U.S. Fish and Wildlife Service
National Wetlands Inventory

210 E. Gobbi, Ukiah_None

December 24, 2021

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

Aquatic Resource Delineation Report

210 East Gobbi Street
Ukiah, Mendocino County, California
AEI Project No. 465082

July 14, 2022

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1.0 Introduction

1.1 Purpose and Scope of Report

A formal delineation of jurisdictional water bodies was conducted by Natural Investigations Co. on the 2.36 -acre property proposed for redevelopment as multi-family residential housing located at 210 East Gobbi Street, Ukiah in Mendocino County, California. The property consists of three parcels: APN 003-040-77 (0.86 acre); APN 003-040-78 (0.63 acre); and APN 003-040-79 (0.87 acre). This report presents the results of the field survey conducted in accordance with the United States Army Corps of Engineers (USACE) Wetlands Delineation Manual to determine which portions of this property may qualify as potentially jurisdictional waters of the United States (including wetlands). The USACE is ultimately responsible for determining the limits of their jurisdiction, and this report has been prepared to assist the USACE with their determination. This report also identifies which portions of this property may qualify as potentially jurisdictional waters of the State of California (including isolated wetlands and riparian zones). The State of California is ultimately responsible for determining the limits of their jurisdiction, and this report has also been prepared to assist State agencies with their determination.

The scope of services does not include other services that are not described in this Section, such as formal consultation with governmental agencies, or preparation of permit applications.

1.2 Project Location and Description

The property is located on the south side of East Gobbi Street, on both sides of Village Circle, in the city of Ukiah. The Study Area was defined to be within the property boundary of the 2.36-acre parcel (see Exhibits). The proposed project is a residential development for multi-family housing with parking and ornamental landscaping.

1.3 Regulatory Setting

Real property in California that contains water resources is subject to various federal and state regulations, and activities occurring in these water resources may require permits, licenses, variances, or similar authorization from federal, state and local agencies. Following is a brief, but not exhaustive, summary of such regulations, as they apply particularly to field delineations of jurisdictional waterbodies.

1.3.1 Federal Regulations

At the federal level, the Federal Water Pollution Control Act, more commonly referred to as the Clean Water Act (CWA) (33 United States Code [USC] 1344), is the primary law regulating wetlands and surface waters. In Section 404 of the CWA, waters of the US are defined as: all waters used in interstate or foreign commerce; all interstate waters including interstate wetlands; all other waters such as intrastate lakes, rivers, streams (including intermittent and ephemeral streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes or natural ponds, where the use, degradation, or destruction of which could affect interstate commerce; impoundments of these waters; tributaries of these waters; or wetlands adjacent to these waters (33 CFR Part 328). With non-tidal waters, in the absence of adjacent wetlands, the

extent of federal jurisdiction is defined by the ordinary high-water mark - the line on the shore established by the fluctuations of water, and indicated by a clear, natural line impressed on the bank, shelving, changes in soil character, destruction of terrestrial vegetation, or the presence of litter and debris. Wetlands are defined as: "*…those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.*" (Federal Register 1980, 1982).

Any person, firm, or agency planning to alter of work in navigable waterbodies, including the discharge of dredged or fill material, must first obtain authorization from the United States Army Corps of Engineers (USACE). Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) prohibits the obstruction or alteration of navigable waters of the US without a permit from USACE. Section 301 of the Federal Water Pollution Control Act, as amended ("Clean Water Act") prohibits the discharge of pollutants, including dredged or fill material, into waters of the US without a Section 404 permit from USACE (33 USC 1344). If the proposed project involves species (or their habitat) listed under the federal Endangered Species Act of 1973, USACE must initiate consultation with United States Fish and Wildlife Service (USFWS) or National Marine Fisheries Service pursuant to Section 7 (16 USC 1536; 40 CFR Part 402). Wetland features that exhibit vernal pool characteristics may be protected under the federal Endangered Species Act or California Endangered Species Act, because several crustaceans listed as threatened or endangered are dependent upon vernal pool habitat.

Under CWA Section 401, every applicant for a federal permit or license for any activity which may result in a discharge to a water body must obtain certification that the proposed activity will comply with State water quality standards. The applicable Regional Water Quality Control Board must certify that a USACE Section 404 Permit action meets state water quality objectives by issuing a Water Quality Certification. California Department of Fish and Game provides comment on USACE permit actions under the Fish and Wildlife Coordination Act. Under CWA Section 402, any construction project that disturbs at least one acre of land requires enrollment in the State's construction general permitting program under the National Pollutant Discharge Elimination System and implementation of a storm water pollution prevention plan.

The United States Environmental Protection Agency (USEPA) and USACE (2008) issued joint guidance regarding Clean Water Act jurisdiction following the decision in the consolidated cases of Rapanos v. United States and Carabell v. United States. USACE and USEPA will assert jurisdiction over traditional navigable waters, and non-navigable tributaries that have relatively permanent flow, and adjacent wetlands. The agencies will decide jurisdiction on a case-by-case basis for non-navigable tributaries that do not have relatively permanent flow, and adjacent wetlands, based upon significant nexus criteria (Kennedy Test, Scalia Test). The agencies generally will not assert jurisdiction over ditches, swales or other erosional features, or isolated wetlands.

1.3.2 State Regulations

Waters of the State are regulated primarily under the California Water Code and the California Code of Regulations Title 23: Water and Title 27: Environmental Protection. All water features in California, on public and private lands, in both natural and artificial channels, including isolated

wetland features and impermanent drainages that are not claimed as waters of the US, are considered waters of the State. Waters of the State are protected under the Porter-Cologne Water Quality Control Act (California Water Code, Division 7: Water Quality) and are regulated by the State Water Resources Control Board (SWRCB) and its 9 Regional Water Quality Control Boards.

All parties proposing to discharge materials that could affect waters of the State must file a report of waste discharge with the appropriate regional board. The regional board will then respond to the report by issuing waste discharge requirements (WDRs) in a public hearing, or by waiving WDRs (with or without conditions) for that proposed discharge. Both of the terms "discharge of waste" and "waters of the State" are broadly defined in the Porter-Cologne Act, such that discharges of waste include fill, any material resulting from human activity (including construction), or any other "discharge" that may directly or indirectly impact waters of the State.

Additional statewide regulations that protect wetlands and riparian areas include the Wetlands Conservation Policy (Executive Order W-59-93), also known as the State's "No Net Loss" Policy for Wetlands; and the Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (State Water Board Resolution No. 2004-0030).

