Plant Humboldt Cannabis Nursery
Biological Assessment

May 19, 2025 revision

The following report presents the biological site assessment for an existing Cannabis Nursery (Project) known as the Plant Humboldt Nursery in Briceland, CA. This report summarizes 1) existing biological conditions within the Project area, 2) the potential for special status species or natural communities to occur on or adjacent to the Project area, 3) the potential impacts of the Project on special status species or natural communities, 4) mitigate potential impacts to less-than significant levels under CEQA, and 5) discussion and justification for the Property's requested reduction in width for its Streamside Management Area (SMA).

Location

The Plant Humboldt Nursery is located within the community of Briceland in Humboldt County, CA.

- Section 18, Township 4 South, Range 3 East, H.B. & M., Humboldt County, CA.
- Briceland USGS 7.5' quadrangle

Project

The Project is a cannabis permit for a nursery located within the community of Briceland, CA. The Project is within an existing commercial nursery that has operated at this location since 2008.

The permit encompasses two types of uses: a (10000 ft²) nursery positioned on the west side of the property and a (1000 ft²) research & development plot on the east side. Existing activities at the nursery site include growing cannabis plants from seed that are sold at retail and to commercial farms. Activities at the research & development (R&D) site include breeding cannabis for desired genetics, then growing the plants to maturity and harvesting them for their seed. The scope of this permit does not include growing cannabis flower for sale or processing cannabis to a form that can be consumed.

Scoping

Scoping for the potential presence of special status species and plant communities was undertaken in order to determine whether the proposed project could have significant negative impacts on those species and communities. Prior to field visits, lists of special status plants (Table 1), sensitive natural communities (Table 2) and special status wildlife (Table 3) were created by consulting Rarefind 5 (Biogeographic Data Branch, CA Department of Fish & Wildlife 2024) and the California Native Plant Society Rare and Endangered Plant Database (CNPS 2024). Furthermore, the CNDDB Spotted Owl Data Viewer was also queried for any potential northern spotted owl observations within the vicinity of the project area.

Query criteria for the Rarefind 5 search of the California Natural Diversity Database (CNDDB) were:

- All species and communities
- Nine-quad search centered on the Briceland 7.5' minute quadrangle.
- Within the plan elevation (520-600').

Query criteria for the CNPS Rare and Endangered Plant Database search were:

- Nine (8)-quad search centered on the Briceland 7.5' minute quadrangle.
- Within the plan elevation (520 – 600').

The scoping list was further refined by making a general habitat assessment within the Project area, and nearby unique habitats (e.g. late-seral forest stands, large streams, lakes, rock outcroppings, meadows, unique soil types such as serpentine, etc.) were noted based upon aerial photo interpretation, familiarity with the area, and consultation with adjacent or nearby approved THPs/NTMPs. Also, specific habitat and range information was obtained by using previously published listings of endangered, threatened or rare species by region, county, local knowledge of pertinent species and their ranges, and field manuals.

Assessment

Reconnaissance Surveys

Field reconnaissance surveys of the project area were conducted by biologist Giacomo Renzullo of BBW & Associates on February 9, 2024. During this site visit, the Project area was assessed for the presence of special status species, nest structures, and general habitat features. The Project area and surrounding forests were also evaluated for the presence of watercourses/riparian areas, rock outcroppings and other potentially significant habitat features.

Additional field work was completed May 15, 2025 to identify and characterize the Streamside Management Area of the property as defined by Humboldt County's Streamside Management Areas and Wetlands Ordinance.

Land Use

The permit area is located within a larger developed property (Refer Figure 1, green denoting the Project area) that has been an integral part of the community of Briceland for more than 150 years.

The town's original gas well that supplied gas and light to the community of Briceland is located on the property. From 1950 to 1995, the property was a well-known and well-used automobile junk yard. In 1995, the current owner acquired the property and, after extensive cleaned up efforts, transformed the junkyard into a homestead and garden. From 2018 to present, the property has operated under a provisionally permit to provide nursery services to the Cannabis industry.

The property is bordered on at two sides (north and east) by a bend in the Class I Redwood Creek. The Briceland Thorne Road runs along the northwest side of the boundary and is the only vehicular access to the property. The southern edge of the property is bordered by the Old Briceland Road. Both are County-maintained paved public roads.

The property is bisected by a break in slope with the higher elevation to the west up along Briceland-Thorne Road, and the lower elevation to the east and adjacent to Redwood Creek.

The existing cannabis nursery is located within the higher, western side of the property. This area currently contains the retail storefront, multiple temporary hoop-houses/cold-frames, and out-buildings associated with the nursery and retail outlet (Figure 2). This side of the property is immediately adjacent to the Briceland-Thorne Road and is the only public access to the facility. The hoop house and open cold-frame structures occupies the western corner and roughly occupies 15% of the total permit area. Additional structures on this side of the property include a house, water tanks, and several small out-buildings and shipping containers. Most of the remainder of this portion of the property is covered in weed mat and a parking area topped with crushed rock.

The R & D portion of the permit occupies the lower, eastern side of the property. This site is located roughly in the middle of the existing vegetable garden and adjacent to the Old Briceland Road. The property narrows here and most of the existing gardens, 25 year-old fruit trees, a lined off-stream pond and vegetable gardens are within 150' of Redwood Creek.

Habitats

Vegetation Communities: The project area is located within a canyon live oak (*Quercus chrysolepis*) dominated meadow and adjacent to the fish-bearing Redwood Creek. Red alder (*Alnus rubra*), California bay laurel (*Umbellularia californica*), Oregon Ash (Fraxinus latifolia) and the occasional cotton wood (*Populus trichocarpa*) grow within the existing riparian corridor along the Redwood Creek. The post-colonization habitation of the Briceland area has contributed to an eclectic mix of non-native plant species e.g., black locust (*Robinia pseudoacacia*), Himalayan blackberry (*Rubus armenicus*), wild radish (*Raphanus sativus*), lemon balm (*Melissa officinalis*), annual grasses, and numerous other ornamental & food crop species to the project area and surrounding community. Furthermore, fire-suppression in the last century has encouraged the encroachment of Douglas fir into the oak woodlands and meadows. We consider the stand within the Project area to be closest to the *Quercus chrysolepis* Forest & Woodland Alliance. The vegetation type within the riparian corridor is closest to the *Alnus rubra* Forest Alliance.

The section of Redwood Creek adjacent to the Project area is known to have natural spawning populations of steelhead, coho, and chinook salmon. This watercourse is classified as Aquatic, Estuary and Klamath/North coast flowing waters.

Observations

During the field visit on 2/9/24, the weather was mild (partly sunny, light winds) and there was no measurable precipitation. Redwood Creek was exhibiting normal winter flow rates.

The nursery/retail area on the west side of the property (Figure 2), including the parking lot and nursery space, was generally tidy and free of weeds, with minimal amounts of junk or clutter. There were occasional groupings of bamboo planted intermittently throughout the area, most of

which were contained with borders and planters that seemed to efficiently prevent the plants from 'running' into the surrounding soil. There was one area to the northeast of the nursery site where it was observed that approximately ¼ yard of green waste (presumably from weed removal efforts of the nursery) was dumped over the property fence and near the break in slope to Redwood Creek.

