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Re: Biological Review of The Village on APN 505-022-011, -012

This report is to summarize findings from our field reconnaissance visit to APN 505-022-011, -012 on April 20, 2016. The project area is located on Saint Louis road within the City of Arcata (Arcata North Quad, T6N R1E section 20). The majority of the area is developed. The undeveloped eastern portion of the property is where the biological investigation occurred. The area under investigation is approximately 1.4 acres. The location of the project area is shown in Figure 1.

The majority of the property is currently developed and being used as a rental storage spaces and light industrial work spaces. The lower portion of the property where the biological investigation took place is vacant field that was used in the past as animal pasture. A slight drainage ditch runs north- south along a portion of the western property line. The majority of this ditch is approximately 5 feet wide and mostly filled with soil. A tributary to Janes Creek/ McDaniel Slough flows off property to the north. The property line is 50 feet from the creek. A wetland area was delineated in the lower portion of the undeveloped area on the property. See figure 2 for wetland and creek locations.



Figure 1 Project Location



Figure 2. Wetland Area and Creek Location

Wildlife

The wildlife assessment took place on April 20, 2016 between the hours of 1200- 1425. The assessment was done by wildlife biologist Vanessa Blount. Conditions were mostly clear and sunny with a light wind and cloud cover between 0-10% Temperature at this time was roughly 70 degrees Fahrenheit.

Sensitive Species:

The CNDDDB Rarefind and Biosis were reviewed to see if any sensitive species had been located in or near the project area. The CNDDDB shows no occurrences on or adjacent to the Parcel. Nearby CNDDDB occurrences and habitat present at the site indicate that the species listed in Table 1 could be present on the site.

Table 1 Possible Wildlife Species

Species	Status		Breeding Period
	Federal	State	
Cooper's Hawk (<i>Accipiter cooperii</i>)	none	Species of Concern	spring
great egret (<i>Ardea alba</i>)	none	Species of Concern	Spring
Pacific tailed frog (<i>Ascaphus truei</i>)	none	Species of Concern	May-October
obscure bumble bee (<i>Bombus caliginosus</i>)	none	Species of Concern	January- October
western bumble bee (<i>Bombus occidentalis</i>)	none	Species of Concern	Winter- Early Spring
snowy egret (<i>Egretta thula</i>)	none	Species of Concern	March- May
black-crowned night heron (<i>Nycticorax nycticorax</i>)	none	Species of Concern	March- July
Del Norte salamander (<i>Plethodon elongatus</i>)	none	Species of Concern	Fall, Spring
California clapper rail (<i>Rallus longirostris obsoletus</i>)	Endangered	Endangered	February- August
northern red-legged frog (<i>Rana aurora</i>)	none	Species of Concern	October- February
foothill yellow-legged frog (<i>Rana boylei</i>)	none	Species of Concern	April- October
southern torrent salamander (<i>Rhyacotriton variegatus</i>)	none	Species of Concern	Spring-Early summer
great blue heron (<i>Ardea herodias</i>)	none	Species of Concern	March- June
white-footed vole (<i>Arborimus albipes</i>)	none	Species of Concern	April- September
western pond turtle (<i>Emys marmorata</i>)	none	Species of Concern	April-August

The site was assessed according to its current habitat conditions. The habitat would most likely be utilized by amphibian, avian, and reptile species seasonally. The west side of the site contains a wetland ditch (running North to South). With the wetland in close proximity to Jane's creek it may provide a habitat for herpetofauna when conditions are suitable. However, less than 5% of the property has suitable groundcover habitat e.g. logs, debris, therefore the presence of some of these species is unlikely in drier months. The north eastern and north western quadrants currently provided similar habitat with tall grasses, thistles, and brambles creating cover and trapped moisture. The south eastern quadrant however, with its steep west facing incline does not provide suitable habitat. A tiny barn structure occupies the south eastern corner.

Wildlife observed include:

Wildlife observed during the site assessment included the following.

- A great blue heron (*Ardea herodias*) was observed circling above the survey area at 1220.
- Presence of a Pacific tree frog (*Pseudacris regilla*) was identified in the south western quadrant of the property at 1245, at 1315 another viewing was detected by a colleague in the same location.
- Pacific tree frog vocalization- north west quadrant of property at 1320.
- Anna's Humming bird (*Calypte anna*) mating calls/display were observed in a willow tree in the center of the property during entire site visit. This is a probable indication of breeding/nesting behavior.

