



9/22/23

Botanical Survey Report

Mitchell Road 2023

APN# 017-172-047

City of Eureka
Humboldt County, CA.

Prepared by
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Eureka, CA.
September 2023

For
MAD RIVER PROPERTIES, INC.
MCKINLEYVILLE, CA.

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Attachment A: List of Potentially Occurring Sensitive Plant Species

Attachment B: General Location Map, Humboldt County Parcel Maps, Survey Route Map

Attachment C: Comprehensive Species List

Introduction

This report is intended to serve as documentation of survey and assessment of the habitat features found within the subject property and the potential of those habitats to be suitable or critical to the life history of vascular and non-vascular plant species considered sensitive, rare, threatened, or endangered (including candidate species) in the United States and/or The State of California. Seasonally appropriate botanical survey was completed to determine if rare, threatened, endangered, or sensitive plant species or listed sensitive vegetation communities are present in the surveyed area. This report is the result of an in-field survey, reviews of relevant scientific literature, and professional knowledge. This survey report is intended to satisfy any project needs for botanical survey and mitigation for rare or endangered plant species and sensitive vegetation communities under the California Environmental Quality Act (CEQA), California Endangered Species Act (CESA), Federal Endangered Species Act (FESA), and the Native Plant Protection Act (NPPA).

Summary of Findings

Botanical Survey Results

- No plants considered sensitive, rare, threatened, or endangered (including candidate species) in the United States and/or The State of California were detected during seasonally appropriate surveys within the subject parcel.
- No uncommon species included in California Rare Plant Rank (CRPR) 3 or 4 were detected during surveys.
- Areas of Sensitive Natural Vegetation Community have been detected. These are areas of **Redwood forest and woodland alliance (G3, S3, CDFW Sensitive)**. A majority of the approximately 1.22-acre study area can be described as redwood forest composed of second growth (stumps and remnants from past timber harvest are present) redwoods (*Sequoia sempervirens*) and Douglas's fir (*Pseudotsuga menziesii*), with some red alder (*Alnus rubra*), maple (*Acer* spp.), and spruce (*Picea sitchensis*) mixed in (includes a single Monterey pine (*Pinus radiata*) tree). Alliances with an S rank of 1-3 are considered sensitive in CA. as are any alliances or associations included on the CDFW Vegetation Classification and Mapping Program (VegCAMP) list of Sensitive Natural Vegetation Communities and may qualify as Environmentally Sensitive Habitat Areas (ESHA) under California Coastal Commission guidelines. All other vegetation communities encountered are either dominated by native species not listed or ranked as sensitive in CA or are non-native, planted, or escaped ornamentals and invasives common to disturbed areas and ruderal vegetation communities in the region.

Setting

The approximately 1.22-acre study area is located within a parcel located in Humboldt County, California on the Arcata South USGS 7.5' quadrangle. The subject parcels are located between Mitchell Road and Main Street, east of Ryan Slough and South of Old Arcata Road. The study area is within the eastern boundaries of the City of Eureka, CA. (see General Location Map in Attachment B). Parcels included within the study area are listed below.

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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 North Coast sub-region. The elevation ranges from approximately 20'-95' feet above mean sea level.

The subject parcels and all areas of potential development occur within the California coastal zone.

Habitat Description

Habitat within the study area is composed of two fairly distinct communities. The western two-thirds of the site is composed of second growth redwood forest with a moderately stocked understory of sword fern, huckleberry and salal, along with several non-native herbs and shrubs. The duff and debris layers are light except where recent winter storms have caused some blowdown trees and limbs. The top portion of the subject parcel is composed of a graded and partially developed access road and house site. A large powerline corridor runs east to west down the northern boundary of the parcel, the vegetation below the powerline is managed and all taller trees and shrubs have been cut back. Two small ephemeral watercourses travel east to west down both the north and south boundaries of the subject parcel. These watercourses flow with seasonal rain events and have relatively undeveloped channel morphology and riparian habitat. Both watercourses lose a defined channel near the bottom where they join a roadside ditch along Mitchell Road before likely being diverted into the adjacent Ryan Slough wetland and riparian complex. The top of the southern stream has a small clump of arroyo willow and dense Himalaya blackberry. A culvert is in place to direct runoff from the access road and house site into this watercourse. The subject parcel does not contain any true oak woodlands, areas of coastal scrub, coastal prairie, dune, or salt marsh habitat types.

Methods

Seasonally appropriate and floristically guided survey is intended to satisfy any project needs for botanical survey and mitigation for rare or endangered plant species and sensitive vegetation communities under the California Environmental Quality Act (CEQA). If sensitive plant species are detected within the project boundaries appropriate measures to avoid and/or mitigate impacts

to those species shall be developed by a qualified professional and delivered to the appropriate agencies for review. These same measures are listed in CEQA, Section 15370.

- Avoid the impact altogether by not taking a certain action
- Minimize impacts by limiting the degree or magnitude of the action
- Rectify the impact by repairing, rehabilitating, or restoring the impacted environment
- Reduce or eliminate the impact over time by preservation and maintenance operations during the life of the project
- Compensate for the impact by replacing or providing substitute resources or environments

Surveys for this project were conducted on 18 June 2023. The surveys were conducted by Mr. James Regan. Mr. Regan holds a bachelors' degree in botany and has experience (20 years) working as a professional botanist in northern California. Approximately 2.0 field hours were spent on surveys within the project area. Maps showing survey routes are included as Attachment B. Surveys were done as an intuitive assessment of potential habitats based on personal knowledge and visible environmental features such as canopy cover, slope, soil texture, aspect, hydrologic features, and associated tree, shrub, and herbaceous plant species (if present). The botanical survey was floristic in nature and seasonally appropriate for sensitive plant species which appear on the attached scoping list and have suitable habitat within the study area. This survey protocol is based on the publication "Protocol for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities" (CDFG 2018).