The eastern side of the property contains the R&D site within the private vegetable garden and adjacent to the lined pond. Due to the seasonality of the survey, the garden site was mostly in a state of dormancy until spring crops could be planted. The vegetation within this area consisted primarily of introduced ornamental and food crop species contained within the defined garden beds, interspersed with mostly non-native grasses and forbs commonly observed in the area (e.g., velvet grass (*Holcus lanatus*), sweet vernal grass (*Anthoxanthum odoratum*), bull thistle (*Cirsium vulgare*), wild radish (*Raphanus sativus*), etc. There were intermittent semi-dwarf fruit trees, planted mostly near the break in slope to the nursery site, that included cultivars of apple, pear, and pecan. Additionally, there was a line of four pole-sized (~10") black locust (*Robinia pseudoacacia*) trees planted north side of the garden approximately 3 meters from the bank (SMA) of Redwood Creek.

Riparian vegetation associated with the creek was isolated to the immediate banks of the watercourse. Past the break in slope at the creek bank, vegetation changed quickly to the dryer oak savannah habitat indicative of the area. Riparian vegetation consisted of California bay laurel (*Umbellularia californica*), Red alder (*Alnus rubra*), occasional cotton wood (*Populus trichocarpa*), Oregon ash (Fraxinus latifolia), elder berry (*Sambucus mexicana and two other Sambucus species, each cultivated*), and horse tail (*Equisetum* sp.).

There were a few areas of bank failure (Figure 6) on the property line and outside the proposed Project area where it bordered Redwood Creek and. One bank failure to the north of the artificial pond had eroded beneath the fencing that running along the top of the break in slope and had partial collapsed into the watercourse. Another bank failure approximately 10 meters to the west of the first had undermined a patch of bamboo, and two clumps were observed within the watercourse. There were accumulations of large woody debris (LWD) within the active channel of Redwood Creek where it bordered the permit area, primarily on the eastern side of the property north of pond, and vegetable garden. Some of the larger pieces of wood had been physically anchored to the substrate as part of an earlier in-stream restoration project implemented by the Eel River Watershed Improvement Group (ERWIG). The anchored LWD appeared to have accumulated additional woody and herbaceous debris that, over the years, appears to have a significant effect on the immediate currents of Redwood Creek – these localized changes in currents appeared to be contributing to bank instability along the creek bank/permit area.

There is a single, approximately 80-foot diameter lined pond located on the east side of the property that the property owner uses to water plants (both commercial and personal) on the property. The pond is drained annually and there were no signs of the presence of bull frogs (*Lithobates catesbeianus*) within the body of water.

Streamside Management Area Discussion

The attached maps depict the SMA as it would be applied according to the Humboldt County Streamside Management Areas and Wetlands Ordinance using a time progression of photos from 1968 to the present. This ordinance prescribes a standard 100' horizontal distance SMA measured from the top of the bank or the edge of the riparian drip-line whichever is greater. The clear intent of this ordinance is to protect the important aquatic resources of perennial streams like Redwood Creek. As one blanket prescription cannot account for the inherent differences in topography and forest composition found throughout Humboldt County's famously variable landscapes and stream zones, this report was initially conceived to provide some justification for the property's current and historical uses and the continuation of those uses.

In revising this report based on direct communication with Steven Santos, senior Planner at the Humboldt County Planning Department, we intend to describe the current SMA and justify how a reduction in its width will continue to provide Redwood Creek with robust shade and filter strip properties while allowing the current property owner to earn a living adjacent to this important aquatic resource.

Section 61.1.7.6.3 of the ordinance states that the streamside management area may be reduced or eliminated where the County determines, based on specific factual findings, that:

> 61.1.7.6.3.1 The mapping of the SMA is not accurate, there are no in-channel wetland characteristics or off-channel riparian vegetation, or the reduction will not significantly affect the biological resources of the SMA on the property.
>
> 61.1.7.6.3.2 For projects subject to ministerial review, reductions may be allowed without a special permit in consultation with California Department of Fish and Wildlife

The current 100' buffer would put the house and more than 50% of the property within the SMA. This buffer would include the rainwater catchment pond, the vegetable gardens, the home and the parking area for the business without providing any additional protection for the aquatic resources present in Redwood Creek. The majority of this area is found on a naturally flat bench that was once a paved County throughfare. The pond has an approved 1600 (EPIMS-HUM-52532-R1C) from CDFW to provide domestic and irrigation water for the property.

As can be seen from the historic aerial photo progression of the site (Figures 8 & 9), most of the area encompassed by the County-proposed SMA guidelines consisted of a canyon live oak savannah and prairie grasslands. Additionally, an extensive non-native blackberry bramble developed at the junction of the two historic roads bordering the Project, a biproduct of the human impact experienced at the site since at least the 1860s.

Aerial photo interpretation of the type, scale, and distribution of this canyon live oak vegetation type throughout the Briceland area clearly shows that there was no extensive riparian forest on this site prior to its current use a commercial nursery. Riparian vegetation within the Project appears to be isolated to the immediate banks of the watercourse and is absent past the break-in-slope. This stretch of Redwood Creek has always meandered through an mostly open environment with a narrow but effective strip of riparian trees along its length. The first photo from 1968 (Figure 8) clearly shows the damage from the 1964 flood along the county road downstream from the property.

