>	Brewer's milk-vetch	Chaparral, cismontane woodland, meadows and seeps, valley, and foothill grassland (open, often gravelly)/often serpentinite, volcanic; --/--/4.2	April- June ann. herb	Poor habitat present
<i>Brasenia schreiberi</i>	watershield	Marshes & swamps/freshwater; --/--/2B.3	March- Sept rhizom e. herb	Habitat not present
<i>Calystegia collina ssp. oxyphylla</i>	Mt. Saint Helena morning-glory	Chaparral, lower montane conifer. forest, valley & foothill grassland/serpentinite; --/--/4.2	April-June rhizome. herb	Habitat Present, not found
<i>Carex comosa</i>	bristly sedge	Coastal prairie, marshes, and swamps (lake margins), valley and foothill grassland; --/--/2B.1	May-Sept. per. rhizome. herb	Habitat present not

<i>Ceanothus confusus</i>	Rincon ridge ceanothus	Closed cone conifer. forest, chaparral, cismontane woodland/volcanic; --/--/1B.1	Feb.-April everg. shrub	Poor habitat present
<i>Clarkia gracilis ssp. tracyi</i>	Tracy's clarkia	Chaparral (openings, usually serpentinite); --/--/4.2	April-June ann. herb	Habitat present, not found
<i>Collomia diversifolia</i>	serpentine collomia	Chaparral, cismontane woodland/serpentinite, rocky or gravelly; --/--/4.3	May-June ann. herb	Habitat not present
<i>Cryptantha dissita</i>	serpentine cryptantha	Chaparral/serpentine outcrops; --/--/1B.2	April-June ann. herb	Habitat not present

Plant Species	Common Name	Habitat Requirements/ Fed-State-CNPS* Status	Blooming Season/Form	Habitat Present
<i>Entosthodon kochii</i>	Koch's cord moss	Cismontane woodland (soil); --/--/1B.3	moss	Habitat present but not found during surveys
<i>Erythranthe nudata</i>	bare monkeyflower	Chaparral, cismontane woodland, serpentinite seeps. --/--/4.3	May-June ann. herb	Habitat not present
<i>Fritillaria purdyi</i>	Purdy's fritillary	Chaparral, cismontane woodland, lower montane coniferous forest; usually serpentinite; --/--/4.3	March-June bulb. herb	Habitat present, not found
<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	Freshwater marsh, marshes & swamps (freshwater), vernal pools, sometimes lake margins/clay; --/SE/1B.2	April-Aug. ann. herb	Habitat not present
<i>Hesperolinon adenophyllum</i>	glandular western flax	Chaparral, cismontane woodland, valley & foothill grassland/usually serpentine chaparral; --/--/1B.2	May-Aug. ann. herb	Habitat present but not found
<i>Horkelia bolanderi</i>	Bolander's horkelia	Lower montane conifer. forest, chaparral, meadows & seeps, valley & foothill grassland/grassy margins of vernal pools and meadows; --/ --/1B.2	June-Aug. per. herb	Habitat present but not found during surveys
<i>Kopsiopsis hookeri</i>	small groundcone	North Coast coniferous forest/redwood forest; - -/-- /2B.3 (parasitic)	April-August per. rhizome . herb	Habitat not present
<i>Layia septentrionalis</i>	Colusa layia	Chaparral, cismontane woodland, valley & foothill grassland/sandy or serpentine; --/-- /1B.2	April-Mayann. herb	Habitat present but not found during surveys
<i>Leptosiphon acicularis</i>	bristly leptisiphon	Chaparral, cismontane woodland, coastal prairie, valley, and foothill grassland; --/-- /4.2	April-Julyann. herb	Habitat present but not found during surveys

<i>Monardella viridis</i>	green monardella	Broadleaved upland forest, chaparral, cismontane woodland; --/--/4.3	June-Sept. rhizom e. herb	Habitat present but not found. during surveys
<i>Plagiobothrys lithocaryus</i>	Mayacamas popcorn-flower	Chaparral, cismontane woodland, valley & foothill grassland/mesic; --/--/1A (presumed extinct)	April-Mayann. herb	Poor habitat present
<i>Ranunculus lobbii</i>	Lobb's aquatic buttercup	Cismontane woodland, North Coast coniferous forest, valley, and foothill grassland, vernal pools/mesic--/--/4.2	Feb.-May ann. herb (aquatic)	Habitat not present
<i>Streptanthus glandulosus ssp. hoffmanii</i>	Hoffman's bristly jewelflower	Chaparral, cismontane woodland, valley, and foothill grassland/rocky, often serpentinite; --/--/1B.3	March-Julyann. herb	Habitat not present
<i>Tracyina rostrata</i>	beaked tracyina	Cismontane woodland, valley & foothill grassland; --/--/1B.2	May-June ann. herb	Habitat present but not found during surveys