A list of sensitive plant species that have the potential to occur in this area is provided in Attachment A. This list is the result of a compilation of occurrence data from the California Native Plant Society (CNPS) and California Natural Diversity Database (CNDDDB). Sources were queried for the Arcata South USGS 7.5' quadrangle and the 8 quadrangles immediately adjacent. Plant species with potential habitat within the project area are noted. All other species listed are described as existing in habitat types that are not found within the project area. Plant species listed as rare, threatened, or endangered by either the United States or the State of California or species ranked by the CNPS as California Rare Plant Rank (CRPR) 1 and 2 with potential habitat within the project area are considered the primary focus of seasonal surveys. CRPR list 3 and 4 plants are recorded and reported if found within the project area and will be considered for mitigation if appropriate. A complete list of species encountered is found in Attachment C.

Results/Recommendations

Sensitive Plant Species

- No plants considered sensitive, rare, threatened, or endangered (including candidate species) in the United States and/or The State of California were detected during seasonally appropriate surveys within the subject parcels.

- No uncommon species included in CRPR 3 or 4 were detected during surveys.

Sensitive Natural Vegetation Communities

- Areas of Sensitive Natural Vegetation Community have been detected. These are areas of **Redwood forest and woodland alliance (G3, S3, CDFW Sensitive)**.

A majority of the approximately 1.22-acre study area can be described as redwood forest composed of second growth (stumps and remnants from past timber harvest are present) redwoods (*Sequoia sempervirens*) and Douglas's fir (*Pseudotsuga menziesii*), with some red alder (*Alnus rubra*), maple (*Acer* spp.), and spruce (*Picea sitchensis*) mixed in (includes a single Monterey pine (*Pinus radiata*) tree). Alliances with an S rank of 1-3 are considered sensitive in CA. as are any alliances or associations included on the CDFW Vegetation Classification and Mapping Program (VegCAMP) list of Sensitive Natural Vegetation Communities and may qualify as Environmentally Sensitive Habitat Areas (ESHA) under California Coastal Commission guidelines. All other vegetation communities encountered are either dominated by native species not listed or ranked as sensitive in CA or are non-native, planted, or escaped ornamentals and invasives common to disturbed areas and ruderal vegetation communities in the region.

It should be noted that this community in its current condition and structure does not appear to be old growth, late seral, or a unique forest stand and has been part of timber harvest and land clearing/management activities in the past. It is not an unentered or pristine version of the type. The redwood stand generally lacks canopy and crown complexity. This vegetation type in this condition is well represented in the region and locally outside of the boundaries of the current study area.

Activities that resource agencies may consider to be significant impacts to sensitive vegetation communities during development would include the removal of mature trees and shrubs leading to a loss of reproductive success (removal of mature, breeding individuals) and loss of canopy cover that could impact understory vegetation by allowing increased light and potentially an increase in invasive understory herbs and shrubs. In riparian areas removal of mature, overstory trees could also affect stream health by reducing canopy cover and potentially resulting in an increase in seasonal stream temperatures. Ground disturbance in these areas such as grading, or understory vegetation removal may create disturbed space which may be colonized by invasive plants sourced from adjacent areas. Removal of invasive or non-native species is appropriate if exposed soils and potential openings are replanted with suitable native replacements, or those areas are naturally re-vegetated by appropriate native species.

Conditions and Limitations

This report is based on conditions observed and recorded during field visits in 2023. This report has not been reviewed nor has concurrence with the conclusions been obtained. Verification by agencies may be necessary in the future. Land use practices and regulations can change, thereby affecting conditions and results described herein.

This report and accompanying maps and data should be transmitted to the appropriate agents for review and included in any application for permits necessary for the completion of any proposed development projects within the study area.

The location and extent of mapped features is approximate. Maps are not to scale. In field survey and monumentation of pertinent features for buffering or mitigation planning may be required prior to the initiation of permitted activities.

Significance of features and/or habitats and the necessity for mitigation during development is decided by regional agents of the appropriate federal, state, and local agencies if and when the site is reviewed for permitting purposes.

This report was prepared for exclusive use; consultants are not liable for any actions arising out of the reliance of any third party on the information contained in this report.

Please feel free to call with any questions.

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Attachment A
List of Potentially Occurring Sensitive Plant Species

Mitchell Road – List of Potentially Occurring Sensitive Plant Species

Scientific Name	Common Name	G Rank	S Rank	CESA	FESA	Blooming Period	Habitat	Elevation Range (ft)	Habitat in Project Area
<i>Abronia umbellata</i> <i>var. breviflora</i>	pink sand- verbena	G4G5T2	S2	None	None	Jun-Oct	Coastal dunes	0-35	No
<i>Astragalus pycnostachyus</i> <i>var. pycnostachyus</i>	coastal marsh milk-vetch	G2T2	S2	None	None	(Apr)Jun- Oct	Coastal dunes (mesic), Coastal scrub, Marshes and swamps (coastal salt, streamsides)	0-180	Potential Adjacent
<i>Cardamine angulata</i>	seaside bittercress	G4G5	S3	None	None	(Jan)Mar-Jul	Lower montane coniferous forest, North Coast coniferous forest	50-3000	Potential Adjacent
<i>Carex arcta</i>	northern clustered sedge	G5	S1	None	None	Jun-Sep	Bogs and fens, North Coast coniferous forest (mesic)	195-4595	Potential Adjacent
<i>Carex leptalea</i>	bristle-stalked sedge	G5	S1	None	None	Mar-Jul	Bogs and fens, Marshes and swamps, Meadows and seeps (mesic)	0-2295	Potential Adjacent
<i>Carex lyngbyei</i>	Lyngbye's sedge	G5	S3	None	None	Apr-Aug	Marshes and swamps (brackish, freshwater)	0-35	Potential Adjacent
<i>Carex praticola</i>	northern meadow sedge	G5	S2	None	None	May-Jul	Meadows and seeps (mesic)	0-10500	Potential
<i>Castilleja ambigua</i> <i>var. humboldtensis</i>	Humboldt Bay owl's- clover	G4T2	S2	None	None	Apr-Aug	Marshes and swamps (coastal salt)	0-10	Potential Adjacent
<i>Castilleja litoralis</i>	Oregon coast paintbrush	G3	S3	None	None	Jun	Coastal bluff scrub, Coastal dunes, Coastal scrub	50-330	No
<i>Chloropyron maritimum</i> <i>ssp. palustre</i>	Point Reyes salty bird's- beak	G4?T2	S2	None	None	Jun-Oct	Marshes and swamps (coastal salt)	0-35	No
<i>Collinsia corymbosa</i>	round- headed collinsia	G1	S1	None	None	Apr-Jun	Coastal dunes	0-65	No