Recommendations

Utilization of the site by special status wildlife species would be seasonally dependent. There is the most potential for sensitive species to use the site during the rainy months and in the spring. As under the current plans no construction will be taking place within the undeveloped portion of the property we believe no further surveys are necessary. If however, any construction or disturbance will be taking place in the undeveloped area we recommend preconstruction surveys for special status amphibians including Foothill Yellow-legged Frogs and Northern Red-Legged Frogs as well as surveys for nesting birds. Current habitat conditions would be considered satisfactory for use by Cooper's Hawk as there is suitable nesting Pine tree in central western portion of property. Great egret, snowy egret, black-crowned night heron, great blue heron, western bumble bee, and obscure bumble bee may also use the habitat or adjacent riparian along Jane's Creek for foraging.

Botany

We conducted a botanical survey to determine the presence of sensitive species or communities within the proposed project area. Survey findings are useful in assessing the potential for significant negative impacts on botanical resources and are critical in mitigating those impacts to a less than significant level. The following report conforms to the California Department of Fish and Game's (CDFG) *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFG 2009).

The area surveyed is an old agricultural field that was used for grazing in the recent past. Some areas of the field are seasonal wetland, being wet in the winter and spring but drying up in the summer. Common species are sweet vernal grass (*Anthoxanthum odoratum*), tall fescue (*Festuca arundinaceae*), Kentucky bluegrass (*Poa pratensis*), Western buttercup (*Ranunculus occidentalis*), wild radish (*Raphanus sativus*), velvet grass (*Holcus lanatus*), and teasel (*Dipsacus fullonum*).

Methods

I consulted the current inventories of the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Plants of California* (CNPS 2016), the CDFG California Natural Diversity Database (CNDDDB 2016), in order to determine which rare plant species may occur within the project area and to compile a target species list. A query based on Humboldt County for CNPS List 1, 2, 3 and 4 taxa resulted in 118 listed vascular and nonvascular listed plant species. Species for which habitat does not exist in the project area (e.g., coastal dunes) were not included to the target species list. Furthermore, since the database queries only result in those species that have been recorded in the county, I added any species lacking such records but may occur in the area (Table 2). These scoping strategies are consistent with the California Department of Fish and Game guidelines (CDFG 2009) and the California Environmental Quality Act (State of California 2001). I also checked the *Inventory of Rare and Endangered Plants of California* (CNPS 2016) for uncommon but not endangered List 4 plants and included them in the survey. However, List 4 plants are not legally protected.

Surveys were conducted according to the CDFG *Guidelines* (CDFG 2009) by Prairie Moore on April 20, 2016. Ms. Moore is qualified to conduct botanical surveys on the north coast. The total number of field-survey-hours was 3. The intuitively controlled survey method was used to cover the area intensively. The survey was seasonally appropriate (i.e., conducted during target species' blooming windows or when plants were readily identifiable by vegetative characteristics) for some target species (Table 2). For those target species for which the survey was not seasonally appropriate, we focused on identifying suitable habitat. Vascular plants encountered in the field were identified to the lowest taxonomic level necessary for a rare species determination. A species list was recorded and is attached (Table 3).

Table 2. Target list of botanical taxa

<i>Species scientific name</i> common name	Listing*	Habitat and Elevation	Blooms*
<i>Angelica lucida</i> sea-watch	4.2	Coastal bluff, scrub, dunes, prairie, salt marsh, wetland, riparian 0-150m	May - Sept
<i>Astragalus pycnostachyus</i> var. <i>pycnostachyuscoastal</i> marsh milk-vetch	1B.2	wetland-riparian, coastal marshes or seeps 0-30m	Apr-Oct
<i>Calamagrostis bolanderi</i> Bolander's reed grass	4.2	North coast coniferous forest, closed-cone coniferous forest, broadleaved upland forest, coastal scrub, wet meadows, seeps, marsh, bogs, fens 0-455m	May - Aug
<i>Calamagrostis crassiglumis</i> Thurber's reed grass	2B.1	Coastal scrub, Marshes and swamps (freshwater) 10-60m	May - Aug
<i>Calamagrostis foliosa</i>	4.2, CR	North coastal coniferous forest, northern	May-Sep