California Fish and Game Code (§1600-1607, 5650F) protects fishery resources by regulating "...*any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake*." California Department of Fish and Wildlife (CDFW) requires notification prior to project commencement, and issuance of a Lake or Streambed Alteration Agreement, if a proposed project will result in the alteration or degradation of waters of the State. The limit of CDFW jurisdiction is currently interpreted to be the "stream zone", defined as "*that portion of the stream channel that restricts lateral movement of water*" and delineated at "*the top of the bank or the outer edge of any riparian vegetation, whichever is more landward*". CDFW reviews the proposed actions and, if necessary, submits to the applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by the CDFW and the applicant is the Streambed Alteration Agreement.

The California Coastal Act requires that most development avoid and buffer wetland resources (California Coastal Commission 2004, 2006). Policies include:

- Section 30231, which requires the maintenance and restoration (if feasible) of the biological productivity and quality of wetlands appropriate to maintain optimum populations of marine organisms and for the protection of human health.
- Section 30233, which limits the filling of wetlands to identified high priority uses, including certain boating facilities, public recreational piers, restoration, nature study, and incidental public services (such as burying cables or pipes). Any wetland fill must be avoided unless there is no feasible less environmentally damaging alternative, and authorized fill must be fully mitigated.

The California Coastal Commission (CCC)'s regulations establish a "one parameter definition" that only requires evidence of 1 of the 3 USACE parameters to establish wetland conditions:

> "*Wetland shall be defined as land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent and drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salts or other substances in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deep-water habitats.*" (14 CCR Section 13577).

1.3.3 Local Regulations

No County or municipal regulations pertaining to delineation of jurisdictional water features were identified.

1.4 Environmental Setting

The Study Area and vicinity is in climate Zone 14 "Northern California's Inland Areas with Some Ocean Influence", with maritime air moderating temperatures that would otherwise be hotter in summer and colder in the winter (Sunset, 2021). The topography of the Study Area is flat with gentle drainage swales. The elevation ranges from approximately 598 feet to 601 feet above mean sea level. The Study Area is located within the Russian River watershed. The Study Area is a fallow field/infill lot that is mowed to reduce fire risk. The surrounding land uses are multi-family residential and single-family residential and light commercial. Along the northern edge of the parcel is East Gobbi Street, a large local transportation corridor. An abandoned railroad track borders the eastern margin of the parcel.

2.0 Methodology

The delineation was conducted in accordance with the:

- 1987 Corps of Engineers Wetland Delineation Manual.
- 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0.
- 2008 A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States.
- 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0). U.S. Army Engineer Research and Development Center Environmental Laboratory, Vicksburg, MS. 153 pp.

Methodology followed USACE and USEPA guidelines, and consisted of preliminary data gathering and research, field surveys, digital mapping, and documentation of final boundary determinations.

2.1 Preliminary Data Gathering and Synthesis

Prior to conducting the field delineation, the following information sources were reviewed:

- Client's engineering or design drawings (where available);
- United States Geologic Survey (USGS) 7.5-degree minute topographic quadrangle maps and aerial photography;
- United States Department of Agriculture Natural Resources Conservation Service (NRCS) soil survey maps;
- Federal Emergency Management Agency (FEMA) Flood Insurance Rate (Flood Hazard Boundary) Maps;
- United States Fish and Wildlife Service (USFWS) National Wetland Inventory Maps; and
- Any readily available studies performed previously.

2.2 Determination Procedures

The purpose of the field determination was to: 1) identify any and all water features that are subject to federal jurisdiction (*i.e.*, waters of the US) within the Study Area; and 2) if present, determine the boundary of each water feature. The entire study area was assessed in such a manner as to view all areas to the degree necessary to determine the vegetation community types and the presence or absence of jurisdictional water features. Wetland field determination procedures followed the USACE *Wetlands Delineation Manual* technical guidelines for a Level 2 Routine Field Determination (Environmental Laboratory 1987). Additionally, the appropriate USACE regional supplement was also consulted.

The diagnostic environmental characteristics of hydrophytic vegetation, hydric soils, and wetland hydrology (i.e., 3-parameter approach) were used as the standard for determining if specific areas qualified as wetlands (Environmental Laboratory 1987). A subject area was determined to be a wetland if all 3 requisite characteristics were present; as a general rule, evidence of a minimum of one positive indicator for each parameter must be found in order to make a positive wetland determination.

Hydrophytic vegetation is defined as "...*the sum total of macrophytic plant life that occurs in areas where the frequency and duration of inundation or soil saturation produce permanently or periodically saturated soils sufficient in duration to exert a controlling influence on the plant species present*." (Environmental Laboratory 1987). Hydrophytic vegetation indicators included: prevalence of vegetation; majority of dominant plant species are obligate or facultative wetland plants (hydrophytes); morphological or physiological adaptations to saturated soil conditions; and species listed on the *National List of Plant Species that Occur in Wetlands* (USFWS 2006a) and the *Regional List* (Region 10) (USFWS 2006b). This National List divides plant species into categories based upon their frequency of occurrence in wetlands. These categories are: OBL = obligate wetland plants that occur almost always in wetlands under natural conditions (estimated probability greater than 99%); FACW = facultative wetland plants that usually occur in wetlands, but occasionally occur in non-wetlands (estimated probability 67 – 99%); FAC = facultative wetland plants that are equally likely to occur in wetlands or non-wetlands (estimated probability 34 – 66 %); FACU = facultative upland plants that usually occur in non-wetlands, but occasionally are found in wetlands (estimated probability 1 – 33 %); UPL = obligate upland plants that almost always occur in non-wetlands (estimated probability greater than 99%); NI and UNK = insufficient information to determine status; NL = not listed; NA = no agreement by Regional Panel on status; NO = species does not occur in specified region; *

(asterisk) indicates tentative assignment; + (positive) or – (negative) sign indicates higher or lower frequency in its category, respectively. During field investigations, the percentage of hydrophytic plant coverage was determined based on the ratio of wetland indicator species coverage present to the total plant coverage present. More than 50 percent of the dominant plant species cover must be FAC, FACW, or OBL to meet the hydrophytic vegetation criterion.

Hydric soils are defined as soils that are "*...formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part*." (Environmental Laboratory 1987). A minimum one week of inundation or 14 consecutive days of saturation during the growing season is a typical requirement. The criteria for establishing the presence of hydric soils vary among different soil types and drainage classes. Hydric soil indicators include evidence of reducing or redoximorphic conditions (including sulfidic odor, organic streaking), gleyed, mottled, or low-chroma soils, iron and manganese concretions, and low dissolved oxygen concentration (aquic moisture regime); organic soils (histosols); or mineral soils saturated and rich in organics (histic epipedon) (NRCS 2006a). Richardson and Vepraskas (2001) present a thorough discussion of wetland soil science. In the absence of visible field indicators, hydric soil conditions may be determined according to two criteria: 1) all dominant plant species have an indicator status of OBL and/or FACW (at least one dominant plant species must be OBL); and 2) areas below the level of ordinary high water are frequently flooded for long duration or very long duration during the growing season and possess an aquic (reducing) moisture regime. Soils are also classified as hydric on non-hydric by NRCS (2006b).