Scientific Name	Common Name	G Rank	S Rank	CESA	FESA	Blooming Period	Habitat	Elevation Range (ft)	Habitat in Project Area
<i>Erysimum menziesii</i>	Menzies' wallflower	G1	S1	CE	FE	Mar-Sep	Coastal dunes	0-115	No
<i>Erythronium oregonum</i>	giant fawn lily	G5	S2	None	None	Mar-Jun(Jul)	Cismontane woodland, Meadows and seeps	330-3775	Potential
<i>Erythronium revolutum</i>	coast fawn lily	G4G5	S3	None	None	Mar-Jul(Aug)	Bogs and fens, Broadleaved upland forest, North Coast coniferous forest	0-5250	Potential
<i>Fissidens pauperculus</i>	minute pocket moss	G3?	S2	None	None		North Coast coniferous forest (damp coastal soil)	35-3360	Potential
<i>Gilia capitata ssp. pacifica</i>	Pacific gilia	G5T3	S2	None	None	Apr-Aug	Chaparral (openings), Coastal bluff scrub, Coastal prairie, Valley and foothill grassland	15-5465	No
<i>Gilia millefoliata</i>	dark-eyed gilia	G2	S2	None	None	Apr-Jul	Coastal dunes	5-100	No
<i>Hesperevax sparsiflora var. brevifolia</i>	short-leaved evax	G4T3	S3	None	None	Mar-Jun	Coastal bluff scrub (sandy), Coastal dunes, Coastal prairie	0-705	No
<i>Iliamna latibracteata</i>	California globe mallow	G2G3	S2	None	None	Jun-Aug	Chaparral (montane), Lower montane coniferous forest, North Coast coniferous forest (mesic), Riparian scrub (streambanks)	195-6560	Low Potential
<i>Lasthenia californica ssp. macrantha</i>	perennial goldfields	G3T2	S2	None	None	Jan-Nov	Coastal bluff scrub, Coastal dunes, Coastal scrub	15-1705	No
<i>Lathyrus japonicus</i>	seaside pea	G5	S2	None	None	May-Aug	Coastal dunes	5-100	No
<i>Lathyrus palustris</i>	marsh pea	G5	S2	None	None	Mar-Aug	Bogs and fens, Coastal prairie, Coastal scrub, Lower montane coniferous forest, Marshes and swamps, North Coast coniferous forest	5-330	Potential Adjacent
<i>Layia carnosa</i>	beach layia	G2	S2	CE	FT	Mar-Jul	Coastal dunes, Coastal scrub (sandy)	0-195	No
<i>Lilium occidentale</i>	western lily	G1G2	S1	CE	FE	Jun-Jul	Bogs and fens, Coastal bluff scrub, Coastal prairie, Coastal scrub, Marshes and swamps (freshwater), North Coast coniferous forest (openings)	5-605	Potential Adjacent
<i>Monotropa uniflora</i>	ghost-pipe	G5	S2	None	None	Jun-Aug(Sep)	Broadleaved upland forest, North Coast coniferous forest	35-1805	Potential

Scientific Name	Common Name	G Rank	S Rank	CESA	FESA	Blooming Period	Habitat	Elevation Range (ft)	Habitat in Project Area
<i>Angelica lucida</i>	sea-watch	G5	S3	None	None	Apr-Sep	Coastal bluff scrub, Coastal dunes, Coastal scrub, Marshes and swamps (coastal salt)	0-490	No
<i>Astragalus rattanii</i> var. <i>rattanii</i>	Rattan's milk-vetch	G4T4	S4	None	None	Apr-Jul	Chaparral, Cismontane woodland, Lower montane coniferous forest	100-2705	No
<i>Chrysosplenium glechomifolium</i>	Pacific golden saxifrage	G5?	S3	None	None	Feb-Jun	North Coast coniferous forest, Riparian forest	35-1770	Potential
<i>Coptis laciniata</i>	Oregon goldthread	G4?	S3?	None	None	(Feb)Mar-May(Sep-Nov)	Meadows and seeps, North Coast coniferous forest (streambanks)	0-3280	No
<i>Eleocharis parvula</i>	small spikerush	G5	S3	None	None	(Apr)Jun-Aug(Sep)	Marshes and swamps	5-9910	Potential Adjacent
<i>Epilobium septentrionale</i>	Humboldt County fuchsia	G4	S4	None	None	Jul-Sep	Broadleafed upland forest, North Coast coniferous forest	150-5905	No
<i>Fritillaria purdyi</i>	Purdy's fritillary	G4	S4	None	None	Mar-Jun	Chaparral, Cismontane woodland, Lower montane coniferous forest	575-7400	No
<i>Glehnia littoralis</i> ssp. <i>leiocarpa</i>	American glehnia	G5T5	S2S3	None	None	May-Aug	Coastal dunes	0-65	No
<i>Hemizonia congesta</i> ssp. <i>tracyi</i>	Tracy's tarplant	G5T4	S4	None	None	(Mar-Apr)May-Oct	Coastal prairie, Lower montane coniferous forest, North Coast coniferous forest	395-3935	No
<i>Hosackia gracilis</i>	harlequin lotus	G3G4	S3	None	None	Mar-Jul	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	0-2295	Potential
<i>Lathyrus glandulosus</i>	sticky pea	G3	S3	None	None	Apr-Jun	Cismontane woodland	985-2625	Low Potential
<i>Lilium kelloggii</i>	Kellogg's lily	G3	S3	None	None	(Feb)May-Aug	Lower montane coniferous forest, North Coast coniferous forest	10-4265	Yes