Plant Species	Common Name	Habitat Requirements/ Fed-State-CNPS* Status	Blooming Season/Form	Habitat Present
<i>Viburnum ellipticum</i>	oval-leaved viburnum	Chaparral, cismontane woodland, lower montane coniferous forest; --/--/2B.3	May-June decid. shrub	Habitat not present

*See CNPS list for key

TABLE 3. PLANT COMMUNITIES AND OTHER COVER TYPES PRESENT

TABLE 4. FLORA; Clear path Canyon 2050 Ogulin Canyon Road

Habit	Species	Common Name	Family	Origin
forb	<i>Chlorogalum pomeridianum</i>	Wavyleaf soap plant	Agavaceae	N
forb	<i>Andostoma fasciculatum</i>	chamise	Alismataceae	N
forb	<i>Allium serra</i>	jeweled onion	Alliaceae	N
forb	<i>Conium maculatum</i>	poison hemlock	Apiaceae	A
forb	<i>Lomatium dasycarpum ssp. dasycarpum</i>	woolly-fruited lomatium	Apiaceae	N
forb	<i>Lomatium macrocarpum</i>	Large fruited lomatium	Apiaceae	N
forb	<i>Sanicula bipinnata</i>	Poison sanicle	Apiaceae	N
forb	<i>Achillea millefolium</i>	common yarrow	Asteraceae	N
forb	<i>Agoseris apargioides var apargioides</i>	coast dandelion	Asteraceae	N
forb	<i>Chamomilla suaveolens</i>	pineapple weed	Asteraceae	A
forb	<i>Centaurea solstitialis</i>	Yellow star thistle	Asteraceae	A
forb	<i>Eriophyllum lanatum var. lanatum</i>	common woolly sunflower	Asteraceae	N
forb	<i>Madia gracilis</i>	gumweed, slender tarweed	Asteraceae	N
forb	<i>Micropus californicus</i>	cottontop	Asteraceae	N
forb	<i>Psilocarpus tenellus</i>	slender woolly marbles	Asteraceae	N
forb	<i>Wyethia angustifolia</i>	narrow-leaved mule ears	Asteraceae	N
forb	<i>Wyethia glabra</i>	green mule ears, shining mule ears	Asteraceae	N
forb	<i>Cynoglossum grande</i>	grand hound's tongue	Boraginaceae	N
forb	<i>Lepidium nitidum var. nitidum</i>	shining peppergrass	Brassicaceae	N
forb	<i>Dichelostemma capitatum</i>	Blue dicks	Brodiaea	N
forb	<i>Lonicera interrupta</i>	Chaparral honeysuckle	Caprifoliaceae	N
forb	<i>Cerastium glomeratum</i>	mouse-ear chickweed, sticky mouse-ear	Caryophyllaceae	A

Habit	Species	Common Name	Family	Origin
forb	<i>Acmispon glaber</i>	deerweed	Fabaceae	N
forb	<i>Lupinus bicolor</i>	miniature lupine	Fabaceae	N
forb	<i>Trifolium hirtum</i>	rose clover	Fabaceae	A
forb	<i>Vicia americana var. americana</i>	American vetch	Fabaceae	N
forb	<i>Erodium cicutarium</i>	red stem storksbill	Geraniaceae	A
forb	<i>Geranium dissectum</i>	cut-leaved geranium	Geraniaceae	A
forb	<i>Nemophila menziesii</i>	baby blue eyes	Hydrophylaceae	N
forb	<i>Calochortus superbus</i>	Yellow mariposa	Lillaceae	N

Habit	Species	Common Name	Family	Origin
forb	<i>Dichelostemma congestum</i>	fork-toothed ookow	Liliaceae	N
forb	<i>Triteleia laxa</i>	Ithuriel's spear	Liliaceae	N
forb	<i>Toxicoscordion fremontii</i>	Fremont's death camas	Liliaceae	
forb	<i>Clarkia purpurea</i>	purple clarkia, winecup clarkia, four-spot	Onagraceae	N
forb	<i>Eschscholzia californica</i>	California poppy	Papaveraceae	N
forb	<i>Delphinium hesperium</i>	foothill larkspur	Ranunculaceae	N
forb	<i>Galium divaricatum</i>	Lamarck's bedstraw	Rubiaceae	N
forb	<i>Penstemon heterophyllus</i>	foothill penstemon	Scrophulariaceae	N