Wetland hydrology "*...encompasses all hydrologic characteristics of areas that are periodically inundated or have soils saturated to the surface at some time during the growing season*" (Environmental Laboratory 1987). Many factors influence site-specific hydrology, including the precipitation, stratigraphy, topography, soil permeability, and plant cover of the site. In general, inundation or saturation must occur for at least 5 percent of the growing season to qualify as wetland hydrology. The degree of inundation or saturation at the Project Area can vary widely from year to year depending on rainfall patterns within the watershed. Primary wetland hydrology indicators include visual observations of inundation or soil saturation, water marks and water-stained leaves, sediment deposits, drift lines, and drainage patterns in wetlands.

Sampling locations were established within potential wetland areas and within adjacent uplands, where present, to determine the boundary of wetlands. At each sampling point, the location was georeferenced using a GPS receiver and marked on an aerial photograph; a numbered pin flag or lathe was placed, where necessary, to assist other surveyors. Information on vegetation, soils, and hydrology was recorded on a USACE *Routine Wetland Determination Data Form*.

Dominant and subdominant plant species in each vegetative stratum (e.g., tree, shrub, forb) that occurred within approximately 5 to 10 feet of the sampling point were identified and recorded, and their wetland indicator status determined. All visible flora observed were recorded in a field notebook and identified to the lowest possible taxon; a hand lens was used where necessary. When a specimen could not be identified *in situ*, a photograph or voucher specimen (depending upon scientific permit requirements) was taken and identified later in the laboratory using a dissecting scope where necessary. Taxonomic determinations and

nomenclature followed these references: plants—Pavlik (1991), Brenzel (2007), Stuart and Sawyer (2001), Lanner (2002), Baldwin et al. (2012), Calflora (2019), University of California at Berkeley (2019a,b).

Where necessary, a soil pit was dug with a spade to expose at least 16 inches of soil profile, and the sample evaluated for hydric soil indicators. Munsell Soil Color Charts (2000 edition, Gretagmacbeth, Inc.) were used to determine soil matrix and mottle color (hue, value, and chroma), and soil type and particle size was also noted. NRCS (1999) Soil Taxonomy handbook was referenced for soil classification where necessary. Based on the results of the 3-parameter test, the extent of each potential wetland was mapped in the field using a GPS receiver capable of submeter accuracy and/or demarcated on aerial photographs for later "heads-up" digitization. Wetlands and other aquatic habitats were classified using the USFWS "*Classification System for Wetland and Deepwater Habitats*", or "Cowardin class" (Cowardin *et al.*, 1979; USFWS 2014). A determination was made whether normal environmental conditions exist; atypical conditions followed a modified procedure described in the USACE Manual (Environmental Laboratory 1987). Geographic analyses, including acreage calculations, were performed using geographical information system software (ArcGIS 10, ESRI, Inc.).

For identification of water features other than wetlands that are subject to federal or State jurisdiction, 2 principal field characteristics were evaluated: 1) the presence of a channel; and 2) the presence of an ordinary high-water mark. The ordinary high-water mark is defined in 33 CFR Part 329.11 as the line on the shore established by the fluctuations of water, and indicated by a clear, natural line impressed on the bank, shelving, changes in soil character, destruction of terrestrial vegetation, or the presence of litter and debris. Other characteristics were noted, where possible: description of hydrologic feature type, length, approximate discharge volume, gradient, range between low and high-water mark, width of riparian vegetation, etc. For determination of whether these water bodies constituted waters of the US, USACE regulations (33 CRF 328) were consulted. Data sheets for these non-wetland water bodies were completed at representative locations and were included in the Appendix.

A joint USEPA/USACE memorandum dated 2008 provided guidance to implementing the Supreme Court's decision in the consolidated cases Rapanos v. United States and Carabell v. United States (hereafter referred to simply as "Rapanos") which addressed the jurisdiction over waters of the United States under the Clean Water Act. In Rapanos, the Supreme Court restricted where the federal government can apply the Clean Water Act, specifically by determining whether a wetland or tributary is a "water of the United States." According to USEPA & USACE (2008), jurisdiction will continue to be asserted over "all waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide." These waters are referred to as traditional navigable waters. The agencies will also continue to assert jurisdiction over wetlands adjacent to traditional navigable waters, where "adjacent" means "bordering, contiguous, or neighboring." Finding a continuous surface connection is not required to establish adjacency under this definition (USEPA & USACE 2008).

A non-navigable tributary of a traditional navigable water is a non-navigable water body whose waters flow into a traditional navigable water either directly or indirectly by means of other

tributaries. Clean Water Act jurisdiction will continue to be held over non-navigable tributaries that are "relatively permanent" – waters that typically (e.g., except due to drought) flow year-round or waters that have a continuous flow at least seasonally (e.g., typically three months). Justice Scalia emphasizes that relatively permanent waters do not include tributaries "*whose flow is 'coming and going at intervals…broken, fitful.'*" Therefore, "relatively permanent" waters do not include ephemeral tributaries which flow only in response to precipitation and intermittent streams which do not typically flow year-round or have continuous flow at least seasonally (USEPA & USACE 2008). However, CWA jurisdiction over these waters will be evaluated under the significant nexus standard described next.

The agencies will assert jurisdiction over the following types of waters when they have a significant nexus with a traditional navigable water: (1) non-navigable tributaries that are not relatively permanent, (2) wetlands adjacent to non-navigable tributaries that are not relatively permanent, and (3) wetlands adjacent to, but not directly abutting, a relatively permanent tributary (e.g., separated from it by uplands, a berm, dike or similar feature). The agencies will assess the flow characteristics and functions of the tributary itself, together with the functions performed by any wetlands adjacent to that tributary, to determine whether collectively they have a significant nexus with traditional navigable waters. A waterbody possesses the requisite nexus, and thus becomes jurisdictional, if the waterbody, either alone or in combination with similarly situated lands in the region, significantly affects the chemical, physical, and biological integrity of other covered waters more readily understood as 'navigable' (USEPA & USACE 2008).

To assist in the interpretation of the Rapanos criteria, the USACE Jurisdictional Determination Form Instructional Guidebook was consulted (USACE & USEPA 2007).