Scientific Name	Common Name	G Rank	S Rank	CESA	FESA	Blooming Period	Habitat	Elevation Range (ft)	Habitat in Project Area
<i>Lilium rubescens</i>	redwood lily	G3	S3	None	None	(Mar)Apr-Aug(Sep)	Broadleaved upland forest, Chaparral, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest	100-6265	Potential
<i>Listera cordata</i>	heart-leaved twayblade	G5	S4	None	None	Feb-Jul	Bogs and fens, Lower montane coniferous forest, North Coast coniferous forest	15-4495	Yes
<i>Lycopodium clavatum</i>	running-pine	G5	S3	None	None	Jun-Aug(Sep)	Lower montane coniferous forest (mesic), Marshes and swamps, North Coast coniferous forest (mesic)	150-4020	Yes
<i>Mitellastrca caulescens</i>	leafy-stemmed mitrewort	G5	S4	None	None	(Mar)Apr-Oct	Broadleaved upland forest, Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest	15-5580	Yes
<i>Pityopus californicus</i>	California pinefoot	G4G5	S4	None	None	(Mar-Apr)May-Aug	Broadleaved upland forest, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest	50-7300	Potential
<i>Pleuropogon refractus</i>	nodding semaphore grass	G4	S4	None	None	(Feb-Mar)Apr-Aug	Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest, Riparian forest	0-5250	Yes
<i>Ribes laxiflorum</i>	trailing black currant	G5?	S3	None	None	Mar-Jul(Aug)	North Coast coniferous forest	15-4575	Potential
<i>Sidalcea malachroides</i>	maple-leaved checkerbloom	G3	S3	None	None	(Mar)Apr-Aug	Broadleaved upland forest, Coastal prairie, Coastal scrub, North Coast coniferous forest, Riparian woodland	0-2395	Yes
<i>Tiarella trifoliata</i> var. <i>trifoliata</i>	trifoliolate laceflower	G5T5	S2S3	None	None	(May)Jun-Aug	Lower montane coniferous forest, North Coast coniferous forest	560-4920	Potential
<i>Usnea longissima</i>	Methuselah's beard lichen	G4	S4	None	None		Broadleaved upland forest, North Coast coniferous forest	165-4790	Yes

Rank Definitions

Global Conservation Status Definitions

Listed below are definitions for interpreting NatureServe global (range-wide) conservation status ranks. These ranks are assigned by NatureServe scientists or by a designated lead office in the NatureServe network.

- 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 or elimination due to very restricted range, very few populations, steep declines, or other factors.
- G3 Vulnerable**—At moderate risk of extinction or elimination due to a restricted range, relatively few populations, 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.
- G#G# Range Rank**—A numeric range rank (e.g., G2G3, G1G3) is used to indicate the range of uncertainty about the exact status of a taxon or ecosystem type. Ranges cannot skip more than two ranks (e.g., GU should be used rather than G1G4).

Intraspecific Taxon Conservation Status Ranks

- T# Intraspecific Taxon** (trinomial)—The status of intraspecific taxa (subspecies or varieties) are indicated by a “T-rank” following the species' global rank. Rules for assigning T-ranks follow the same principles outlined above. For example, the global rank of a critically imperiled subspecies of an otherwise widespread and common species would be G5T1. A T subrank cannot imply the subspecies or variety is more abundant than the species. For example, a G1T2 subrank should not occur. A vertebrate animal population, (e.g., listed under the U.S. Endangered Species Act or assigned candidate status) may be tracked as an intraspecific taxon and given a T-rank; in such cases a Q is used after the T-rank to denote the taxon's informal taxonomic status.

Subnational (S) Conservation Status Ranks

- S1 Critically Imperiled**—Critically imperiled in the jurisdiction because of extreme rarity or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the jurisdiction.
- S2 Imperiled**—Imperiled in the jurisdiction because of rarity due to very restricted range, very few populations, steep declines, or other factors making it very vulnerable to extirpation from jurisdiction.
- S3 Vulnerable**—Vulnerable in the jurisdiction due to a restricted range, relatively few populations, 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 jurisdiction.
- S#S# Range Rank** — A numeric range rank (e.g., S2S3 or S1S3) is used to indicate any range of uncertainty about the status of the species or ecosystem. Ranges cannot skip more than two ranks (e.g., SU is used rather than S1S4).

Rank Qualifiers

- ? **Inexact Numeric Rank**—Denotes inexact numeric rank; this should not be used with any of the Variant Global Conservation Status Ranks or GX or GH.
- Q **Questionable taxonomy that may reduce conservation priority**— Distinctiveness of this entity as a taxon or ecosystem type 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. The “Q” modifier is only used at a global level and not at a national or subnational level.

