WETLAND DELINEATION REPORT

Humboldt County APN 104-321-001
Petrolia, CA.

May 14th, 2021

Prepared for

Empress Farms, LLC

Prepared by

Joe Seney, Wetland Scientist
California Professional Soil Scientist #243

In Conjunction with

Naiad Biological Consulting

Date Prepared

May 17, 2021

Table of Contents

Executive Summary

Landowners and associated contractors are preparing conceptual designs to evaluate design alternatives for construction of cannabis agricultural facilities. The landowner requested assistance in identifying, mapping, and conducting functional assessments for wetlands within the project as part of the anticipated compliance requirements. Wetland scientist Joe Seney and conducted an investigation of aquatic resources and delineated wetlands on Humboldt County parcel APN 104-321-001 on May 14th, 2021. The wetland map and associated data will help to evaluate potential infrastructure development, regulatory compliance documents, prepare wetland restoration alternatives, and assist in preparing applications for section 401/404 permits under the Clean Water Act through the North Coast Regional Water Control Board.

Wetlands within the parcel were mapped based on the presence of all three USACE parameters, hydric soil, wetland hydrology and hydrophytic vegetation for determining wetlands. Wetland boundary locations are based on plot data and a LiDAR derived one foot elevation contour map. In addition, we relied on depth to redoximorphic soil features and presence of wetland hydrology indicators in determining placement of wetland/upland boundary. Much of the vegetation within the project area is disturbed and is predominantly non-native grasses, which are not a strong indicator of wetland/upland boundaries. In addition, I conducted a historical review using images posted on the Humboldt County GIS website. The 2005 NAIP imagery clearly display a Class III channel where I mapped the depressional wetland that will be discussed below. The channel appears to run from southwest to the northeast and connects with a channel draining the upper field (Image 6). The 2018 imagery suggests that the Class III channel no longer exists and the depressional wetland area was significantly disturbed. Vegetation was cleared downslope of the spring and a road at the base of the slope became evident (Image 6).

There are approximately 0.34 acres of wetland within the 17.4 parcel; a 0.23-acre depressional wetland and 0.11-acre spring feed slope wetland. I did not assess the eastern half of the parcel. The water regime in the depressional wetland is seasonally ponded and shallow saturated soils, although surface water may not be present in the wet part of the growing season if precipitation amounts are significantly below “normal” or heavy rainfall events do not occur (Images 1 through 4). Soils are moderately compacted at a depth of five to nine inches, which significantly impedes infiltration of surface flood/ponded water in the southern wetland. Soils consist of a five to seven inches thick surface layer with moderate to high infiltration rates, that are probably a result of the field being disced in the spring of 2019 (Image 5). The subsurface layer, from five to seventeen inches was moderately compacted in five of the seven soil profiles described. In hydric soil profiles, redoximorphic features were only found in the compacted soil layers. Vegetation is primarily non-native grasses.

The water regime in the spring feed slope wetland is seasonally saturated, but surface water “daylighting” on the downhill slope may only occur in only high precipitation/runoff years. Of the two soil profiles I examined, both did not exhibit a hydric soil indicator or Wetland Hydrology Indicators. To confirm Wetland Hydrology a site inspection is needed during the wet part of the growing season in a “normal” precipitation year. Soils were very dark brown to black, were not compacted and contained numerous gravel and cobble size rounded to subangular rock fragments. Both plots had hydrophytic vegetation with common rush and pennyroyal forming a somewhat continuous line downslope where I believe groundwater is daylighted in wet years.

Introduction

Landowners and associated contractors are preparing conceptual designs to evaluate design alternatives for construction of Cannabis agricultural facilities. The landowner requested assistance in identifying and mapping of wetlands within the parcel as part of the anticipated compliance requirements. Wetland scientist Joe Seney and conducted an investigation of aquatic resources and delineated wetlands on Humboldt County parcel APN 104-321-001 on May 14th, 2021. The wetland map and associated data will help to evaluate potential infrastructure development, regulatory compliance documents, prepare wetland restoration alternatives, and assist in preparing applications for section 401/404 permits under the Clean Water Act through the North Coast Regional Water Control Board.