3.0 Results

3.1 Field Survey and Conditions

Tim Nosal M.S. conducted a preliminary assessment on May 10 and July 5, 2022. Weather conditions were warm and overcast. A complete coverage, variable-intensity pedestrian survey was performed of the Study Area, modified to account for differences in terrain, vegetation density, and visibility. Sampling points were established at key locations and analyzed for the presence or absence of wetland (or for channels, ordinary high-water mark) indicators; these points are documented in the Data Sheets in the Appendix. The results of the analyses of Study Area vegetation, soils, and hydrology are presented in the following sections, followed by the recommended jurisdictional determination.

3.2 Vegetation

The Study Area is located within the Inner North Coast Range geographic subregion, which is contained within the Northwestern California geographic subdivision of the larger California Floristic Province (Baldwin et al. 2012). The Study Area currently contains 2 terrestrial natural communities/habitat types, listed in descending areal preponderance:

- Ruderal/Disturbed
- Wet meadow

The Exhibits show approximate boundaries of these natural community types. Classification and description of terrestrial plant communities follows the methodology accepted by CDFW (2014b), which is based upon Sawyer and Keeler-Wolf's (1995) *Manual of California Vegetation*.

Flora sighted within the Study Area during the field survey are listed in the following table. Obligate wetland plants are present within the Study Area.

Table 1. List of All Plants Identified During the Field Survey

Scientific Name	Common Name	Wetland Status
Acmispon americanus	Spanish lotus	NI
Avena barbata	Slender wild oat	UPL
Avena fatua	Wild oat	UPL
Borago officinalis	Common borage	NI
Briza maxima	Rattlesnake grass	NI
Bromus catharticus	Rescue brome	NI
Bromus diandrus	Ripgut brome	UPL
Bromus hordeaceus	Soft chess	FACU-
Cardamine oligosperma	Western bittercress	FACW
Carduus pycnocephalus	Italian thistle	NI
Carex gracilior	Slender sedge	NI
Carex subfusca	Brown sedge	FAC-
Catalpa speciosa	Northern catalpa	FAC
Centaurea solstitialis	Yellow star thistle	NI
Cichorium intybus	Chicory	NI
Conium maculatum	Poison hemlock	FACW
Convolvulus arvensis	Field bindweed	UPL
Cynodon dactylon	Bermuda grass	FAC
Cyperus sp.	Nut grass	FACW
Epilobium brachycarpum	Tall willowherb	UPL
Erodium botrys	Broad leaved filaree	UPL
Erodium moschatum	White stem filaree	UPL
Eschscholzia californica	California poppy	NI
Festuca arundinacea	Tall fescue	FAC-
Festuca bromoides	Brome fescue	NI
Festuca myuros	Rattail sixweeks grass	NI
Festuca perennis	Italian ryegrass	FAC*
Galium aparine	Bedstraw	FACU
Geranium dissectum	Cutleaf geranium	UPL
Hirschfeldia incana	Shortpod mustard	UPL

Scientific Name	Common Name	Wetland Status
Hordeum marinum ssp. gussoneanum	Mediterranean barley	FAC
Hordeum murinum	Wall barley	UPL
Hypochaeris glabra	Smooth cat's-ear	NI
Juncus balticus	Baltic rush	OBL
Kickxia elatine	Sharp-leaved fluellin	NI*
Lactuca serriola	Prickly lettuce	FAC
Lathyrus latifolius	Sweet pea	NI
Leontodon saxatilis	Hawkbit	FACU
Logfia gallica	Narrowleaf cottonrose	UPL
Lupinus bicolor	Miniature lupine	
Lythrum hyssopifolia	Hyssop loosestrife	FACW
Malva neglecta	Common mallow	NI
Medicago polymorpha	California burclover	FACU
Nicotiana sp.	Wild tobacco	FAC
Phalaris aquatica	Harding grass	FAC+
Phyla nodiflora	Common lippia	FACW
Plantago coronopus	Cut leaf plantain	FAC
Plantago lanceolata	English plantain	FAC-
Poa sp.	Bluegrass	-
Polygonum arenastrum	Knot grass	NI
Populus fremontii	Fremont cottonwood	FAC+
Prunus cerasifera	Cherry plum	NI
Prunus persica	Nectarine	NI
Quercus lobata	Valley oak	FACU
Raphanus sativus	Jointed charlock	UPL
Rosa sp.	Rose	-
Rubus armeniacus	Himalayan blackberry	FAC+
Rumex crispus	Curly dock	FACW
Rumex sp.	Dock	FACW
Sonchus oleraceus	Sow thistle	UPL
Spergularia rubra	Red sandspurry	FAC-
Tamarix sp.	Tamarisk	-
Toxicodendron diversilobum	Poison-oak	NI
Tragopogon porrifolius	Salsify	NI
Trifolium hirtum	Rose clover	NI
Vicia hirsuta	Tiny vetch	NI
Vicia sativa	Spring vetch	FACU
Vicia villosa	Winter vetch	NI
Vinca major	Periwinkle	NI
Vitis vinifera	European grape	NI

3.3 Soil Types

Digital soil survey maps from NRCS' SSURGO 2.2 Database were consulted for this study (NRCS 2017), and mapped soil units occurring within the Study Area are listed and described in the following table and mapped in the Exhibits, as needed. No mapped soil units within the Study Area were found to be designated "hydric" by NRCS. NRCS provides this disclaimer: "*Lists of hydric soils along with soil survey maps are good off-site ancillary tools to assist in wetland determinations, but they are not a substitute for observations made during on-site investigations.*" (http://soils.usda.gov/use/hydric/overview.html).

Mapped Soil Units Within The Study Area

Unit #	Unit Name	Taxonomic Group	Drainage Class	Runoff Class	Hydric?
210	Urban Land	-	-	-	No
Data from NRCS SSURGO 2.2 Database/SoilWeb					

Wetland soils were darker and more grayish (Munsell matrix color of 5 YR 2.5/1), and consisted of clayey loams or silty loams, with some gleying. Upland soils were lighter and more reddish (Munsell matrix color of 10 R 3/1), and consisted of sandy loams, with gravel.

3.4 Hydrology

The general direction of surface runoff in the Study Area is to the east to the municipal stormwater drain (see Exhibits). Drainage from this region flows east to the Russian River. Annual precipitation averages approximately 37.26 inches (Western Regional Climate Center 2019).

According to the FEMA Flood Hazard Boundary Map of the region, the property is not located within a flood zone (see Exhibits). The zone codes are as follows: Zone A – inside the 100-year floodplain; Zone X - outside the 500-year floodplain; Zone X500 - outside the 100-year floodplain but within the 500-year floodplain; Zone ANI – area not included in the mapping program. Because wetlands often occur within floodplains, these FEMA Flood Hazard Boundary Maps may assist the delineator in determining if wetland hydrology exists within the Study Area.