The California Rare Plant Ranks

- 1A. Presumed extirpated in California and either rare or extinct elsewhere
- 1B. Rare or Endangered in California and elsewhere
- 2A. Presumed extirpated in California, but more common elsewhere
- 2B. Rare or Endangered in California, but more common elsewhere
- 3. Plants for which we need more information - Review list
- 4. Plants of limited distribution - Watch list

1A: Plants Presumed Extirpated in California and either rare or extinct elsewhere

The plants of Rank 1A are presumed extirpated because they have not been seen or collected in the wild in California for many years. This rank includes those plant taxa that are both presumed extinct, as well as those plants which are presumed extirpated in California and rare elsewhere. 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.

1B: Plants Rare, Threatened, or Endangered in California and Elsewhere (Includes Rare Plant Ranks 1B.1, 1B.2, 1B.3)

The plants of Rank 1B are rare throughout their range with the majority of them 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 plant taxa tracked by the CNDDDB, with more than 1,000 plants assigned to this category of rarity.

2A: Plants Presumed Extirpated in California, but more common elsewhere

The plants of Rank 2A are presumed extirpated because they have not been seen or collected in the wild in California for many years. This rank includes only those plant taxa that are presumed extirpated in California, but that are more common elsewhere in their range. Note: Plants of both Rank 1A and 2A are presumed extirpated in California; the only difference is the status of the plants outside of the state.

2B: Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere

(Includes Rare Plant Ranks 2B.1, 2B.2, 2B.3)

The plants of Rank 2B are rare, threatened or endangered in California, but more common elsewhere. Plants common in other states or countries are not eligible for consideration under the provisions of the **Federal** Endangered Species Act; however they are eligible for consideration under the **California** Endangered Species Act. This rank is meant to highlight the importance of protecting the geographic range and genetic diversity of more widespread species by protecting those species whose ranges just extend into California. Note: Plants of both Rank 1B and 2B are rare, threatened or endangered in California; the only difference is the status of the plants outside of the state.

3: Plants about which more information is needed, a review list. Many of the plants constituting California Rare Plant Rank 3 meet the definitions of the California Endangered Species Act of the California 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: Plants of limited distribution, a watch list. Plants with a California Rare Plant Rank of 4 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 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 impact significance 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.

Threat Ranks:

The California Rare Plant Ranks (CRPR) use a decimal-style threat rank. The threat rank is an extension added onto the CRPR and designates the level of threats by a 1 to 3 ranking with 1 being the most threatened and 3 being the least threatened. So most CRPRs read as 1B.1, 1B.2, 1B.3, etc. Note that some Rank 3 plants do not have a threat code extension due to difficulty in ascertaining threats for these species. Rank 1A and 2A plants also do not have threat code extensions since there are no known extant populations of the plants in California.

Threat Code extensions and their meanings:

.1 - Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2 – Moderately threatened in California (20-80% of occurrences threatened / moderate degree and immediacy of threat)