The parcel is located in Humboldt County, California, near the town of Petrolia. (Figure 1). This parcel is located approximately five air miles southeast of Petrolia, California within the Buckeye Mtn. 7.5-minute quadrangle in the Mattole River Watershed. The Parcel is approximately 17.4 acres in size.

Wetland Scientist Qualifications

The wetland delineation for this Report was conducted by Joe Seney, a contracted wetland/soil scientist. Joe has over 28 years of experience working as a wetland/soil scientist for the USDI National Park Service, USDA National Resources Conservation Service and USDA Forest Service. In addition, he has taught soils and hydrology courses at Humboldt State University since 2007. Joe has an MSc. in Earth Sciences and a PhD (unfinished) in Soils with a supporting field of Plant Ecology.

Methods

The survey was conducted in accordance with the three-parameter method of the U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual and the 2010 Regional Supplement: Western Mountains, Valleys and Coast Region (Version 2.0) (USACE, 1987 and 2010). The US Army Corps of Engineers and North Coast Regional Water Quality Board regulates wetlands and other waters under section 404 of the Clean Water Act (CWA). The USACE defines "wetlands" as those areas that exhibit hydric soils, hydrophytic vegetation, and wetland hydrology. For purposes of identifying wetlands protected under the CWA when requesting a Nationwide or Individual CWA Permit from the USACE, wetland maps should be no more than five years old. The Army Corps of Engineers also has jurisdiction and permit authority over other "Waters of the U.S." – those additional aquatic systems such as streams, rivers, and mudflats, which are also protected by the CWA. The State of California has jurisdiction and permit authority over “Waters of the State”, which includes “isolated wetlands”.

Climate

Climate exerts an influence on soil, hydrology, and vegetation at regional, local, and micro-scales Regionally, cool, wet winters and nearly rainless summers characterize the climate of Humboldt County, California. Precipitation in the region follows a very strong seasonal pattern of a wet season (October to May) and a dry season (June to September). The average annual precipitation recorded at the Petrolia Weather Station, California is 57 inches, with approximately 95% falling in the wet season. From January through April 2021, the area received 33.1 inches of precipitation compared to the usual