3.5 National Wetlands Inventory / Previous delineations

No previously published wetland delineation reports were identified or made known to the author. The USFWS National Wetland Inventory (NWI) digital maps of the Study Area were also consulted. Regional mapped wetland features are shown in the Exhibits, where illustrative. No NWI wetlands were mapped within the Study Area. Properties 0.1 mile to the south have mapped wetland features. Note, however, that this database was not used to conclude that a wetland was present or absent in the Study Area.

3.6 Delineation Results and Jurisdictional Recommendations

All hydrologic features were identified and mapped within the Study Area and subjected to the delineation criteria set forth by each regulatory agency. These features are summarized in the following tables and mapped in the Exhibits. This map has not been verified by USACE or SWRCB, and thus represents an unofficial demarcation of the potential limits of jurisdiction. Two survey points were established for the delineation of this Study Area, and corresponding data sheets can be found in the Appendix.

The formal aquatic resources delineation identified and mapped 1 feature within the Study Area:

- a seasonal wetland totaling 1,365 square feet (0.03134 acres), Cowardin Class is PUB3EO. The seasonal wetland is a freshwater marsh that occurs in a depression that fills primarily with runoff from adjacent parcels. This feature drains into a drop inlet of a pipe culvert near the center of the eastern margin of the wetland. During the field survey (which was early July 2022), the ground in these areas was dry and hard. Vegetation that was identifiable was primarily Harding grass (*Phalaris aquatica*), Baltic rush (*Juncus balticus*), Italian ryegrass (Festuca perennis), periwinkle (*Vinca major*) and nutsedge (*Cyperus* sp.). No vernal pool indicator plants were present. The soil in the seasonal wetland has a much greater clay and organic matter content that the surrounding uplands.

No other wetlands were detected within the Study Area. No vernal pools or other isolated wetlands were detected within the Study Area. No other data points and their test pits gave indications of hydric soils, and hydrophytes were generally lacking.

There are no channels within the Study Area.

3.6.1 Water Resources Potentially Subject to Federal Jurisdiction

All identified hydrologic features were subjected to the 3-parameter test, the Hydrology Criterion (Scalia Test), and the Significant Nexus (Kennedy) Test. Based upon these criteria, no features were determined to be potentially subject to USACE jurisdiction. The seasonal wetland fails the connectivity criterion. In other words, the wetland is not hydrologically connected to downstream navigable waters.

Note that this jurisdictional determination is a suggested conclusion from the consulting biologist. USACE is ultimately responsible for determining the limits of their jurisdiction.

3.6.2 Upland Features Not Expected To Be Subject to Federal Regulation

There is a drainage ditch on the eastern edge of the Study Area that drains the adjacent railroad tracks. This feature is understood to not be jurisdictional (see Exhibits). It fails the Scalia Test for relatively permanent flow. The features also fail the connectivity criterion. They all fall under the category described by USEPA & USACE (2008) as:

> "*Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow) are generally not waters of the United States because*

they are not tributaries, or they do not have a significant nexus to downstream traditional navigable waters. In addition, ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water are generally not waters of the United States because they are not tributaries, or they do not have a significant nexus to downstream traditional navigable waters."

There are also various low-lying areas within the Study Area that collect water, but these features did not have hydric soils and hydrophytes were not dominant. These features were understood to not be jurisdictional as well.

3.6.3 Water Resources Potentially Subject to State Jurisdiction

All identified hydrologic features were subjected to the 3-parameter test, the broad (and vague) definition of waters of the State as currently enforced by SWRCB, and the "stream zone" as currently enforced by CDFW. Based upon these criteria, 1 delineated feature (the seasonal wetland) was determined to be potentially subject to State jurisdiction. The SWRCB has claimed jurisdiction over isolated wetlands in various policy and court actions. Since the wetland is not part of a stream zone, this feature is understood to not be subject to CDFW jurisdiction or the Section 1600 program.

4.0 Impact Analyses, Mitigations Measures, and Recommendations

The following discussion evaluates the potential for Project-related activities to adversely affect water resources according to the criteria set forth in Section 2.3. The significance of impacts to water resources and aquatic habitats depends upon the condition of the existing water resources and their proximity to Project-related impacts, whether impacts are temporary or permanent, and the effectiveness of measures implemented to protect these resources from impacts.

Unless Project design and implementation can completely avoid and protect the water resources within the Study Area, the Project may result in the discharge of fill material into potentially jurisdictional waters, which would be a significant adverse impact before mitigation.

4.1 Potential Project Impacts to Waters of the US

If USACE determines that the wetland is subject to their jurisdiction, a CWA Section 404 permit must be obtained, and mitigation performed before these water features are disturbed or altered. CWA 401 water quality certification from RWQCB will also be necessary if a Section 404 permit is issued. Since the sum of affected water resources is less than 0.5 acre, a Section 404 Nationwide Permit may be obtained from USACE. Compliance with all the terms and conditions of the appropriate USACE permit and implementation of compensatory, minimization, and avoidance mitigation would minimize impacts to waters of the US to a less than significant level.

4.2 Potential Project Impacts to Waters of the State

Unless Project design and implementation can completely avoid and protect the water resources within the Study Area, the Project may result in the discharge of fill material into

potentially jurisdictional State waters, which would be a significant adverse impact. This Jurisdictional Waters Delineation Report may be submitted to the applicable RWQCB for verification. CWA 401 water quality certification from the RWQCB will probably be necessary before the wetland is disturbed or filled in. Water Quality Certification typically requires compensatory mitigation for loss of jurisdictional waters. Compliance with all the terms and conditions of the appropriate State permit(s) and implementation of compensatory, minimization, and avoidance mitigation would minimize impacts to waters of the State to a less than significant level.

Construction of buildings and other structures may involve major grading, excavation, and stockpiling. Such soil disturbances can increase erosion by both water and wind, creating a potentially significant impact upon receiving waterbodies. If the construction footprint is larger than one acre in area, such construction is regulated by the Clean Water Act under the SWRCB's California General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ). In conjunction with enrollment under this Permit, a Storm Water Pollution Prevention Plan, Erosion Control Plan, and a Hazardous Materials Management/Spill Response Plan must be created and implemented during construction to avoid or minimize the potential for erosion, sedimentation, or accidental release of hazardous materials. Construction Best Management Practices are also required. Implementation of these measures would reduce potential construction-related impacts to water quality to a less than significant level. Because these actions are required by law, no mitigation is necessary.