.3 – Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

FESA and CESA abbreviation definitions

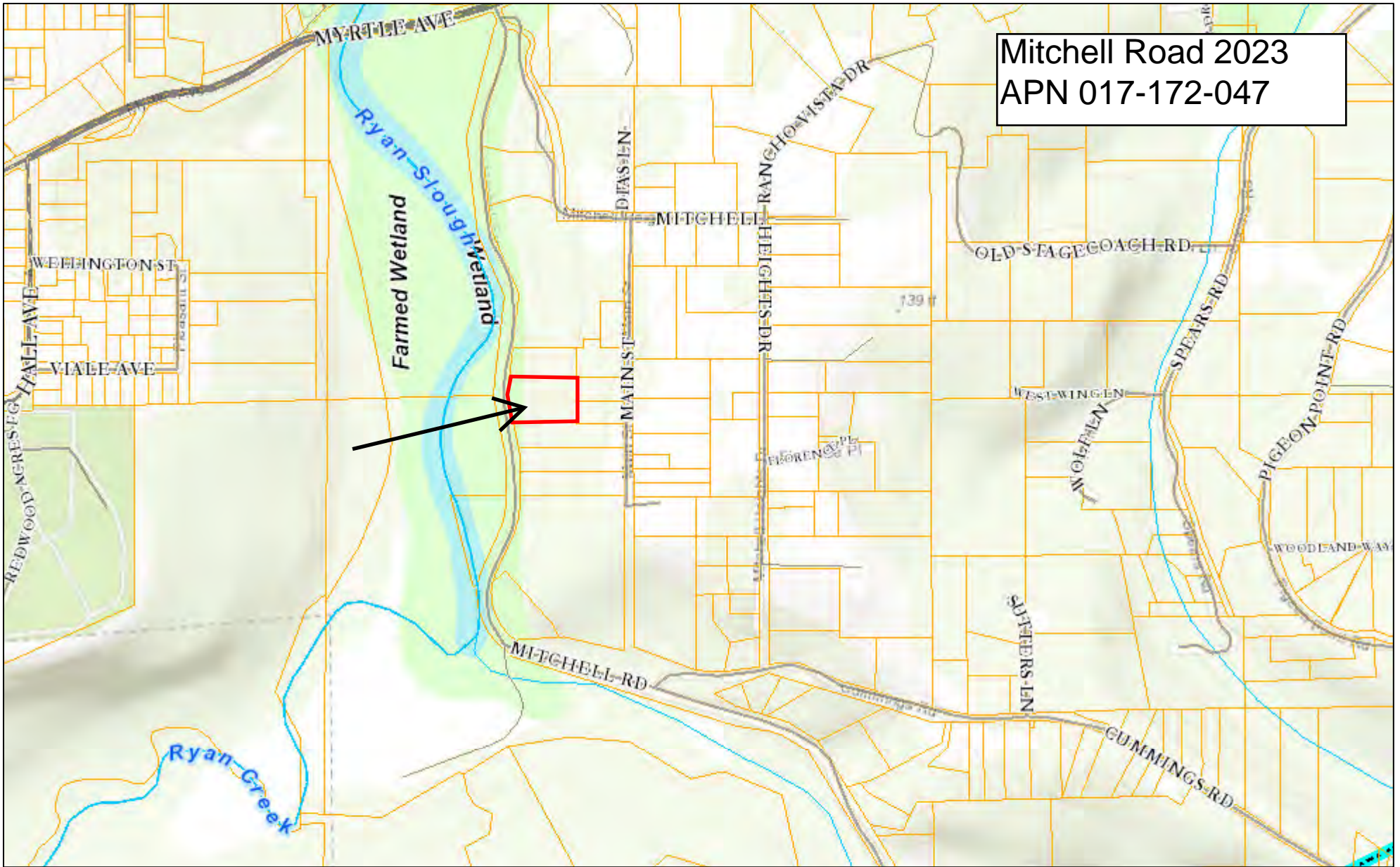
CR – California Rare

CE – California Endangered

FE – Federally Endangered

Attachment B

General Location Map, Humboldt County Parcel Maps, Survey Route Map



Mitchell Road 2023
APN 017-172-047



General Location Map

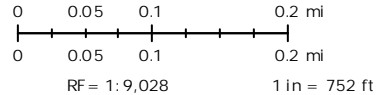
Humboldt County Planning and Building Department

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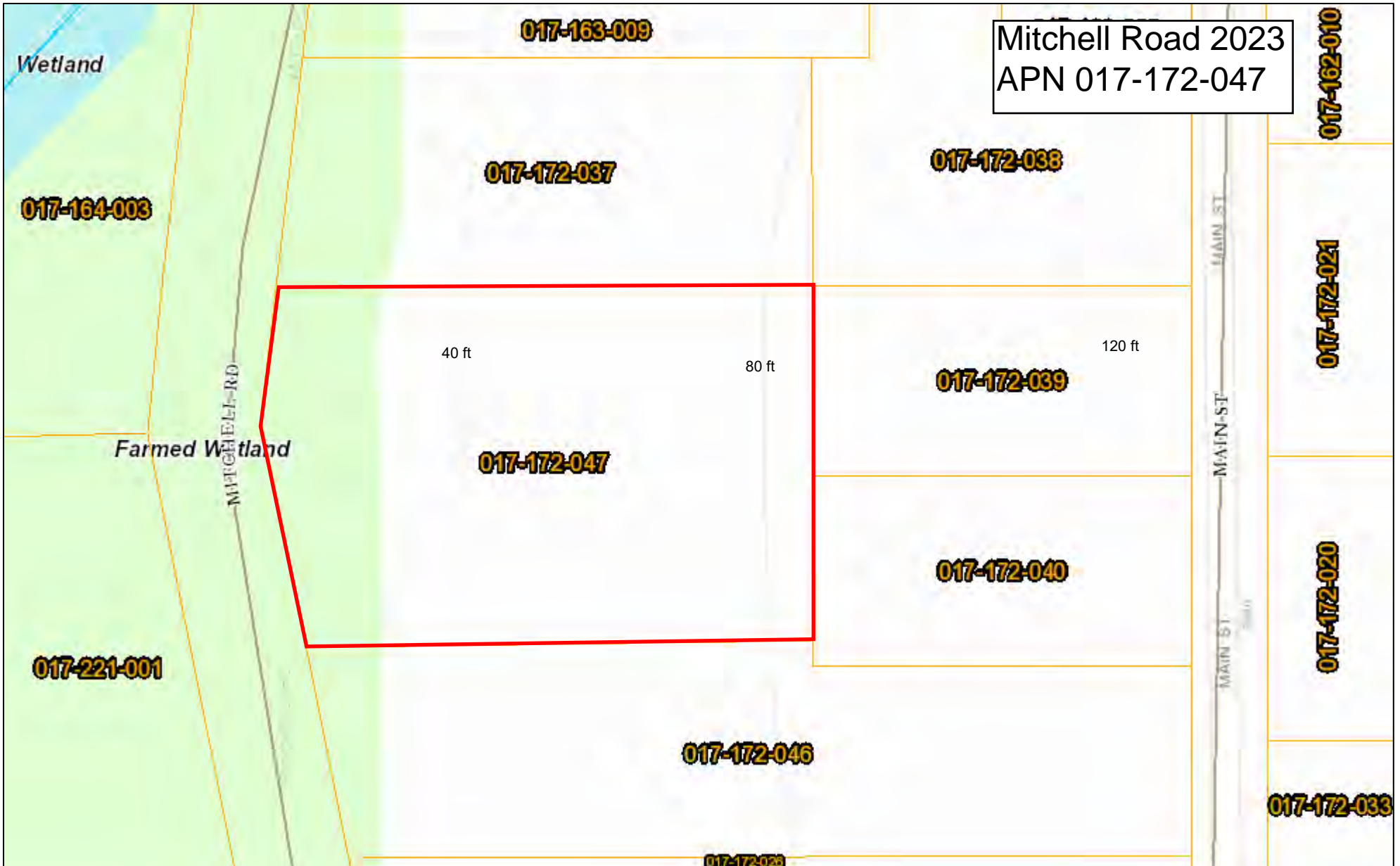
Web AppBuilder 2.0 for ArcGIS

Map Disclaimer:
While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force & effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.