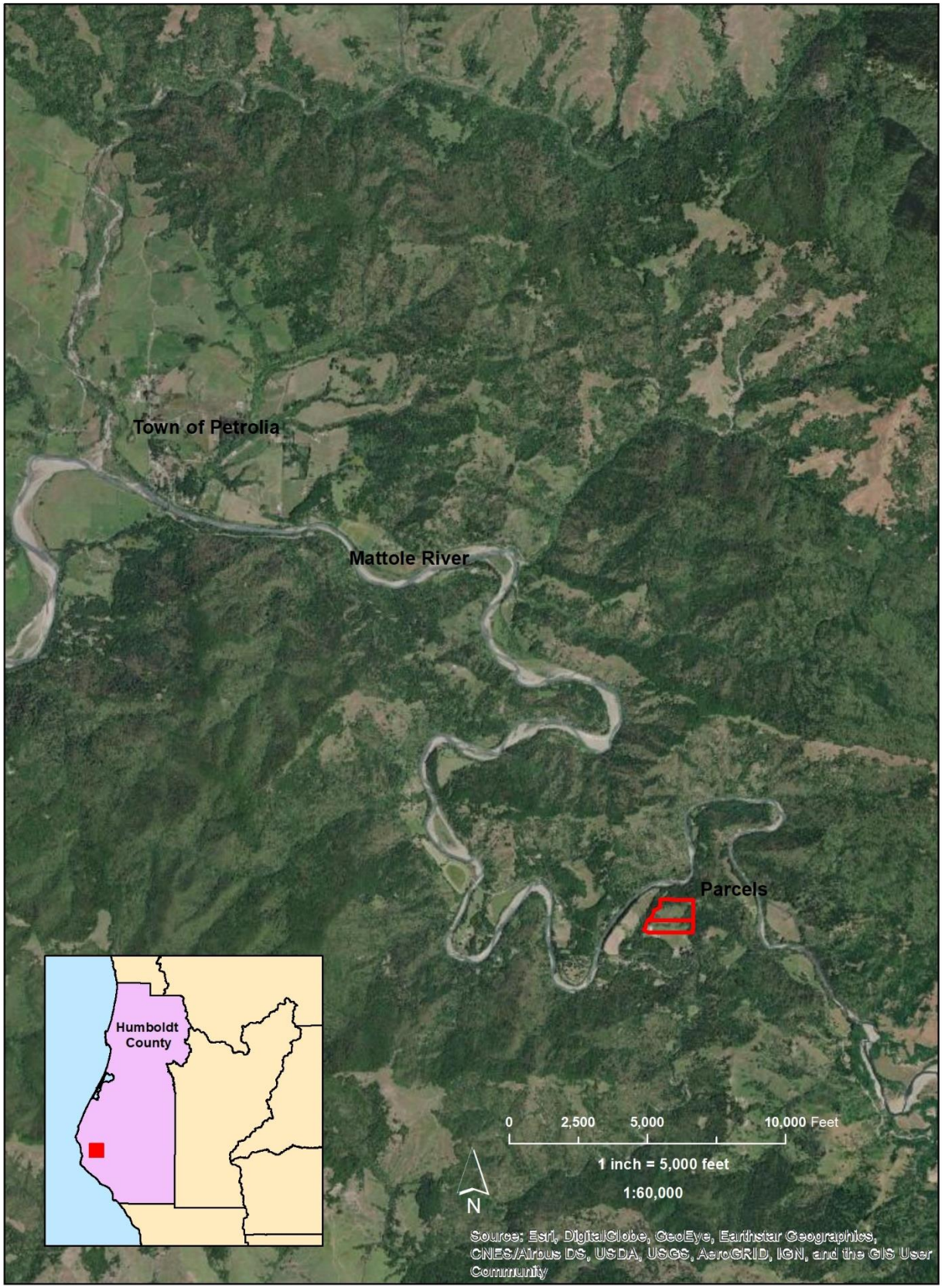


Figure 1 . Parcel Location Map

Table 1. Monthly mean precipitation amounts (inches) for January through March 2021, the five year 2016-2021 "Normal" and the 2016-2021 period of record and standard deviation. Petrolia Weather Station, Petrolia, California.

Year(s)	Jan	Feb	Mar	Apr	Total
2021	14.7	8.3	9.4	0.7	33.1
2016-2021	15.4	12.3	8.2	5.2	41.1
SD (2016-2021)	3.9	12.6	5.1	3.5	

41.1 inches of 2016-2021 mean, approximately 19% below average. The last measurable (0.01") rainfall occurred on May 7th, 2021.

Wetland Hydrology

Presence or absence of wetland hydrology is one of the three parameters used by the 1987 USACE manual (along with hydric soils and hydrophytic vegetation) to delineate wetland boundaries. Although wetland hydrology indicators are important in delineating wetlands, they are the least credible compared to soil and vegetation indicators due to variability of seasonal and local weather patterns that influence hydrology. Wetland hydrology exists at a site when it is flooded, ponded, or has groundwater within 12 inches of the ground surface for 14 or more consecutive days during the growing season in at least 5 out of 10 years. Wetland hydrology is the most seasonal and transitory of the three parameters.