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6.0 Qualifications of Surveyors and Report Preparers

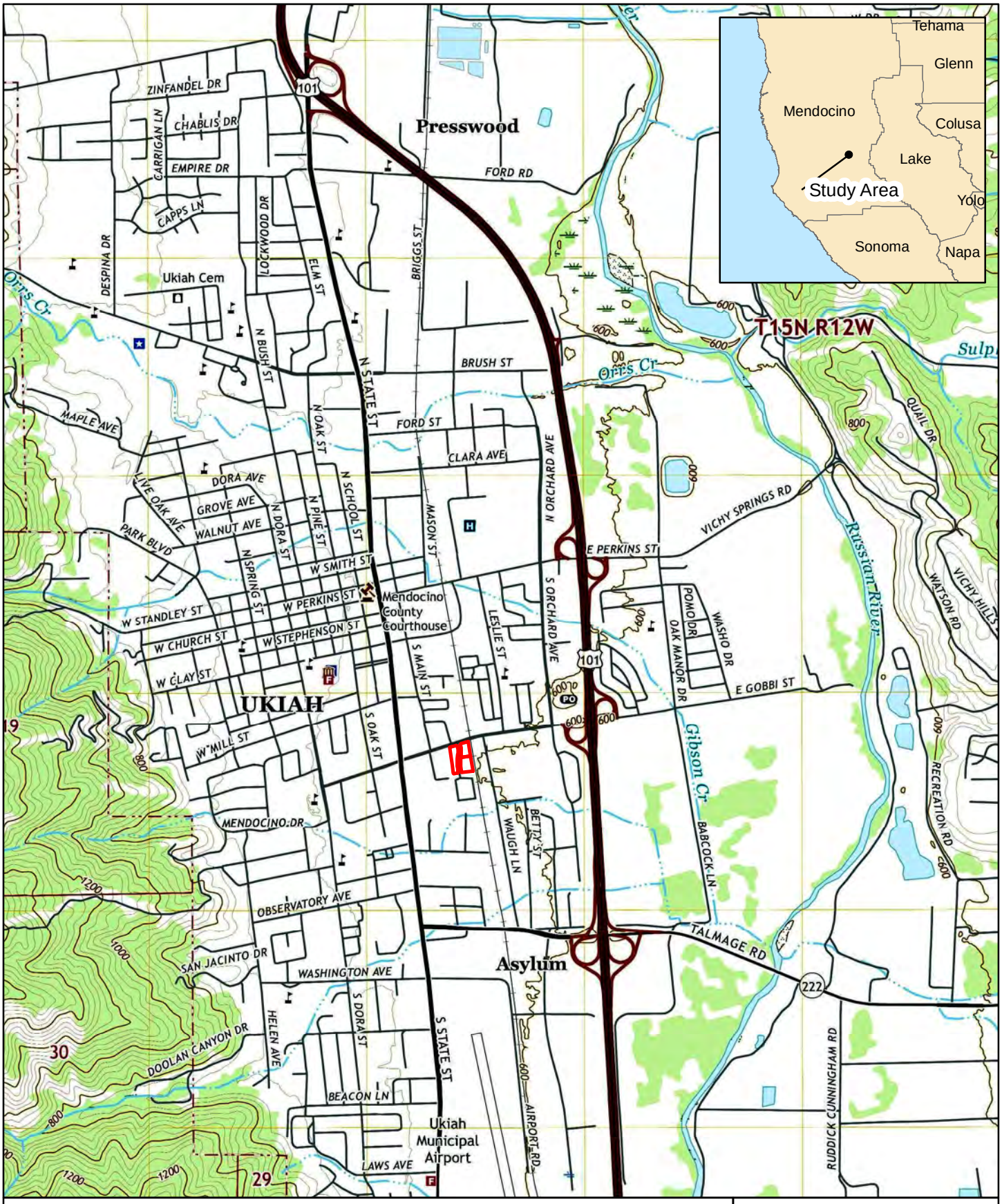
G.O. Graening, Ph.D., M.S.E.

G. O. Graening holds a Ph.D. in Biological Sciences and a Master of Science in Biological Engineering and is a certified professional in storm water quality (EnviroCert Int'l). Dr. Graening has 30 years of experience in environmental assessment and research, including the performance of numerous wetland delineations and aquatic restoration projects. Dr. Graening also serves as an adjunct professor of biology at California State University Sacramento and is an active researcher in the area of conservation biology and groundwater ecology.

Timothy R.D. Nosal, M.S.

Mr. Nosal holds a B.S. and M.S. in Biological Sciences. Mr. Nosal has statewide experience performing sensitive plant and animal surveys in addition to terrestrial vegetation investigations. Mr. Nosal has over 25 years of experience in botanical surveys, environmental assessment, and teaching with employers that include California Department of Fish and Wildlife, State Water Resources Control Board, American River College, MTI College and Pacific Municipal Consultants. Mr. Nosal has intensive experience with the flora of the Pine Hill region includes leading numerous field trips exploring the botany of the region, co-authoring a fuel management plan for Pine Hill, and a Master's thesis on Stebbins's morning glory (*Calystegia stebbinsii*), an endangered plant of this region.

7.0 Exhibits



Study Area

0 0.25 0.5 Miles

1:24,000

210 E. Gobbi Street
Study Area Location Map

Natural Investigations Company

Map Date 4/19/2022

Ukiah 2022 Quadrangle:Township 15N, Range 12W, Unsectioned Yokaya


Parcel boundaries
Vegetation Community Types
Wet meadow
Urbanized/developed
Habitat Types
210 East Gobbi Street, Ukiah
Natural Investigations Company
N
200 ft