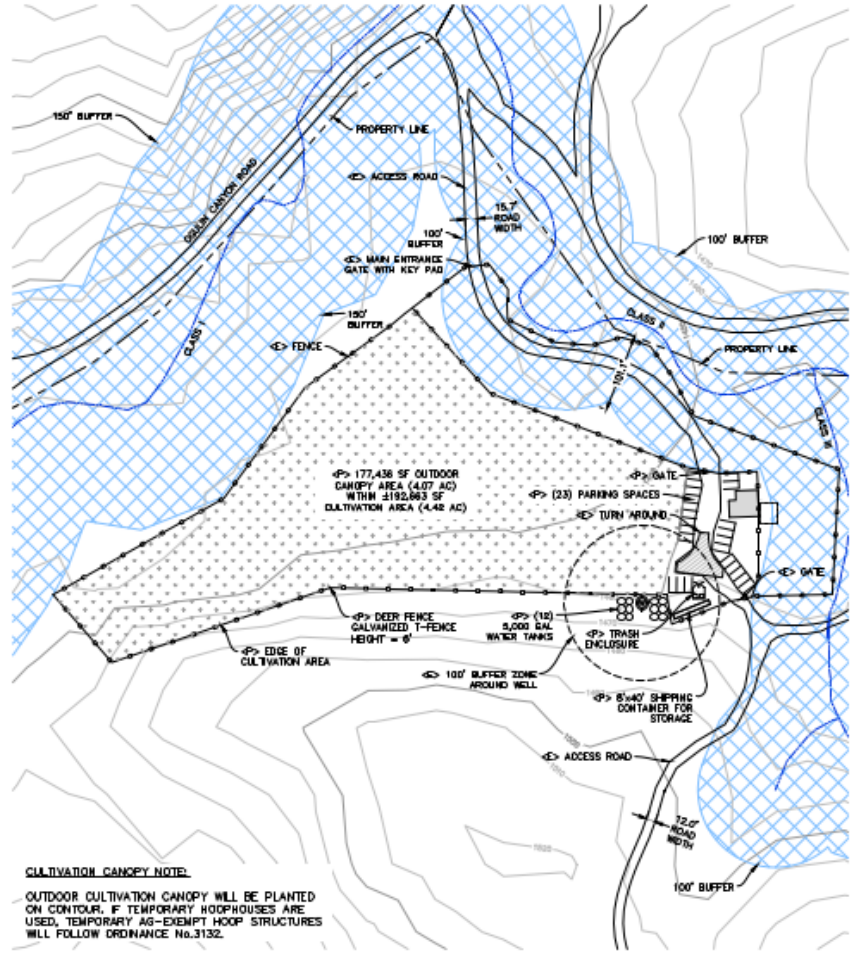
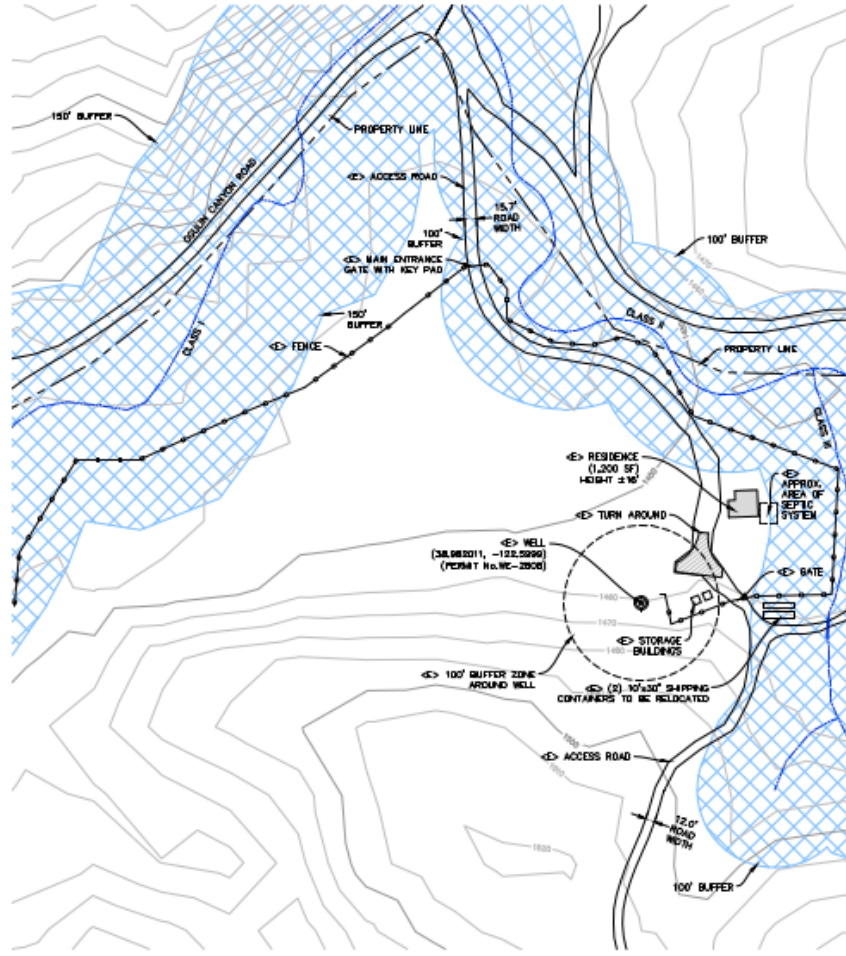
Habit	Species	Common Name	Family	Origin
grass	<i>Avena barbata</i>	slender wild oat	Poaceae	A
grass	<i>Briza minor</i>	small quaking grass	Poaceae	A
grass	<i>Bromus diandrus</i>	ripgut grass, ripgut brome	Poaceae	A
grass	<i>Bromus hordeaceus</i>	soft chess	Poaceae	A
grass	<i>Bromus jinermis</i>	smooth brome	Poaceae	A
grass	<i>Bromus laevipes</i>	woodland brome	Poaceae	N
grass	<i>Bromus madritensis ssp. rubens</i>	red brome	Poaceae	A
grass	<i>Elymus caput-medusae</i>	medusahead	Poaceae	A
grass	<i>Elymus glaucus ssp. glaucus</i>	blue wildrye	Poaceae	N
grass	<i>Elymus multisetus</i>	big squirreltail	Poaceae	N
grass	<i>Festuca myuros</i>	rattail sixweeks grass	Poaceae	A
shrub	<i>Sambucus nigra ssp. caerulea</i>	blue elderberry	Adoxaceae	N
shrub	<i>Toxicodendron diversilobum</i>	poison oak	Anacardiaceae	N
shrub	<i>Baccharis pilularis</i>	coyote brush, chaparral broom	Asteraceae	N
shrub	<i>Symphoricarpos albus var. laevigatus</i>	common snowberry	Caryophyllaceae	N