The USACE manual describes primary and secondary wetland hydrology "indicators" that allow delineators to evaluate hydrology throughout the growing season, even late in the dry season when saturation in the upper part of the soil may no longer be present. Examples of primary indicators include surface water, a high-water table (groundwater within 12 inches of soil surface), soil is saturated, oxidized iron along live root channels or on live root surfaces, and iron deposits. Examples of secondary indicators include presence of a "dry season water table" between 12 and 24 inches below the ground surface, a shallow aquitard, a dense layer within 24 inches of the soil surface, the FAC Neutral Test, and "geomorphic position" of the site (e.g., toe slopes, drainageways, depressions, and swales). The presence of one primary or two secondary indicators confirms wetland hydrology.

Hydric Soils

The 1987 *Wetlands Delineation Manual* (USACE 1987) suggests evaluating existing soil maps before conducting in-field wetland delineations. Soils mapped in the parcel are primarily are the Parkland and Garberville Soil Series. These soils form in alluvium derived from mudstone, sandstone and conglomerate and are found on fluvial terraces throughout Southern Humboldt County. Empress Farms parcels are located on strath terraces, which consist of a thin veneer of cobbly and loamy alluvium, approximately 10 to 15 feet thick, overlain on sandstone bedrock. Due to the limited soil water holding capacity, strath terraces tend to have springs at the break in slopes where landforms transition from a

strath terrace to a lower elevation strath terrace. For example, the spring on Empress Farms terrace riser, or the transition from sandstone cored hillslopes, as exhibited on the higher elevation strath terrace on Empress Farms property. After a series of significant rainfall events over a short time period, rainfall and runoff from the surrounding landscape drains on to the strath terraces, soils reach their maximum water holding capacity, and the remaining water drains through subsurface flow, surface channels, ditches or via overland flow. Image 7 shows an overland flow event that occurred in January 2021 after approximately five inches of rainfall was received during a two-day period (NRM, 2021; Water Investigation Report).

Parkland soils are very deep (>60" to bedrock) moderately well drained (non-hydric soil), with redoximorphic features related to wet season saturation starting at a depth greater than 20 inches. Soil textures are loam or silt loam in the very dark brown or black surface horizons, and clay loam, sandy clay loam or silty clay loam to a depth of 60 inches. Garberville soils are very deep (>60" to bedrock) well drained (non-hydric soil), with redoximorphic features related to wet season saturation starting at a depth greater than 40 inches. Soil textures are loam or gravelly loam in the very dark brown or black surface horizons, and very gravelly sandy loam to clay loam to a depth of 60 inches.

Hydric soils are one of the three parameters used to delineate wetlands. Most hydric soils exhibit characteristic, identifiable morphologies that result from anaerobic conditions and persist in the soil during both saturated (reduced) and dry (oxidized) conditions in the upper 12 inches of soil. Examples include a mottled color pattern resulting from reduction and reoxidation of iron or manganese, and accumulation of organic matter due to increased plant production and slow decomposition rates in saturated environments. Hydric soil field indicators display characteristic morphologies as a result of the accumulation or loss of iron, manganese, sulfur, or carbon compounds in a saturated and anaerobic environment (USACE, 2010).

A soil pit was dug at each sampling point to a minimum depth of between 12 to 18 inches. For each soil profile examined we determined soil horizons, soil texture, soil moist color, described redoximorphic features present, and documented depth to groundwater and soil saturation if present. (NRCS, 2018).

Hydrophytic Vegetation

Predominance of "hydrophytic" (wetland) vegetation is one of the three parameters used to identify wetlands. According to the USACE wetland delineation procedures, calls regarding presence or absence of hydrophytic vegetation are based on the "wetland indicator status" of each dominant species in the plant community being evaluated. Lichvar and others (2016) classified plant species into indicator status categories ranked from wettest to driest as follows: Obligate (OBL), Facultative Wetland (FACW), Facultative (FAC), Facultative Upland (FACU), Upland (UPL), and Not Listed (NI). Plant communities are considered to be hydrophytic (wetland vegetation) if greater than 50 percent of the plant cover by dominant species are ranked as OBL, FACW, or FAC (Dominance Test). The FAC-Neutral Test was calculated and used as a Wetland Hydrology secondary indicator, and is essentially the same as the Dominance Test, but it disregards dominant facultative plant species.