210 E. Gobbi Street
CNDDB Special-Status Species Occurrences

Study Area

0 0.5 1 Miles

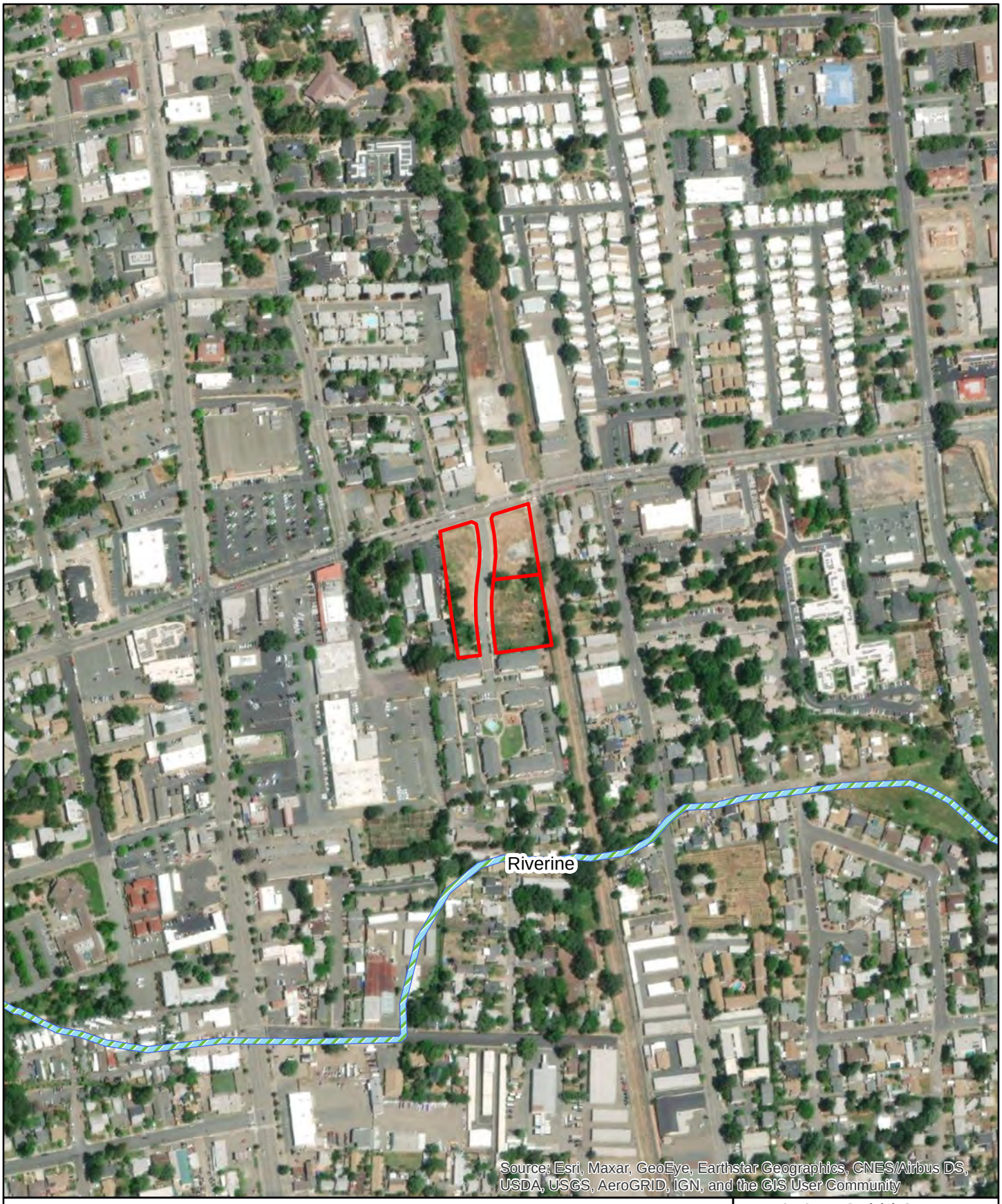
Raiche's manzanita
foothill yellow-legged frog
red-bellied newt
western pond turtle
North American porcupine
Baker's meadowfoam

NATURAL INVESTIGATIONS COMPANY

Map Date 4/19/22

Service Layer Credits: 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

Data Sources: California Department of Fish and Wildlife. 2022. RareFind 5.x, California Natural Diversity Data Base. Biogeographic Data Branch, Sacramento, California. (updated monthly by subscription service)