Habit	Species	Common Name	Family	Origin
shrub	<i>Arctostaphylos manzanita ssp. manzanita</i>	common manzanita	Ericaceae	N
shrub	<i>Arctostaphylos viscida</i>	white-leaf manzanita	Ericaceae	N
shrub	<i>Pickeringia montana</i>	chaparral pea	Fabaceae	N
shrub	<i>Eriodictyon californicum</i>	California yerba santa	Hydrophyllaceae	N
shrub	<i>Lepechinia calycina</i>	pitcher sage	Lamiaceae	N
shrub	<i>Ceanothus cuneatus var. cuneatus</i>	buckbrush	Rhamnaceae	N
shrub	<i>Adenostoma fasciculatum</i>	chamise	Rosaceae	N
shrub	<i>Cercocarpus betuloides var. betuloides</i>	birch-leaf mountain mahogany	Rosaceae	N
shrub	<i>Heteromeles arbutifolia</i>	toyon	Rosaceae	N
tree	<i>Quercus douglasii</i>	Blue oak	Fagaceae	N
Tree	<i>Quercus wislizeni</i>	interior live oak	Fagaceae	N
Tree	<i>Pinus sabiniana</i>	California foothill pine	Pinaceae	N
Tree	<i>Prunus armeniaca</i>	Apricot	Rosaceae	A
Habit	Species	Common Name	Family	Origin
vine	<i>Calystegia occidentalis ssp. occidentalis</i>	western morning-glory	Convolvulaceae	N

Figures 5-9 - Grow Sites

CLEARPATH CANYON, LLC SITE 'A' DETAILED AREA

APN: 010-053-01 & 010-053-02



CULTIVATION CANOPY NOTE:
OUTDOOR CULTIVATION CANOPY WILL BE PLANTED ON CONTOUR. IF TEMPORARY HOOPHOUSES ARE USED, TEMPORARY AG-EXEMPT HOOP STRUCTURES WILL FOLLOW ORDINANCE No.3132.

22x34 SHEET: 1"=80'
11x17 SHEET: 1"=160'



<p>NORTHPOINT CONSULTING GROUP, INC. 1117 Samoa Blvd., Arcata, CA 95521</p>	
<p>CLEARPATH CANYON, LLC. APN 010-053-01 & 010-053-02 SITE 'A' DETAILED AREA</p>	
<p>DATE: 1/14/20</p>	<p>SCALE: 1"=160'</p>
<p>DESIGNER: JLS</p>	<p>CHECKED: JLS</p>
<p>DATE: 1/14/20</p>	<p>DATE: 1/14/20</p>
<p>SHEET</p>	<p>C1</p>
<p>20-098</p>	

Figure - Site A



Photo 1: landscape, Chamise in foreground (CNPS #2) Blue oak savanna (CNPS#1) above, *Q. wislizeni* (CNPS #6) 3rd and Ghost pine (CNPS #3) on ridge in the background.



Photo two; Old hops field (CNPS # 4, Annual brome veg type) Figure 1 Site D.

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