Herbaceous wetlands consist primarily of tall fescue (*Schedononrus arundinaceus*, FAC), colonial bentgrass (*Agrostis capillaria*, FAC), and at wetter locations pennyroyal (*Mentha pulegium*, OBL) and common rush (*Juncus effusus*, FACW). Plant species identified in non-wetland areas include vernal grass (*Anthoxanthum odoratum,* FACU), slender wild oats *(Avena barbata, UPL),* sheep sorrel *(Rumex*

Table 1. Plant Species Identified during field work

Scientific Name	**Common Name**	**Wetland Plant Status**
Agrostis capillaria	colonial bentgrass	FAC
Anthoxanthum odoratum	vernal grass	FACU
Avena barbata	slender wild oat	UPL
Briza minor	little quaking grass	FAC
Bromus hordeaceus	soft chess	FACU
Juncus effusus	common rush	FACW
Mentha pulegium	pennyroyal	OBL
Rubus armeniacus	Himalayan blackberry	FAC
Rumex acetosella	sheep sorrel	FACU
Schedononrus arundinaceus	tall fescue	FAC
Trifolium tomentosum	wooly clover	FACU
Vulpia bromoides	brome fescue	FAC

acetosella, FACU), brome fescue *(Vulpia bromoides,* FAC*),* Himalayan blackberry *(Rubus armeniacus,* FAC) and minor amounts of tall fescue.

Results

Wetlands within the parcel were mapped based on the presence of all three USACE parameters, hydric soil, wetland hydrology and hydrophytic vegetation for determining wetlands. Wetland boundary locations are based on plot data and a LiDAR derived one foot elevation contour map. In addition, we relied on depth to redoximorphic soil features and presence of wetland hydrology indicators in determining placement of wetland/upland boundary. Much of the vegetation within the project area is disturbed and is predominantly non-native grasses, which are not a strong indicator of wetland/upland boundaries. In addition, I conducted a historical review using images posted on the Humboldt County GIS website. The 2005 NAIP imagery clearly display a Class III channel where I mapped the depressional wetland that will be discussed below. The channel appears to run from southwest to the northeast and connects with a channel draining the upper field (Image 6). The 2018 imagery suggests that the Class III channel no longer exists and depressional wetland area was significantly disturbed. Vegetation was cleared downslope of the spring and a road at the base of the slope became evident.

There are approximately 0.34 acres of wetland within the 17.4 parcel (Figures 2 and 3). I did not assess the eastern half of the parcel.

Depressional Wetland in field adjacent to southern property boundary (0.23 acres)

This wetland is classified as a Palustrine Emergent Seasonally Ponded Wetland. The water regime is seasonally ponded and shallow saturated soils, although surface water may not be present in the wet part of the growing season if precipitation amounts are significantly below “normal” or heavy rainfall events do not occur (Images 1 through 4).

Soils are moderately compacted at a depth of five to nine inches, which significantly impedes infiltration of surface flood/ponded water in the southern wetland. Soils consist of a five to seven inches thick surface layer with moderate to high infiltration rates, that are probably a result of the field being disced in the spring of 2019 (Image 5). The subsurface layer, from five to seventeen inches were moderately compacted in five of the seven soil profiles described. In hydric soil profiles, redoximorphic features were only found in the compacted soil layers. In upland soil profiles, at a depth of greater than nine inches, the dominant soil color chroma was three or higher, suggesting no prolong soil saturation from shallow groundwater. Vegetation is primarily non-native grasses.