- | | | | |
|---|--|---|---|
| Highways and Roads | — Private or Unclassified | — Intermittent | Study Area |
| Principal Arterials | Major River or Stream | Subsurface | |
| Minor Arterials | Blue Line Streams | City Boundary | |
| Major Collectors | Perennial 1-3 | Counties | |
| Minor Collectors | Perennial >4 | Parcels (no APN labels) | |
| Local Roads | | Coastal Zone Boundary | |



Sources: NRCS
Humboldt County GIS
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



Topographic Site Map

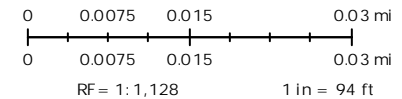
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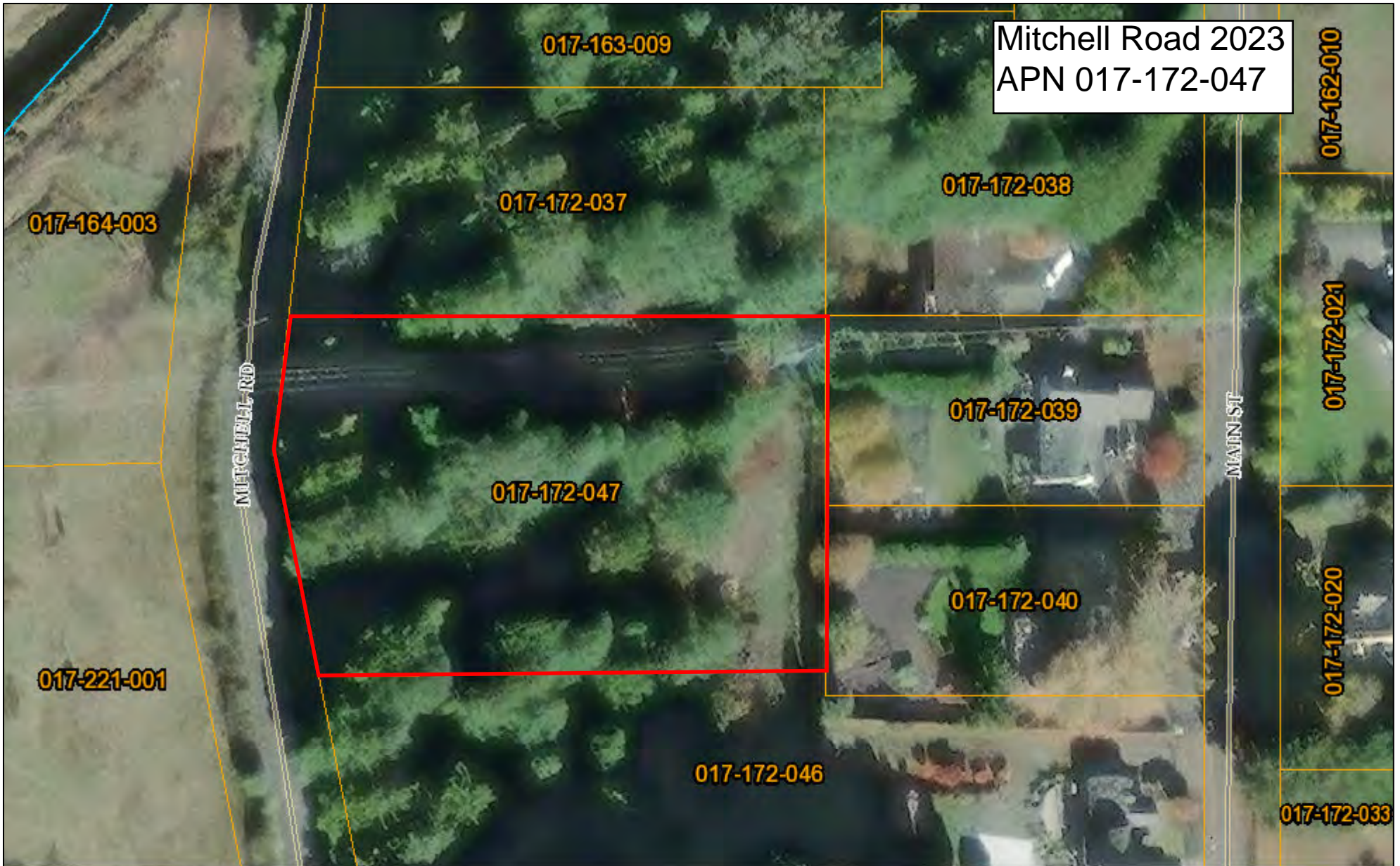
Web AppBuilder 2.0 for ArcGIS

Map Disclaimer:
While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force & effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.

- | | | | |
|---------------------------|---------------------------|----------------|------------|
| Highways and Roads | — Private or Unclassified | — Intermittent | Study Area |
| — Principal Arterials | — Major River or Stream | — Subsurface | |
| — Minor Arterials | | | |
| Blue Line Streams | | | |
| — Major Collectors | — Perennial 1-3 | | |
| — Minor Collectors | — Perennial >4 | | |
| — Local Roads | | | |
| | — City Boundary | | |
| | — Counties | | |
| | — Parcels | | |
| | — Coastal Zone Boundary | | |



Sources: NRCS
Humboldt County GIS
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



Orthographic Site Map

Humboldt County Planning and Building Department

9/21/2023, 8:30:08 AM

Web AppBuilder 2.0 for ArcGIS

Map Disclaimer:
While every effort has been made to assure the accuracy of this information, it should be understood that it does not have the force & effect of law, rule, or regulation. Should any difference or error occur, the law will take precedence.