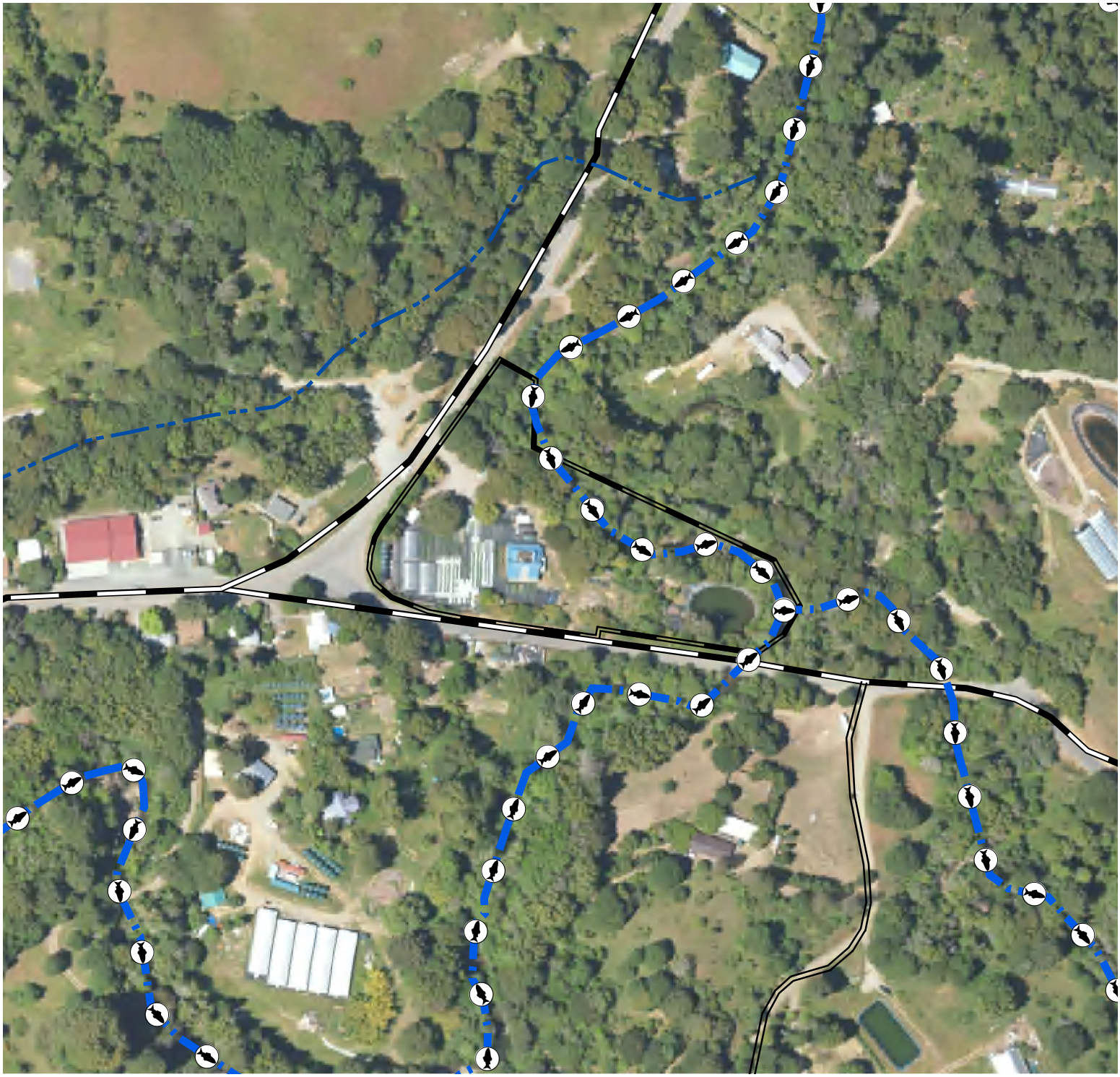
The native canyon live oak-dominated forest that occupied this terrace provided a complementary habitat to the Redwood Creek riparian corridor. This forest type and its mix of prairies are not dissimilar to the garden uses that currently occupy the site. Therefore, we believe it can be justified to reduce the overall width of the SMA to accommodate all of the current uses of this site.

The site simultaneously provides habitat for threatened fish and other aquatic species, as well as providing housing and the many benefits of a well-tended homestead. This includes its current seasonal iteration as a commercial cannabis nursery. We propose to reduce the SMA to 20' from the top of the bank along the entrance to the farm (this becomes 50' to the highwater mark of Redwood Creek and protects the existing mixture of live oak and bay-laurel along this edge of the property). The proposed SMA will then exclude the home and pass along the south edge of the two large, historic specimen canyon live oaks on the house's north side. The SMA for commercial purposes would then expand into the fruit trees on the east side of the property a minimum of 50' as measured from the highwater mark of the creek course with special dispensation for the existing legal non-conforming use of the rainwater catchment pond that provides all of the property's agricultural water.

Any commercial use of the property would be outside of this reduced SMA. However, existing homestead use such as flowers and fruit trees and planted locust may remain with the SMA to provide shade, filter strip and multiple use of the zone while providing protection to Redwood Creek.

Around the pond, the dense copse of *Fraxinus* and *Alnus* would be maintained to create shade, act as a filter strip, and provide native riparian habitat for songbirds & other native wildlife.

Acknowledging the County's interest in moving the two 20' shipping containers to an area outside of the reduced SMA, there is no compelling reason to do so given the position of the containers (which are personal and not for commercial use) and the existence of ample forest cover between their high terrace and the bank of Redwood Creek. Furthermore, the property owner will endeavor to increase filter strip properties of this part of the SMA to guard against any potential run-off from the adjacent commercial uses.



Plant Humboldt Cannabis Nursery

Town of Briceland, CA

0 87.5 175 350 Feet

1:2,500

N

Legend

- Plant Humboldt Property Line
- Class I Watercourse
- Class IIS Watercourse

Produced by:
Restoration Forestry, Inc.