<i>Species scientific name</i> common name	Listing*	Habitat and Elevation	Blooms*
leafy reed grass		coastal scrub, bluffs, cliffs, 0-1220m	
<i>Carex buxbaumii</i> Buxbaum's sedge	4.2	Coastal Prairie, Lower, and upper montane coniferous forest, subalpine forest, riparian, wet meadows, seeps, marsh, bogs, fens 3-3300m	March - Aug
<i>Carex leptalea</i> bristle-stalked sedge	2.B2	Freshwater wetlands, riparian, meadows, marsh, bogs/fens 0- 700m	Mar-Jul
<i>Carex praticola</i> northern meadow sedge	2.B2	Coastal prairie, north coastal coniferous forest, meadows 0- 3200m	May-Jul
<i>Carex saliniformis</i> deceiving sedge	1B.2	Coastal prairie, northern coastal scrub, wetland, riparian 3-230m	Jun
<i>Carex viridula</i> var. <i>viridula</i> green yellow sedge	2B.3	North coastal coniferous forest, wetland, riparian, sphagnum bogs 0- 1600m	Jul-Sep
<i>Castilleja ambigua</i> ssp. <i>Ambigua</i> johnny-nip	4.2	Coastal prairie, scub and bluffs, wetlands marshed and swamps 0-435m	March - Aug
<i>Castilleja mendocinensis</i> Mendocino Coast paintbrush	1B.2	Coastal strand, coastal prairie, northern coastal scrub, closed-cone pine forest, dunes 0-160m	Apr-Aug
<i>Clarkia amoena</i> ssp. <i>Whitneyi</i> Whitney's farewell-to-spring	1B.1	Northern coastal scrub, open 10-100m	Jun-Aug
<i>Eleocharis parvula</i> small spikerush	4.3	Marshes and swamps 1- 3020m	April - Sept
<i>Empetrum nigrum</i> mountain crowberry	2B.2	Coastal prairie, northern coastal scrub, coastal bluff 10-200m	Apr-Jun
<i>Erigeron supplex</i> supple daisy	1B.2	Coastal bluff scrub, Coastal prairie 10- 50m	May-July
<i>Erysimum concinnum</i> bluff wallflower	1B.2	Coastal bluff scrub, Coastal dunes, Coastal prairie 0-185m	Feb-July
<i>Gilia capitata</i> ssp. <i>Pacifica</i> Pacific gilia	1B.2	chaparral, coastal prairie, valley foothill grassland, coastal bluffs, slopes 5-950m	Apr-Aug
<i>Glyceria grandis</i> American manna grass	2B.3	Freshwater wetlands, riparian, streambanks, lake-margins, meadows, bogs/fens, edges 15-1980m	Jun-Aug
<i>Hosackia gracilis</i> harlequin lotus	4.2	North coast coniferous forest, closed-cone coniferous forest, broadleaved upland forest, coastal scrub, coastal prairie, wetland, meadows, seeps, marsh 0-700m	March - Jul
<i>Iris longipetala</i> coast iris	4.2	Lower montane coniferous forest, coastal prairie, meadows and seeps, mesic 0-600m	March - May
<i>Lathyrus palustris</i> marsh pea	2B.2	Coastal prairie, yellow pine forest, northern coastal scrub, north coastal coniferous forest, wetland, riparian, marsh, bogs/fens 1-100.	Mar-Aug
<i>Leptosiphon acicularis</i> bristly leptosiphon	4.2	Chaparral, coastal prairie, Cismontane woodland, Valley and foothill grassland 55-1500m	April - Jul
<i>Lilium occidentale</i> western lily	1B.1, CE, FE	Coastal prairie, northern coastal scrub, north coastal coniferous forest, wetland, riparian, marsh, bogs/fens, openings, coastal 2-185m	Jun-Jul
<i>Montia howellii</i> Howell's montia	2B.2	Redwood forest, wetland, riparian, meadows, vernal-pools 0-835m	Mar-May
<i>Oenothera wolfii</i> Wolf's evening-primrose	1B.1	Coastal strand, coastal prairie, yellow pine forest, northern coastal scrub, dunes, bluffs, roadsides, generally moist places (perhaps also	May-Oct