Study Area

Wetlands and Channels

0 300 600 Feet

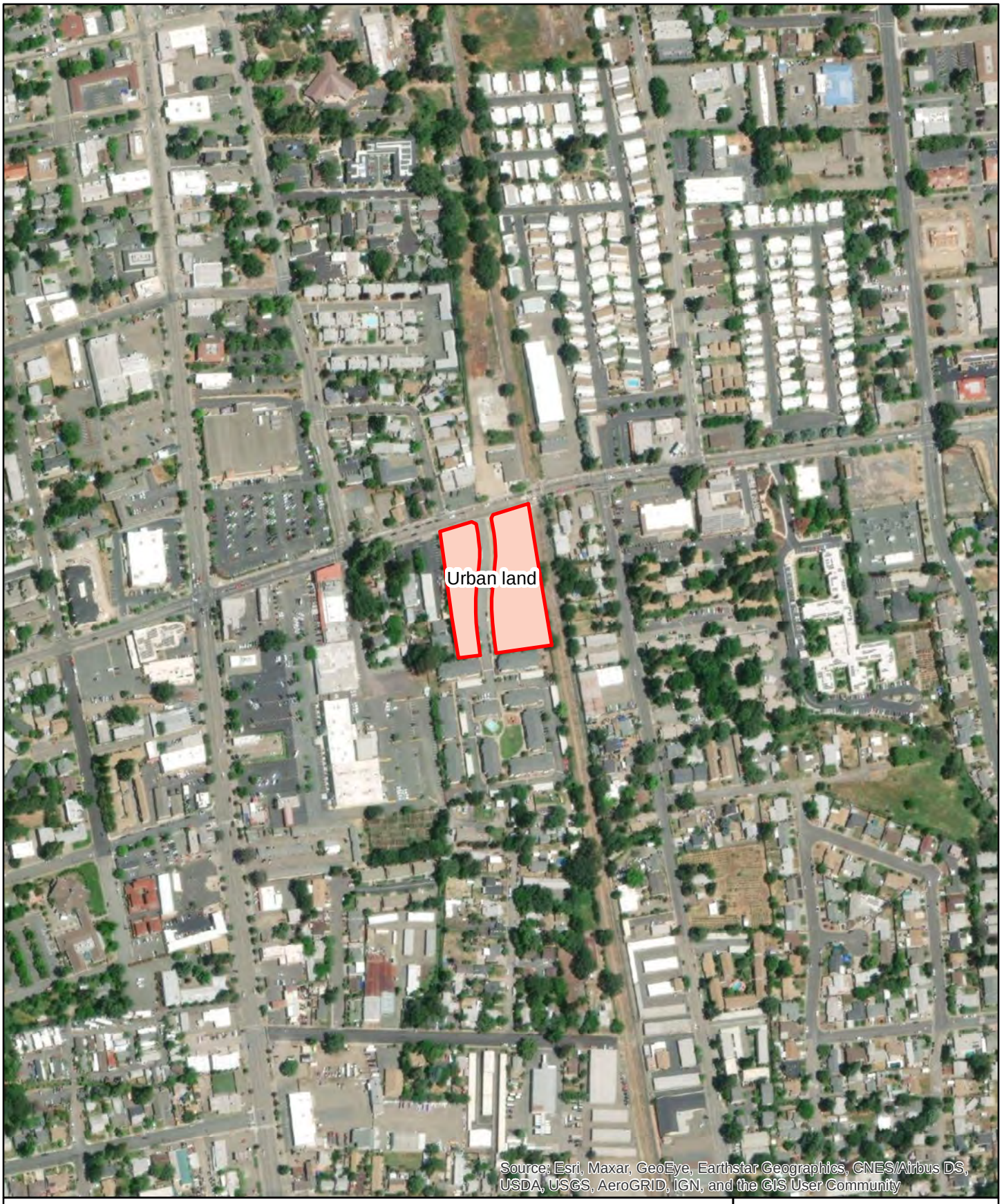
1:5,000

210 E. Gobbi Street National Wetlands Inventory Features Map

Natural Investigations Company

Map Date 4/19/2022

Ukiah 2022 Quadrangle:Township 15N, Range 12W, Unsectioned Yokaya



Study Area

0 300 600 Feet

1:5,000

210 E. Gobbi Street
USDA Soils Map

Natural Investigations Company

Map Date 4/19/2022

Ukiah 2022 Quadrangle:Township 15N, Range 12W, Unsectioned Yokaya

Aquatic Resources Classification			Aquatic Resource Size		
Aquatic Resource Name	**Cowardin**	**Location (Lat/Long)**	**(sq. ft.)**	**(acre)**	**(linear feet)**
Channels					
none		n/a	0	0.000	0
		Total Channels	0	0.000	0
Wetlands					
Seasonal wetland	PUB3E0	39.14312°/-123.20369°	1365	0.031	
		Total Wetlands	1365	0.031	

Stormwater culvert or drop inlet

Parcel Boundary

Wetland

Data Points

N

0 50 100 feet

Aquatic Resources Delineation Map
210 East Gobbi Street, Ukiah

Delineator: Dr. G.O. Graening, July 11, 2022

Natural Investigations Company

8.0 Appendix A – Wetland Delineation Field Data Sheets

DATA FORM - ROUTINE WETLAND DETERMINATION

Project ID: #1122
Client: 210 E. Gobbi Street, Ukiah
Investigator: Tim Nosal
Do normal circumstances exist on the site?
Is it an atypical situation?
Is the area a potential problem area?

Date: July 5, 2022
State: CA
County: Mendocino
Township, Range, Section: T 15N R 12W - Unsectioned Yokaya
Plant Community:
Sample Plot: 1 - in

VEGETATION

Tree stratum	% Cover	Dominant?	Indicator status
Populus	5	N	FACW
Catalpa speciosa	1	N	FAC

Shrub stratum	% Cover	Dominant?	Indicator status
Rubus arm	5	N	FAC

Hebaceous stratum	% Cover	Dominant?	Indicator status
Juncus	70	Y	OBL
Cyperus	5	N	FACW
Festuca pra	15	Y	FAC
Phalaris aquatica	25	Y	FACU
Vinca	5	N	-NI

Percent of dominant species that are OBL, FACW, or FAC (excluding FAC-): 2 of 3 = 67 %

Comments:

HYDROLOGY

Depth of surface water: —
Depth to free water in pit:
Depth to saturated soil:

Primary Indicators:		Secondary Indicators:	
	Inundated		Oxidized rhizosphere in upper 12 in.
	Saturated in upper 12 in.		
✓	Water marks	✓	Water-stained leaves
✓	Drift lines		Local soil survey data
✓	Sediment deposits		FAC neutral test
	Drainage patterns in wetlands		Other

Comments: Site was dry in July - but wet during May 10 visit

SOILS

Mapped Soil Unit: Urban Land
Taxonomy: N/A
Matches Profile? Yes
Drainage Class: N/A

Depth	Matrix Color	Mottle Color	Mottle Abundance, Size, Contrast	Soil Texture
0-3"	5YR 2.5/1			Clayey loam
3-16"	7.5YR 3/2			Silty loam

	Histol		Reducing conditions (test)	✓	Gleyed
	Histic epipedon		High organic content surface layer		Organic streaking
	Sulfidic odor		Redox concentrations (w/in 10")		Organic pan
✓	Probable aquic moisture regime		Concretions (w/in 3", >2mm)		On hydric soils list

Comments: Upland

WETLAND DETERMINATION

Hydrophytic Vegetation? ✓
Hydric Soils? ✓
Wetland Hydrology? ✓

Is this sample plot within a wetland? Yes

Comments:

DATA FORM - ROUTINE WETLAND DETERMINATION

Project ID: #1122
Client: 210 E. Gobbi Street, Ukiah
Investigator: Tim Nosal
Do normal circumstances exist on the site?
Is it an atypical situation?
Is the area a potential problem area?

Date: July 5, 2022
State: CA
County: Mendocino
Township, Range, Section: T 15N R 12W - Unsectioned Yokaya
Plant Community:
Sample Plot: 2- Out

VEGETATION

Tree stratum	% Cover	Dominant?	Indicator status

Shrub stratum	% Cover	Dominant?	Indicator status

Hebaceous stratum	% Cover	Dominant?	Indicator status
Avena	40%	Y	UPL
Phyla	5%	N	FACW
Rhaphanus	10%	Y	FACU

Percent of dominant species that are OBL, FACW, or FAC (excluding FAC-): 0 of 2 = 0 %

Comments: Site recently mowed. Observed vegetation similar to notes from 5-10-22

HYDROLOGY

Depth of surface water: —
Depth to free water in pit:
Depth to saturated soil:

Primary Indicators:		Secondary Indicators:	
	Inundated		Oxidized rhizosphere in upper 12 in.
	Saturated in upper 12 in.		
	Water marks		Water-stained leaves
	Drift lines		Local soil survey data
	Sediment deposits		FAC neutral test
	Drainage patterns in wetlands		Other

Comments: Located on bench above wetlands

SOILS

Mapped Soil Unit: Urban Land
Taxonomy: N/A
Matches Profile? Yes
Drainage Class: N/A

Depth	Matrix Color	Mottle Color	Mottle Abundance, Size, Contrast	Soil Texture
0-3	10R 3/1	-	-	Loam
3+	10R 3/1	-	-	Sandy gravelly loam

Histol	Reducing conditions (test)	Gleyed
Histic epipedon	High organic content surface layer	Organic streaking
Sulfidic odor	Redox concentrations (w/in 10")	Organic pan
Probable aquic moisture regime	Concretions (w/in 3", >2mm)	On hydric soils list

Comments: Upland - Soil appears to be fill material - Very stony/Gravelly

WETLAND DETERMINATION

Hydrophytic Vegetation? No
Hydric Soils? No
Wetland Hydrology? No

Is this sample plot within a wetland? No

Comments:

9.0 Appendix B – Photos from Field Delineation


INCOGNITO








VILLAGE CIRCLE