Projection:
UTM NAD 83 Zone 10N

Date: 5/21/2025

Figure 1: Site Map

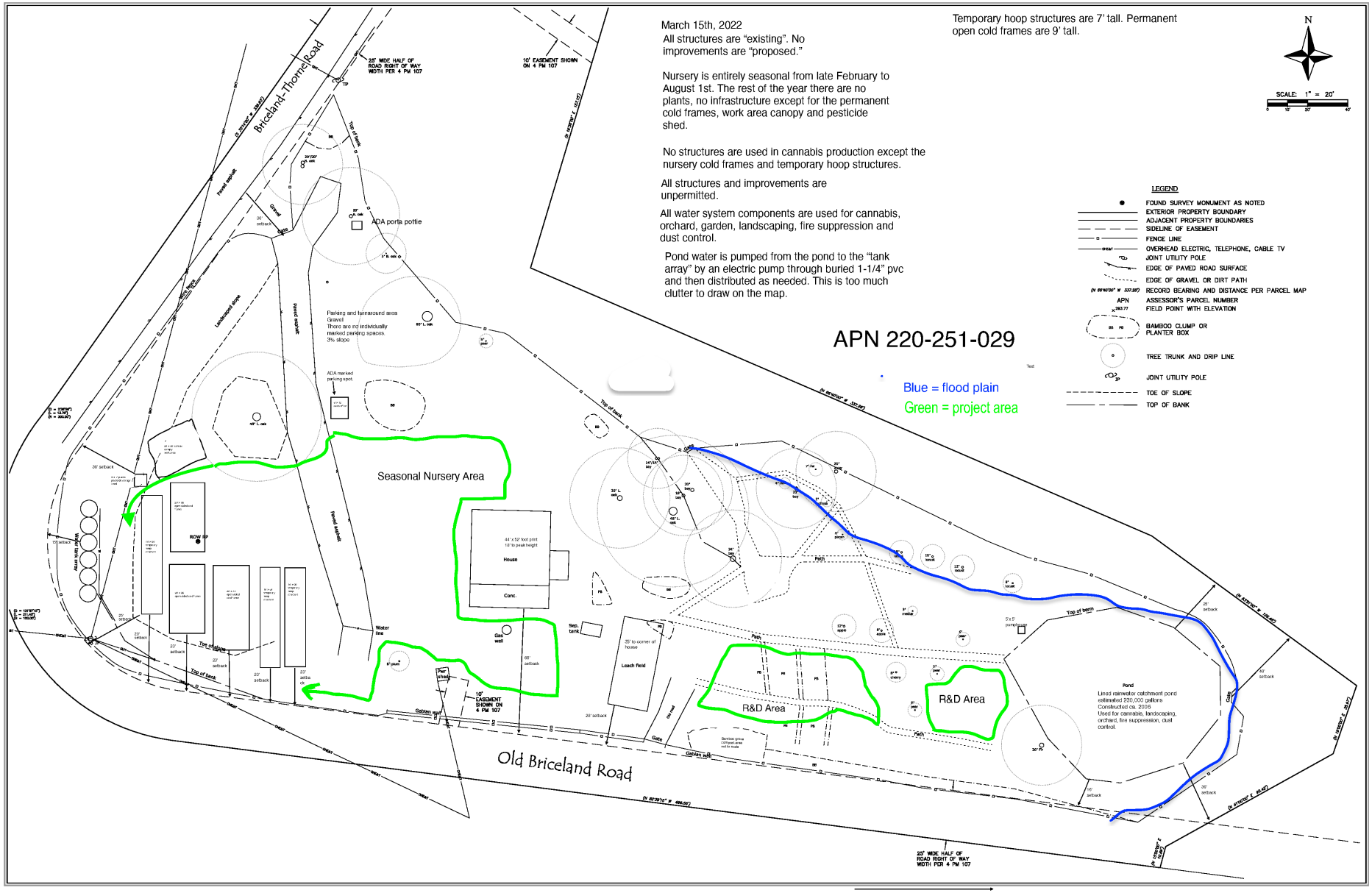


Figure 2: Nursery and Retail Facility

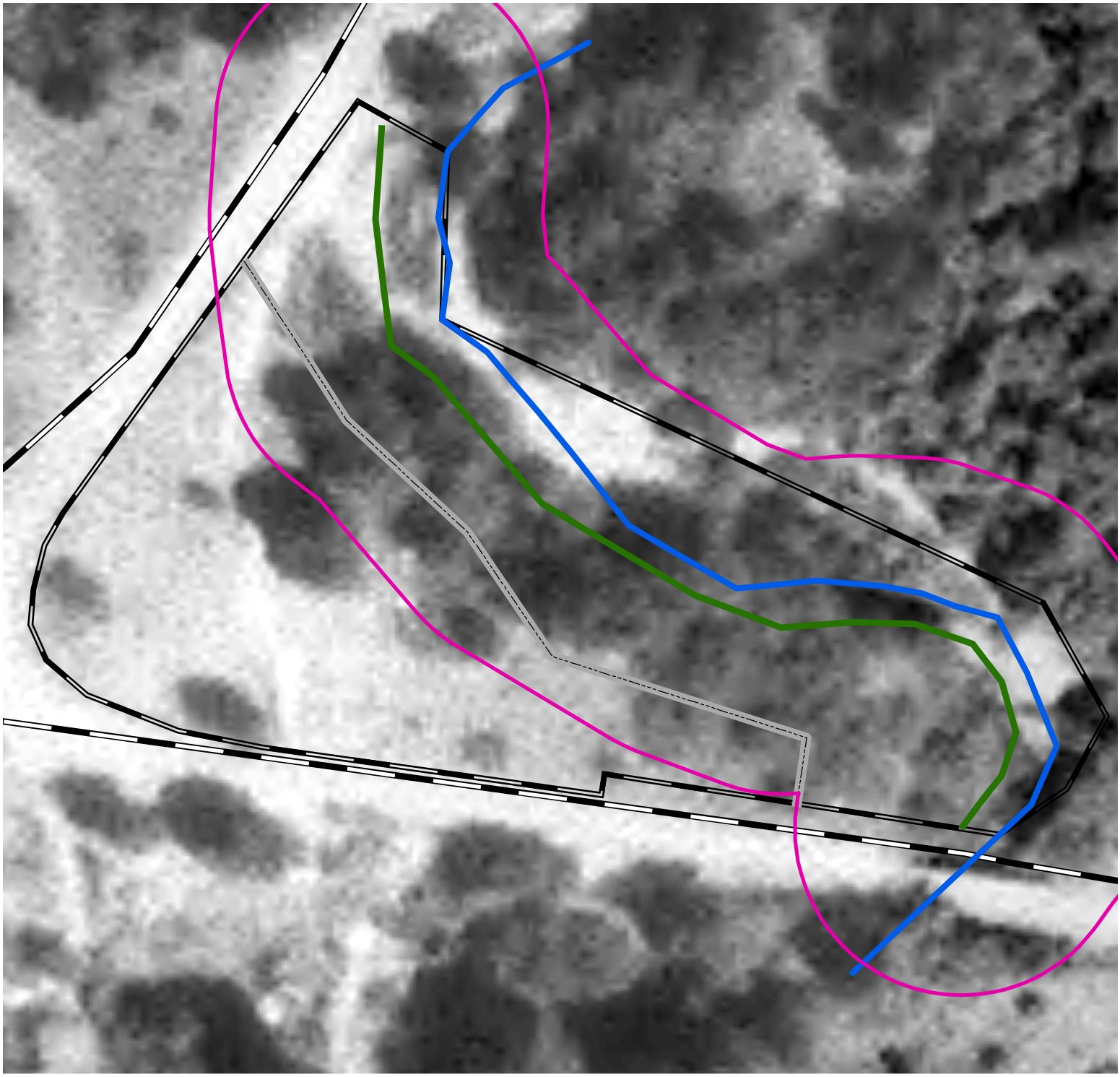
Figure 3: R & D Area within Non-Commercial Vegetable Garden