<i>Species scientific name</i> common name	Listing*	Habitat and Elevation	Blooms*
		inland) Elevation: < 100 m. 3-800m	
<i>Polemonium carneum</i> Oregon polemonium	2.2	Northern coastal scrub, coastal prairie, yellow pine forest, moist to dry, open areas 0-1830m	Apr-Sep
<i>Sidalcea malachroides</i> maple-leaved checkerbloom	4.2	Coastal prairie, mixed evergreen forest, redwood forest, disturbed, Woodlands and clearings near coast 2-730m	Apr-Aug
<i>Sidalcea malviflora ssp. Patula</i> Siskiyou checkerbloom	1B.2	Coastal bluff scrub, coastal prairie, north Coast coniferous forest, open 15-878m	May-Aug
<i>Sidalcea oregana ssp. Eximia</i> coast checkerbloom	1B.2	Yellow pine forest, north coastal coniferous forest, wetland, riparian, meadows 5-1340m	Jun-Aug
<i>Viola palustris</i> marsh violet	2.2	Northern coastal scrub, wetland, riparian, bogs/fens, coastal, Swampy, shrubby places 0-150m	Mar-Aug

Listing codes are as follows: **CNPS 1B** = rare, threatened, or endangered in CA and elsewhere; **CNPS 2B** = rare, threatened, or endangered in CA, but more common elsewhere; **CNPS 3** = plants about which more information is needed; a review list; **CR**: state-listed RARE; **CE** = state-listed ENDANGERED; **FE** = federally-listed ENDANGERED

Survey Results

No rare, endangered, or CNPS list 1, 2, 3, or 4 plants were found during the surveys

Table 3. Overall list of vascular plant species noted within the survey area

TREES

Salix sp. willow

SHRUBS

Rubus armeniacus Himalaian blackberry
Rubus ursinus California blackberry

FERNS & ALLIES (ferns, horsetails, spike- & club-mosses)

Equisetum arvense common horsetail

GRASSES & GRAMINOIDS (grasses, sedges, rushes)

Anthoxanthum odoratum sweet vernal grass
Avena fatua oat grass
Eleocharis sp
Festuca arundinacea tall fescue
Juncus effuses common rush
Juncus patens rush
Holcus lanatus velvet grass
Hordeum sp barley
Lolium multiflorum Italian rye grass
Poa pratensis Kentucky blue grass

OTHER FLOWERING HERBS (by family)

Apiaceae – Carrot Family

Conium maculatum poison hemlock
Foeniculum vulgare fennel

Araliaceae- Ginseng Family

Hedera helix English Ivy

Asteraceae – Sunflower Family

Cirsium vulgare bull thistle
Cirsium sp. Thistle

Brassicaceae – Mustard Family

<i>Raphanus sativus</i>	wild radish
<u>Convolvulaceae- Morning-glory Family</u>	
<i>Convolvulus arvensis</i>	bindweed
<u>Dipsacaceae- Teasel Family</u>	
<i>Dipsacus fullonum</i>	teasel
<u>Fabaceae – Pea Family</u>	
<i>Lathyrus sp</i>	
<i>Trifolium dubium</i>	shamrock clover
<i>Vicia sp.</i>	Vetch
<u>Geraniaceae – geranium Family</u>	
<i>Erodium sp</i>	
<i>Geranium dissectum</i>	common geranium
<u>Papaveraceae- Poppy Family</u>	
<i>Dicentra Formosa</i>	bleeding heart
<i>Eschscholzia californica</i>	California poppy
<u>Plantaginaceae – Plantain Family</u>	
<i>Plantago lanceolata</i>	English plantain
<u>Polygonaceae – Buckwheat Family</u>	
<i>Rumex acetosella</i>	sheep sorrel
<i>Rumex conglomeratus</i>	Clustered dock
<i>Rumex crispus</i>	curly dock
<u>Ranunculaceae</u>	
<i>Ranunculus occidentalis</i>	Western buttercup

References Cited

CDFG (California Department of Fish and Game). November 24, 2009. Protocols for Surveying and Evaluating Impacts to special Status Native Plant Populations and Natural Communities. The Resources Agency, Department of Fish and Game, Sacramento, CA.

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