Of the five soil profiles I described, three wetland and two upland, three exhibited hydric soil field indicators. The primary hydric soil indicator identified was Redox Dark Surface (F6). In most soil profiles there were graywacke sandstone para-gravels, which are weakly cemented and depending on the state of weathering, can have an iron coating. Sometimes weathering para-gravel appear to be redoximorphic features related to prolong soil saturation but are not. Soil profile locations exhibited the following Wetland Hydrology indicators: concave slope shape or slope position (D2-Geomorphic Position) and surface water appears to be perching on a compacted subsurface layer of soil at concave to planar hillslope locations (D3-Shallow aquitard), and at one the plant community passed the FAC Neutral Test (D5). All five plots have hydrophytic vegetation. Non-native tall fescue is the dominant plant within this wetland. Its wetland status is facultative and tends to be found along the margin of herbaceous wetlands, both inside and outside the wetland boundary throughout Humboldt County.

Overall condition of this wetland is poor due to the presence of primarily non-native grasses and the lack of topographic complexity. The result is poor plant species diversity, poor plant community structural complexity and lack of varied landscape complexity resulting in fewer potential niche habitats.

Spring fed slope wetland (0.11 acres)

This wetland is classified as a Palustrine Emergent Seasonally Saturated Wetland. The water regime in this spring feed slope wetland is seasonally saturated, but surface water “daylighting” on the downhill slope may only occur in high precipitation/runoff years.

Of the two soil profiles/plots I examined, both did not exhibit a hydric soil indicator or Wetland Hydrology Indicators. To confirm Wetland Hydrology a site inspection is needed during the wet part of the growing season in a “normal” precipitation year. Soils were very dark brown to black, were not compacted and contained numerous gravel and cobble size rounded to subangular rock fragments. Both plots had hydrophytic vegetation with common rush and pennyroyal forming a somewhat continuous line downslope where I believe groundwater is daylighted in wet years.

Overall condition of this wetland is fair due to the presence of native shrubs and trees, although non-native grasses are present. The presence of highly invasive Himalayan blackberry is a concern.