Figure 4: Creek Bank with Riparian Vegetation

Figure 5: In-Stream Large Woody Debris

Figure 6: Bank Failure

Figure 7: Fence on Edge of Bank Failure



Plant Humboldt Cannabis Nursery

Town of Briceland, CA
1968

0 35 70 140 Feet

1:1,000

N

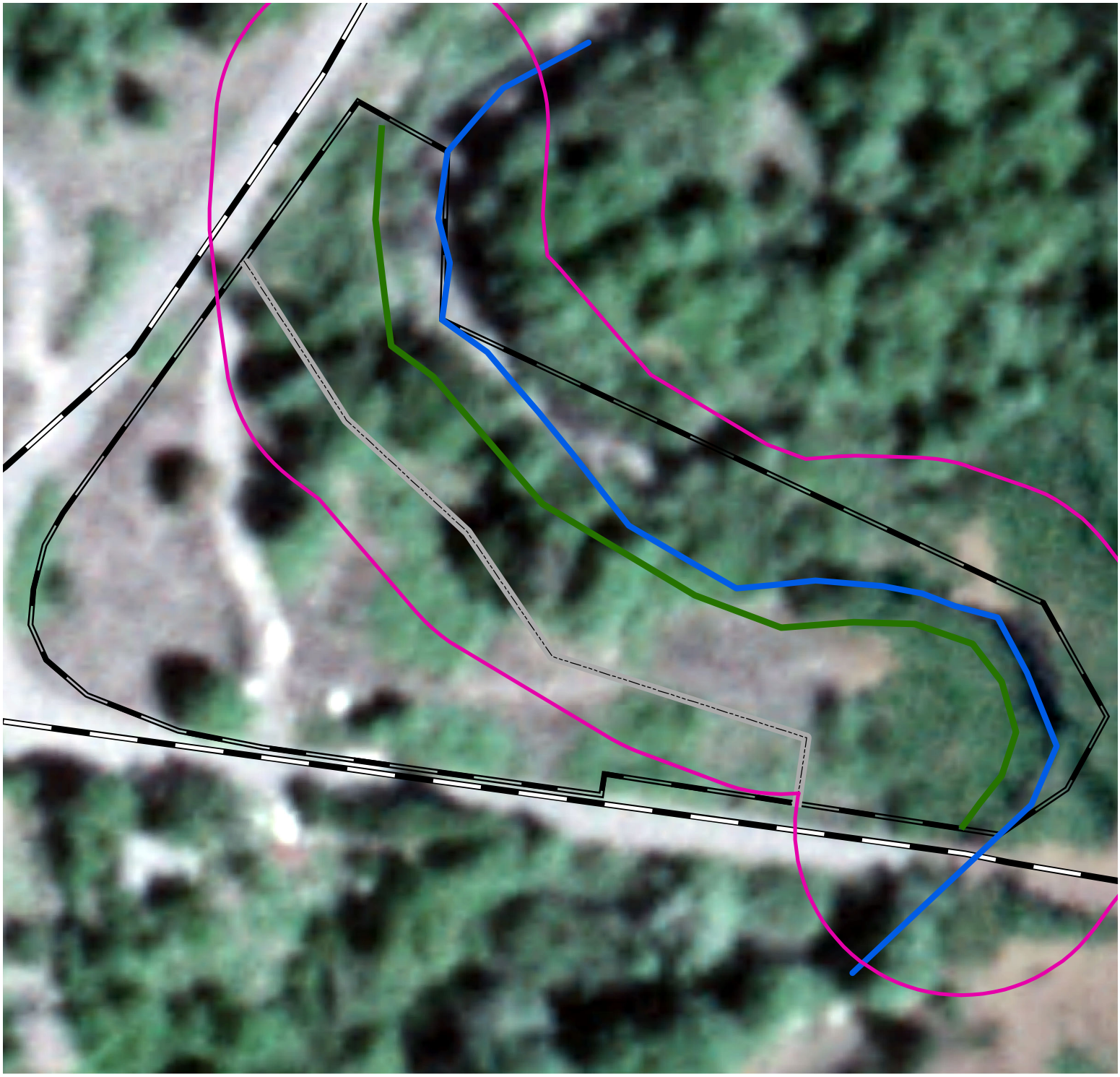
Legend

- Plant Humboldt Property Line
- High Water Line (Redwood Creek)
- 100' Streamside Management Area
- Proposed SMA Alteration

Produced by:
Restoration Forestry, Inc.

Projection:
UTM NAD 83 Zone 10N

Date: 5/21/2025



Plant Humboldt Cannabis Nursery

Town of Briceland, CA
1983

0 35 70 140 Feet

1:1,000

N

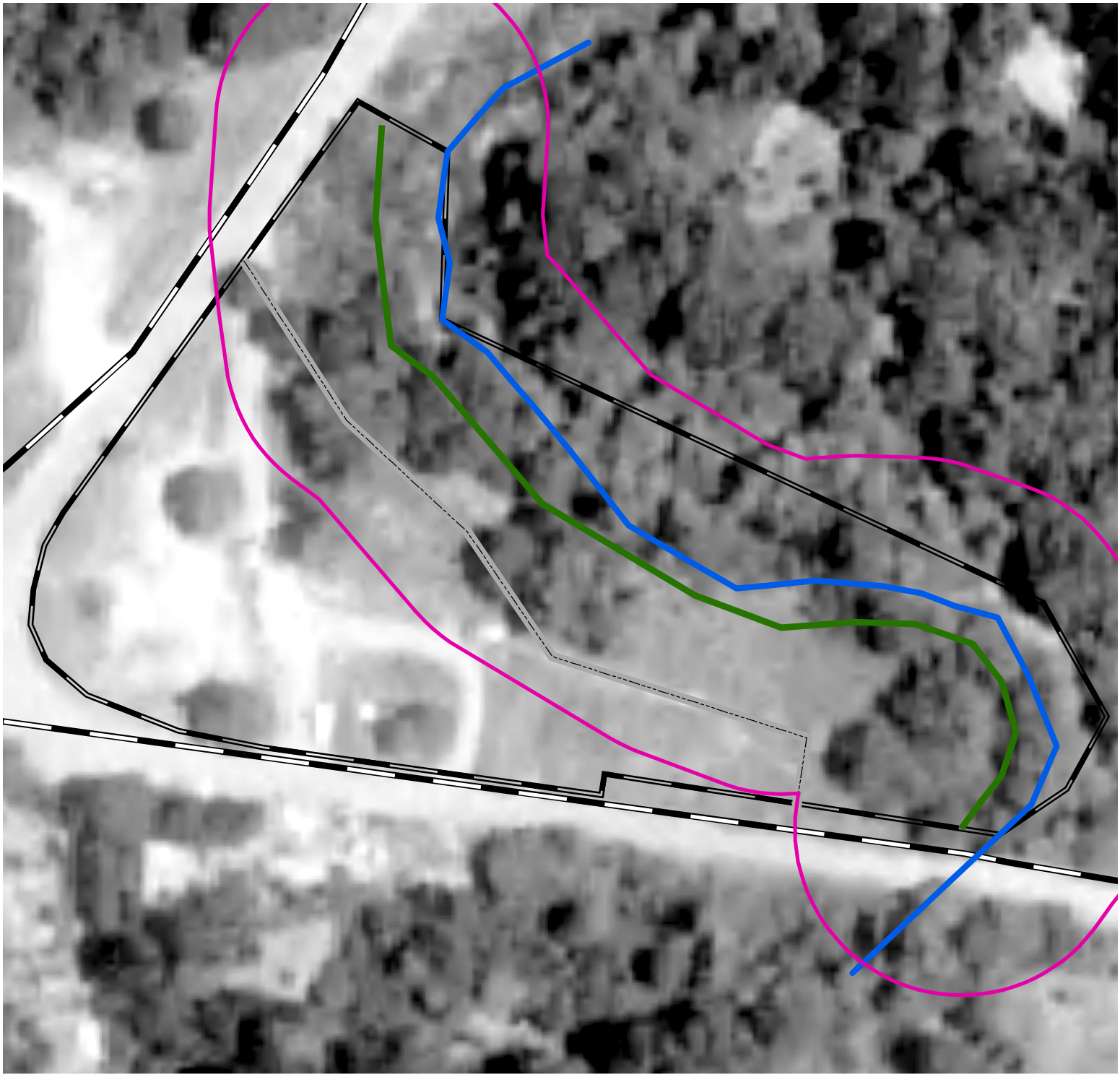
Legend

- Plant Humboldt Property Line
- High Water Line (Redwood Creek)
- 100' Streamside Management Area
- Proposed SMA Alteration

Produced by:
Restoration Forestry, Inc.