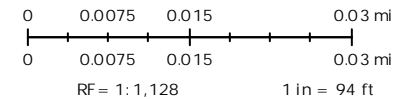
Highways and Roads

- Principal Arterials
- Minor Arterials
- Major Collectors
- Minor Collectors
- Local Roads
- Private or Unclassified
- Major River or Stream
- Perennial 1-3
- Perennial >4
- Intermittent
- Subsurface

Blue Line Streams

- City Boundary
- Counties
- Parcels
- Coastal Zone Boundary

Study Area












Sources: NRCS
Humboldt County GIS
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Mitchell Road 2023

Botanical Survey Route Map

Legend

-  Culvert
-  Culvert
-  Driveway
-  Ephemeral Stream
-  House Site
-  Inside Ditch
-  Parcel Boundary
-  Powerline Corridor
-  Willows/Sambucus

Survey Routes of

18 June 2023



Google Earth

400 ft



Attachment C

Comprehensive Species List

Tree Layer	
<i>Acer macrophyllum</i>	bigleaf maple
<i>Acer sp. (rubrum)</i>	red maple
<i>Alnus rubra</i>	red alder
<i>Frangula purshiana</i>	casacara
<i>Ilex aquifolium</i>	English holly
<i>Picea sitchensis</i>	Sitka spruce
<i>Pinus radiata</i>	Monterey pine
<i>Pittosporum (tenuifolium)</i>	short leaf box
<i>Pseudotsuga menziesii var. menziesii</i>	Douglas-fir
<i>Salix lasiolepis</i>	arroyo willow
<i>Sequoia sempervirens</i>	coast redwood
Shrub Layer	
<i>Baccharis pilularis</i>	coyote brush
<i>Buddleja sp.</i>	butterfly bush
<i>Cotoneaster sp</i>	Cotoneaster
<i>Cytisus scoparius</i>	Scotch broom
<i>Gaultheria shallon</i>	salal
<i>Lonicera involucrata var. ledebourii</i>	black twinberry
<i>Morella californica</i>	wax myrtle
<i>Oemleria cerasiformis</i>	oso berry
<i>Passiflora sp.</i>	passion flower
<i>Prunus sp.</i>	plum or cherry
<i>Rosa sp.</i>	rose
<i>Rubus armeniacus</i>	Himalayan blackberry
<i>Rubus ursinus</i>	Pacific bramble or California blackberry
<i>Sambucus racemosa var. racemosa</i>	red elderberry
<i>Vaccinium ovatum</i>	evergreen huckleberry
Herbaceous Layer	
<i>Agrostis stolonifera</i>	creeping bent-grass
<i>Aira caryophyllea</i>	silver European hairgrass
<i>Anaphalis margaritacea</i>	pearly everlasting
<i>Anthoxanthum odoratum</i>	sweet vernal grass
<i>Avena barbata</i>	slender wild oat
<i>Blechnum spicant</i>	deer fern
<i>Briza minor</i>	small quaking or rattlesnake grass
<i>Bromus sitchensis var. carinatus</i>	California brome
<i>Bromus diandrus</i>	ripgut grass
<i>Bromus hordeaceus</i>	soft chess
<i>Bromus laevipes</i>	woodland brome grass
<i>Calystegia sp.</i>	morning glory
<i>Carex harfordii</i>	Hartford's sedge
<i>Carex leptopoda</i>	short-scaled sedge
<i>Carex obnupta</i>	slough sedge
<i>Claytonia sibirica</i>	Siberian candyflower
<i>Cortaderia jubata</i>	weedy pampas grass
<i>Dactylis glomerata</i>	orchard grass
<i>Daucus carota</i>	wild carrot or Queen Anne's lace

<i>Epilobium ciliatum</i>	northern willow herb
<i>Equisetum arvense</i>	common horsetail
<i>Eschscholzia californica</i>	California poppy
<i>Festuca arundinacea</i>	tall fescue
<i>Festuca myuros</i>	foxtail fescue
<i>Festuca perennis</i>	perennial ryegrass
<i>Galium aparine</i>	goose grass
<i>Gastridium phleoides</i>	nit grass
<i>Geranium dissectum</i>	cut-leaved geranium
<i>Hedera helix</i>	English ivy
<i>Hieracium albiflorum</i>	white hawkweed
<i>Holcus lanatus</i>	common velvet grass
<i>Hypochaeris radicata</i>	hairy cat's-ear
<i>Juncus bufonius</i>	common toad rush
<i>Juncus effusus</i>	common rush
<i>Lathyrus latifolius</i>	sweet pea
<i>Lonicera hispidula</i>	hairy honeysuckle
<i>Lotus corniculatus</i>	birdfoot trefoil
<i>Lysmachia latifolia</i>	Pacific star flower
<i>Maianthemum dilatatum</i>	false lily-of-the-valley
<i>Marah sp.</i>	wild cucumber
<i>Oenanthe sarmentosa</i>	Pacific water-parsley
<i>Plantago lanceolata</i>	English plantain
<i>Poa pratensis</i>	Kentucky bluegrass
<i>Polystichum munitum</i>	sword fern
<i>Prosartes sp.</i>	fairy bells
<i>Pteridium aquilinum var. pubescens</i>	western bracken fern
<i>Ranunculus repens</i>	creeping buttercup
<i>Rumex acetosella</i>	sheep sorrel
<i>Rumex crispus</i>	curly dock
<i>Scirpus microcarpus</i>	small-flowered bulrush
<i>Scrophularia californica</i>	coast figwort
<i>Sonchus oleraceus</i>	common sow thistle
<i>Stachys ajugoides</i>	hedge nettle
<i>Trifolium dubium</i>	little hop clover or shamrock clover
<i>Trillium ovatum</i>	western trillium
<i>Trisetum cernuum</i>	nodding oatgrass
<i>Typha latifolia</i>	broadleaf cattail
<i>Veronica americana</i>	American brooklime
<i>Vicia gigantea</i>	giant vetch
<i>Vicia sativa ssp. sativa</i>	common vetch or spring vetch
<i>Vicia tetrasperma</i>	slender vetch