Projection:
UTM NAD 83 Zone 10N

Date: 5/21/2025



Plant Humboldt Cannabis Nursery

Town of Briceland, CA
1993

0 35 70 140 Feet

1:1,000

N

Legend

- Plant Humboldt Property Line
- High Water Line (Redwood Creek)
- 100' Streamside Management Area
- Proposed SMA Alteration

Produced by:
Restoration Forestry, Inc.

Projection:
UTM NAD 83 Zone 10N

Date: 5/21/2025

Plant Humboldt Cannabis Nursery

Town of Briceland, CA
2005

0 35 70 140 Feet

1:1,000

N

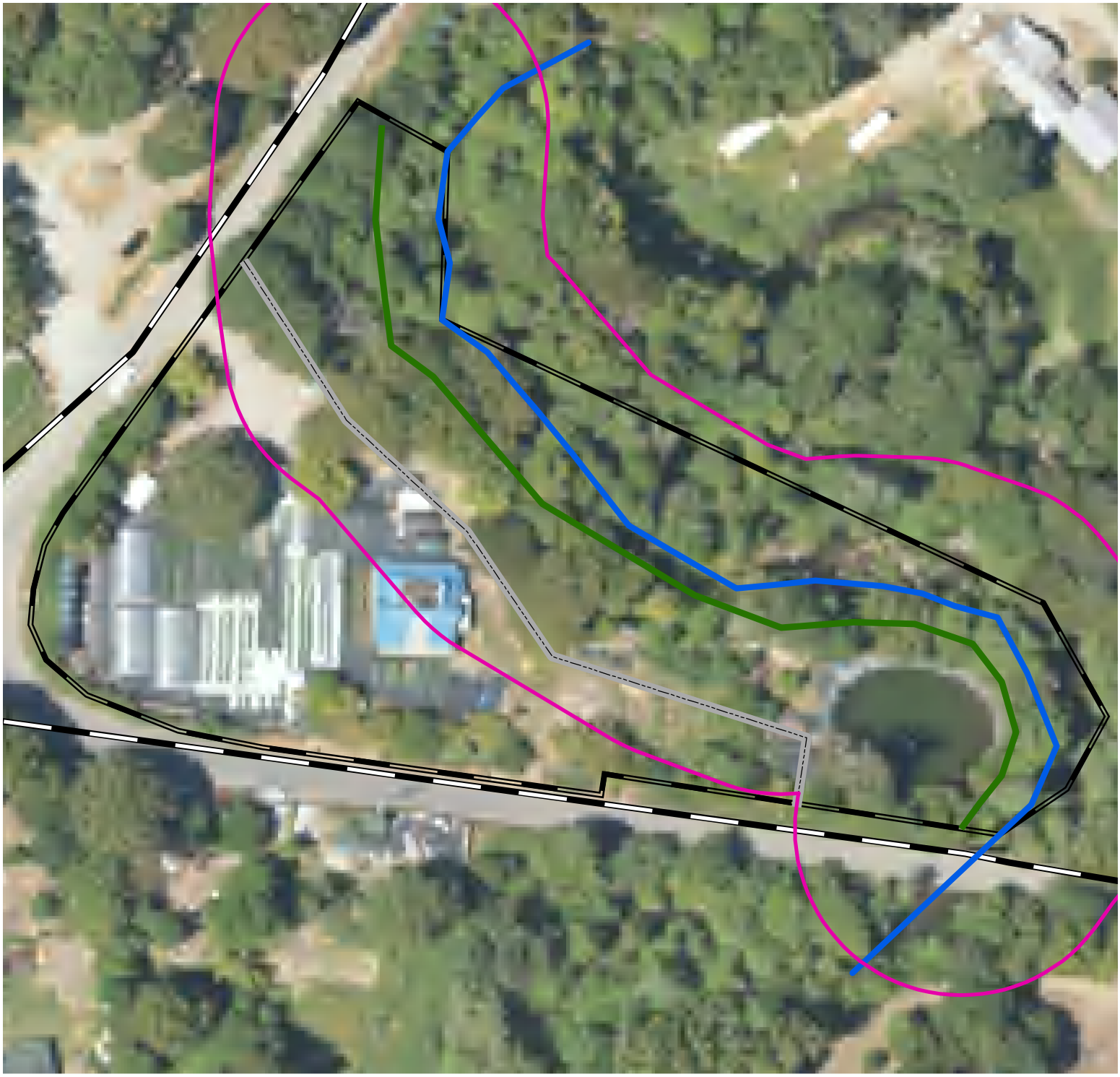
Legend

- Plant Humboldt Property Line
- High Water Line (Redwood Creek)
- 100' Streamside Management Area
- Proposed SMA Alteration

Produced by:
Restoration Forestry, Inc.

Projection:
UTM NAD 83 Zone 10N

Date: 5/21/2025



Plant Humboldt Cannabis Nursery

Town of Briceland, CA
2024 NAIP

0 35 70 140 Feet

1:1,000

N

Legend

- Plant Humboldt Property Line
- High Water Line (Redwood Creek)
- 100' Streamside Management Area
- Proposed SMA Alteration

Produced by:
Restoration Forestry, Inc.

Projection:
UTM NAD 83 Zone 10N

Date: 5/21/2025

Potential Impacts & Recommendations

The current site conditions within the Project, in addition to historic and present activities related to the existing permitted bamboo nursery and private vegetable garden, supports a less than significant change in land use related to the proposed cannabis permit. There is existing infrastructure in the permit area and surrounding property that would adequately accommodate the activities proposed by this permit.

The western side of the property has been used as a retail nursery for bamboo for many years. Thus the conversion of some of the space to a vegetative cannabis plant nursery and retail site would not constitute a significant change in land use.

The existing R&D site in the eastern half of the Project is positioned within an existing, long-cultivated garden at least 10 meters from the edge of Redwood Creek. The surrounding garden area would effectively act as a filter strip, intercepting any potential sediment produced from the R&D site and ensuring a less than significant impact.

Of concern is the degradation of the creek bank along the northern boundary of the property that along Redwood Creek. This bank instability is partly resulting from natural processes of water movement and channel migration known to occur in watercourses of this size within this region. However, there appears to be a significant contribution to the bank instability and erosion by the ill-placed LWD from a past creek restoration project adjacent to the property. Though not explicitly part of this permit, project proponents should explore potential funding opportunities that could fund a redesign of the instream large wood placement in the immediate vicinity of the Project area.

Noise: Considering the existing disturbance from the residential neighborhood and daily traffic along Briceland Thorne and Old Briceland Roads, noise generated from the Project implementation will have a less than significant affect any special status species.

Recommendations:

- Clean up green waste and discontinue future dumping of vegetation (both associated with the nursery and residential use) within the SMA.
- Secure fencing that is within or have the potential to fall into the SMA. Move fencing to the line of honey locusts ~3 meters south of the SMA.
- Remove all bamboo that has fallen or is at risk of falling into the SMA.
- Move fencing up from bank failure on north side of the pond.
- Plant native trees and shrubs (i.e., CA bay, willow, alder, etc.) for bank stabilization.
- Explore funding opportunities that could fund restoration of the section of Redwood Creek adjacent to the Project area.

References Cited

California Department of Fish and Wildlife. 2024. Natural Diversity Data Base Spotted Owl Data Viewer (accessed 5/2/2024)

California Department of Fish and Wildlife. (2024). California Natural Diversity Database, Rarefind – Commercial version 5.3.0. Retrieved May 2, 2024 from https://apps .wildlife.ca.gov/rarefind/view/RareFind.aspx

California Native Plant Society. 2024. A Manual of California Vegetation, Online Edition. http://www.cnps.org/cnps/vegetation/ California Native Plant Society, Sacramento, CA.

California Native Plant Society, Rare Plant Program. 2021. Inventory of Rare and Endangered Plants of California (online edition, v9-01 0.0). Website http://www.rareplants.cnps.org accessed: 5/2/2024

Jepson Flora Project (eds.) 2024 *Jepson eFlora*, http://ucjeps.berkeley.edu/IJM.html

Metz, T. RPF, personal communication, 2/9/2024

U.S. Fish and Wildlife Service. 2012. Protocol for surveying proposed management activities that may impact northern spotted owls. February 2011, revised January 9, 2012

U.S. Fish and Wildlife Service. 2019. NSO-Take Avoidance Analysis. Attachment A & B. 11/1/2019

Qualified Biologist

Giacomo Renzullo received a Bachelor of Science degree in 2000 from Humboldt State University (HSU) with a major in Botany. In 1999 and 2000, he worked on a DFW project constructing an algal flora for Humboldt Bay and adjacent waters. From 2001 through 2004, he worked as a surveyor/climber for a red tree vole population study in Northern California and Oregon where, among other duties, was responsible for identifying plants in the study sites for plant community codes. From 2004 through 2014, he worked primarily as a canopy ecologist (both as a private consultant and as an employee of Humboldt State University), involved in a multitude of arboreal and terrestrial botanical projects situated in mostly late-seral forests of the Pacific Northwest and Sierra Nevada mountains. Duties during this time included identifying terrestrial and epiphytic plant species (vascular and non-vascular) and collecting samples/measurements of mostly late-seral trees for physiological & hydrological studies. Since 2008, Giacomo has served as a biologist and forest analyst for Baldwin, Blomstrom, Wilkinson & Associates, working on CEQA/NEPA permitting, botanical/wildlife surveys, and general forest management projects throughout the state of California. He is familiar with plants and natural communities of California, Oregon and Washington as well as competent in the use of dichotomous keys and field guides. Additional trainings and education include: the "Introduction to Plant Surveys Workshop" given by Teresa Sholars in San Jose, CA, January 14, 2015; the "California Natural Diversity Database (CNDDB), RareFind 5, and BIOS Training" in Fortuna, CA, November 18th, 2014; the California Native Plant Society's "Carex Workshop" taught by Gordon Leppig in Arcata, CA on March 4, 2017; the "Grass Identification Workshop" taught by Geri Hulse-Stephens and Kerry Heise at the Hopland Research and Extension Center on June 2, 2017; and the California Native Plant Society "Online Tools for Vegetation Data Workshop" on November 10, 2020; and the CNPS 'CEQA Impact Assessment Workshop' taught by David Magney & Isabella Langone on September 14th & 15th, 2021 .

- Name: Timothy A. Metz
- **Affiliation:** President, Restoration Forestry, Inc.
- **Education and Training:**

  BS Forest Management from UC Berkeley (1994).
  Registered Professional Forester #2601 (1997).
  Licensed Timber Operator A10776.
  D49 Tree Services Contractor 1137285

  31 years of experience in non-profit conservation work
  26 years of conservation easement design and development.

  Biographical Sketch: Mr. Metz has lived and worked in southern Humboldt County since 1994. He has worked with Sanctuary Forest, Inc. since 1996 and was a founding member of the Upper Mattole River and Forest Cooperative - a consortium of state and federal landowners adjacent to the Mattole Ecological Reserve managed by CDFW. Restoration Forestry, Inc. regularly provides its services to local Non-Industrial Private Forestland owners in the Mattole and South Fork Eel Rivers and has been the contracted Land Manager for Lost Coast Forestlands since 2012. RFI continues to contract with the Mattole Salmon

Group implementing instream fisheries restoration and has provided services over many years to the Mattole Restoration Council on upslope fire hazard reduction and forest resilience projects. In other related experience, he was a founder and benefactor of the 430-acre Southern Humboldt Community Park and served as its Board President from 2000-2011.

Table 1: Special Status Plant Species (Table continued on following page)**:**

Name	CRPR	CESA	FESA	Habitat/Phenology	Habitat Present
Humboldt County milk-vetch *Astragalus agnicidus*	1B.1	None	None	Broadleafed upland forest, North Coast coniferous forest. Blooms (Mar) Apr-Sep.	yes
Bolander's reed grass *Calamagrostis bolanderi*	4.2	None	None	Bogs and fens, Broadleafed upland forest, Closed-cone coniferous forest, Coastal scrub, Marshes and swamps, Meadows and seeps, North Coast coniferous forest. Blooms May-Aug.	yes
Leafy reed grass *Calamagrostis foliosa*	4.2	Rare	None	Coastal bluff scrub, North Coast coniferous forest . Blooms Mar-Sep.	yes
Northern cluster sedge *Carex arcta*	2B.2	None	None	Bogs and fens, North Coast coniferous forest (mesic). Blooms Jun-Sep.	yes
Mendocino Coast paintbrush *Castilleja mendocinensis*	1B.2	None	None	Closed-cone coniferous forest, Coastal bluff scrub, Coastal dunes, Coastal prairie, Coastal scrub. Blooms Apr-Aug.	marginal
Glory bush *Ceanothus gloriosus* var. *exaltatus*	4.3	None	None	Chaparral. Blooms Mar-Jun (Aug).	no
Oregon goldenthread *Coptis laciniata*	4.2	None	None	Meadows and seeps, North Coast coniferous forest (streambanks). Blooms (Feb)Mar-May(Sep-Nov).	yes
Humboldt County fuschia *Epilobium septentrionale*	4.3	None	None	Broadleafed upland forest, North Coast coniferous forest. Blooms Jul-Sep.	yes

Name	CRPR	CESA	FESA	Habitat/Phenology	Habitat Present
Giant fawn lily *Erythronium oregonum*	2B.2	None	None	Cismontane woodland, Meadows and seeps. Blooms Mar-Jun(Jul).	yes
Coast fawn lily *Erythronium revolutum*	2B.2	None	None	Bogs and fens, Broadleafed upland forest, North Coast coniferous forest. Blooms Mar-Jul(Aug)	yes
Pacific gilia *Gilia capitata* ssp. *pacifica*	1B.2	None	None	Chaparral (openings), Coastal bluff scrub, Coastal prairie, Valley and foothill grassland. Blooms Apr-Aug.	no
Tracy's tarplant *Hemizonia congesta ssp. tracyi*	4.3	None	None	Coastal prairie, Lower montane coniferous forest, North Coast coniferous forest. Blooms (Mar-Apr)May-Oct.	yes
Harlequin lotus *Hosackia gracilis*	4.2	None	None	Broadleafed upland forest, Cismontane woodland, Closed-cone coniferous forest, Coastal bluff scrub, Coastal prairie, Coastal scrub, Marshes and swamps, Meadows and seeps, North Coast coniferous forest, Valley and foothill grassland. Blooms Mar-Jul.	yes
Small groundcone *Kopsiopsis hookeri*	2B.3	None	None	Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest. Blooms Apr-Aug.	yes
Bristly leptosiphon *Leptosiphon aureus*	4.2	None	None	Chaparral, Cismontane woodland, Coastal prairie, Valley and foothill grassland. Blooms Apr-Jul.	marginal
Bristly leptosiphon *Leptosiphon latisectus*	4.3	None	None	Broadleafed upland forest, Cismontane woodland. Blooms Apr-Jun.	marginal
Redwood lily *Lillium rubescens*	4.2	None	None	Broadleafed upland forest, Chaparral, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest. Blooms (Mar)Apr-Aug(Sep).	yes

Name	CRPR	CESA	FESA	Habitat/Phenology	Habitat Present
Heart-leaved twayblade *Listera cordata*	4.2	None	None	Bogs and fens, Lower montane coniferous forest, North Coast coniferous forest. Blooms Feb-Jul.	yes
Northern bugleweed *Lycopus uniflorus*	4.3	None	None	Bogs and fens, Marshes and swamps. Blooms Jul-Sep.	no
Leafy-stemmed miterwort *Mitellastra caulescens*	4.2	None	None	Broadleafed upland forest, Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest. Blooms (Mar)Apr-Oct.	yes
Howell's montia *Montia howellii*	2B.2	None	None	Meadows and seeps, North Coast coniferous forest, Vernal pools. Blooms (Feb)Mar-May.	yes
White-flowered rein orchid *Piperia candida*	1B.2	None	None	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest. Blooms (Mar-Apr)May-Sep.	yes
California pinefoot *Pityopus californicus*	4.2	None	None	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest; mesic. Blooms (Mar-Apr)May-Aug	yes
North Coast semaphore grass *Pleuropogon hooverianus*	1B.1	None	None	Broadleafed upland forest, Meadows and seeps, North Coast coniferous forest. Blooms Apr-Jun.	yes
Maple-leaved checkerbloom *Sidalcea malachroides*	4.2	None	None	Broadleafed upland forest, Coastal prairie, Coastal scrub, North Coast coniferous forest, Riparian woodland. Blooms (Mar)Apr-Aug.	no
Siskiyou checkerbloom	1B.2	None	None	Coastal bluff scrub, Coastal prairie, North Coast coniferous forest. Blooms (Mar)Apr-Aug.	no

Name	CRPR	CESA	FESA	Habitat/Phenology	Habitat Present
Sidalcea malviflora ssp. *patula*					
Methuselah's beard *Usnea longissima*	4.2	None	None	Broadleafed upland forest, North Coast coniferous forest. Blooms N/A.	no

Table 2: Sensitive Natural Communities:

Name	Taxonomic Group	State Rank	Habitat Present
Redwood	Forest	S3	no

Table 3: Special Status Wildlife Species:

Name	FedList	CalList	Habitats	GenHab	MicroHab
Pallid bat *Antrozous pallidus*	None	SSC	Chaparral, Coastal scrub, Desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Riparian woodland, Sonoran desert scrub, Upper montane coniferous forest, Valley & foothill grassland	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting.	Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.
Sonoma vole *Arborimus pomo*	None	SSC	North coast coniferous forest, Old-	North coast fog belt from Oregon border to Somona County. In Douglas-fir, redwood	Feeds almost exclusively on Douglas-fir needles. Will occasionaly take needles of grand fir, hemlock or spruce.

Name	FedList	CalList	Habitats	GenHab	MicroHab
			growth, Redwood	and montane hardwood-conifer forests.	
Obscure bumble bee *Bombus caliginosus*	None	None		Coastal areas from Santa Barbara County north to Washington state.	Food plant genera include Baccharis, Cirsium, Lupinus, Lotus, Grindelia and Phacelia.
Western bumble bee *Bombus occidentalis*	None	Cand.		Once common and widespread, species has declined precipitously from central CA to southern B.C., perhaps from disease.	
Western pond turtle *Emys marmorata*	Proposed	SSC	Aquatic, Artificial flowing waters, Klamath/North coast flowing waters, Klamath/North coast standing waters, Marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation.	Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.

Name	FedList	CalList	Habitats	GenHab	MicroHab
			coast flowing waters, South coast standing waters, Wetland		
North American porcupine *Erethizon dorsatum*	None	None	Broadleaved upland forest, Cismontane woodland, Closed-cone coniferous forest, Lower montane coniferous forest, North coast coniferous forest, Upper montane coniferous forest	Forested habitats in the Sierra Nevada, Cascade, and Coast ranges, with scattered observations from forested areas in the Transverse Ranges.	Wide variety of coniferous and mixed woodland habitat.
American peregrine falcon *Falco peregrinus anatum*	Delisted	Delisted		Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures.	Nest consists of a scrape or a depression or ledge in an open site.
Osprey ***Pandion hailiatus***	None	None	Riparian forest	Ocean shore, bays, freshwater lakes, and large streams.	Large nests built in tree-tops within 15 miles of a good fish-producing body of water.
Fisher *Pekania pennanti*	None	SSC	North coast coniferous forest, Old-	Intermediate to large-tree stages of coniferous forests and	Uses cavities, snags, logs and rocky areas for cover and denning. Needs large areas of mature, dense forest.

Name	FedList	CalList	Habitats	GenHab	MicroHab
			growth, Riparian forest	deciduous-riparian areas with high percent canopy closure.	
Foothill yellow-legged frog - north coast DPS *Rana boylii* pop. 1	None	SSC	Aquatic, Klamath/North coast flowing waters, Riparian forest, Riparian scrub, Riparian woodland	Northern Coast Ranges north of San Francisco Bay Estuary, Klamath Mountains, and Cascade Range including watershed subbasins (HU 8) Lower Pit, Battle Creek, Thomes Creek, and Big Chico Creek in Lassen, Shasta, Tehama, and Butte Counties.	Partly shaded shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying and at least 15 weeks to attain metamorphosis.
Northern Spotted Owl *Strix occidentale caurina*	Threatened	Threatened	North coast coniferous forest, Old-growth, Redwood	Old-growth forests or mixed stands of old-growth and mature trees. Occasionally in younger forests with patches of big trees.	High, multistory canopy dominated by big trees, many trees with cavities or broken tops, woody debris, and space under canopy.
Red-bellied newt *Tarucha rivularis*	None	None	Broadleaved upland forest, North coast coniferous forest, Redwood, Riparian forest,	Coastal drainages from Humboldt County south to Sonoma County, inland to Lake County. Isolated population of uncertain origin in Santa Clara County.	Lives in terrestrial habitats, juveniles generally underground, adults active at surface in moist environments. Will migrate over 1 km to breed, typically in streams with moderate flow and clean, rocky substrate.

Name	FedList	CalList	Habitats	GenHab	MicroHab
			Riparian woodland		