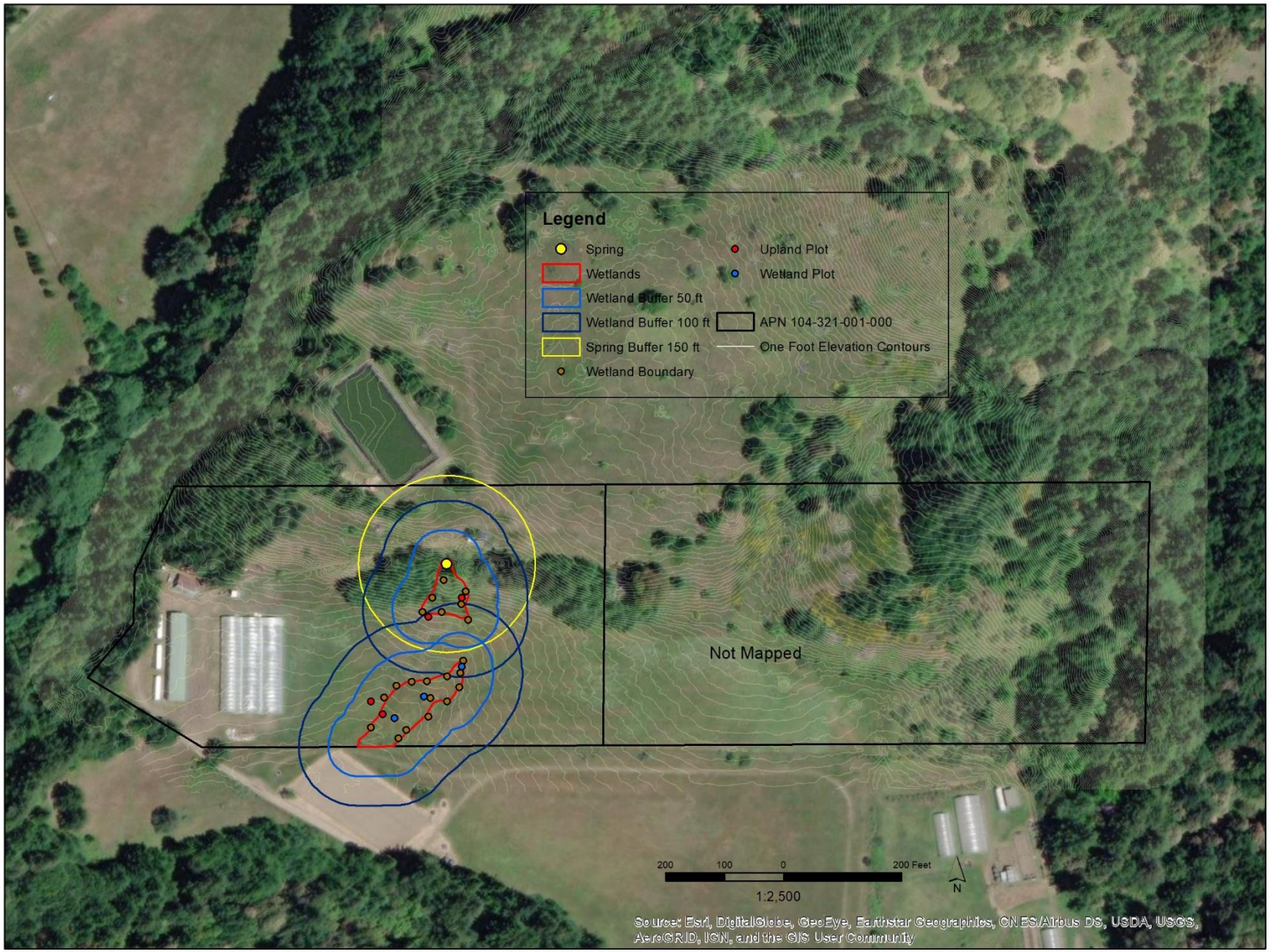


Figure 2. Wetland Delineation Map scale 1:2,500

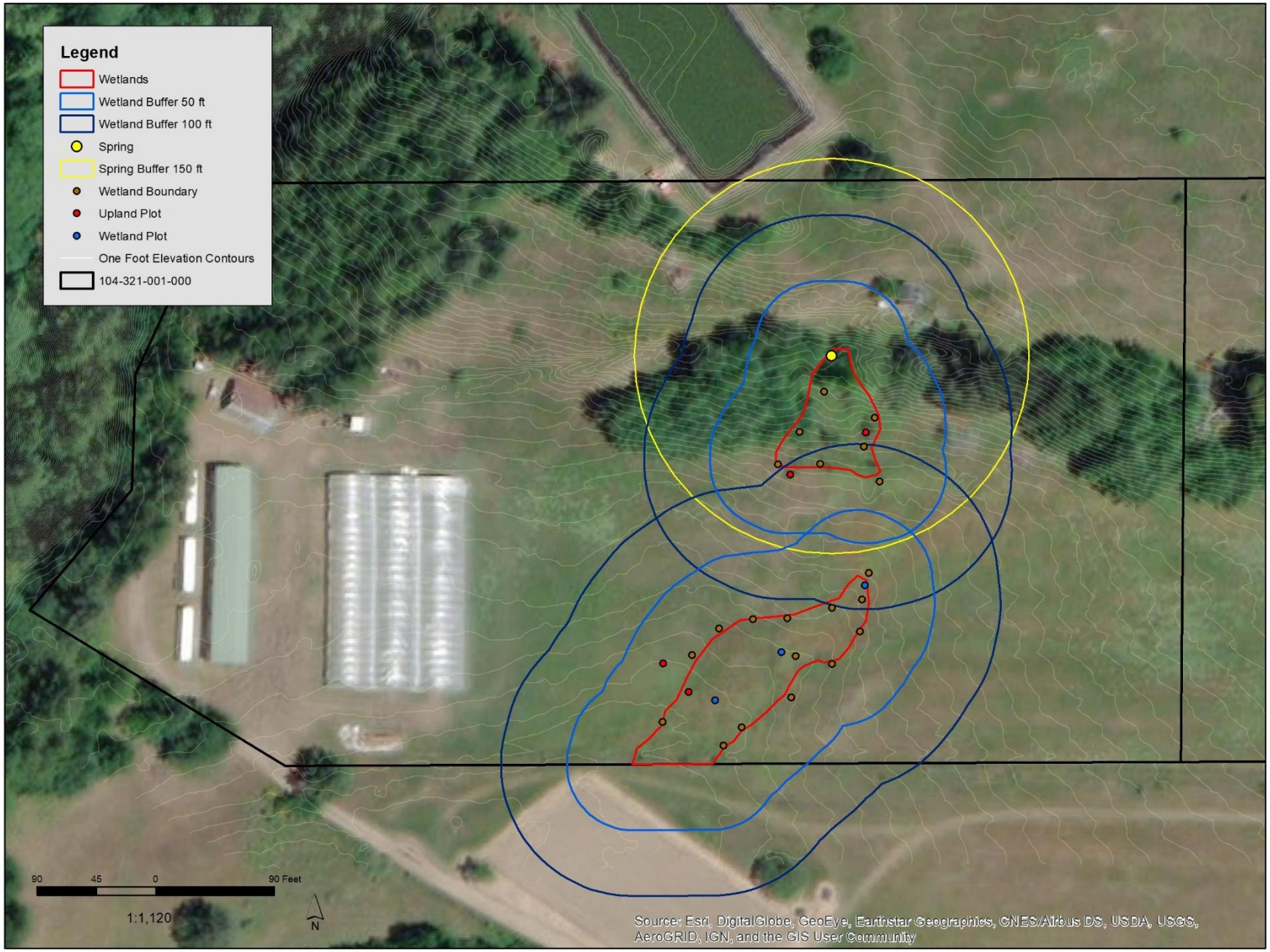


Figure 3. Wetland Delineation Map scale 1:1,120.

References Cited

Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, editors. 2012. The Jepson Manual: vascular plants of California, second edition. University of California Press, Berkeley CA

Cowardin, L. M., V. Carter, F. C. Golet, and E. T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of The United States. U.S. Fish and Wildlife Service. FWS/OBS-79/31. Washington, DC.

Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. The National Wetland Plant List: 2016 wetland ratings. Phytoneuron 2016-30: 1-17. Published 28 April 2016.

National Oceanic and Atmospheric Administration (NOAA). 2021. Agricultural Applied Climate Information System (AgACIS) Accessed from http://agacis.rcc-acis.org/. NOAA Regional Climate Centers. U.S. Department of Commerce. Washington, D.C.

Natural Resources Conservation Service (NRCS), United States Department of Agriculture. 2021. Web Soil Survey. Available online at the following link: https://websoilsurvey.sc.egov.usda.gov/. Accessed February 1st, 2021.

United States Army Corps of Engineers (USACE).2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)*. Washington, D.C.

United States Army Corps of Engineers (USACE).1987. *Corps of Engineers Wetlands Delineation Manual*. Washington, D.C.

Western Regional Climate Center, 2021. Web Access February 2021
https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca2910

Appendix A
Images

WETLAND DELINEATION REPORT

APN 104-321-001

May 2021

Image 1. Looking east across transition where spring water reaches soil surface, downslope from spring. Rushes, penny royal, Himalayan blackberry and vernal grass are most common plants. Soils do not exhibit redoximorphic features from prolong soil saturation, probably as result of the water is oxygenated and not stationary longer enough to induce anerobic conditions.

Image 2. Active ground animals strongly indicate non-hydric soil conditions and lack of soil saturation within 12 inches of soil surface.

Image 3. Patches of penny royal are reliable indicators of surface soil compaction and hydric soils.

Image 4. Wetland boundary is at transition from taller, more robust tall fescue plant community to shorter, less robust mixed grass-forb plant community. Both plant communities are growing into moderately compacted soils.

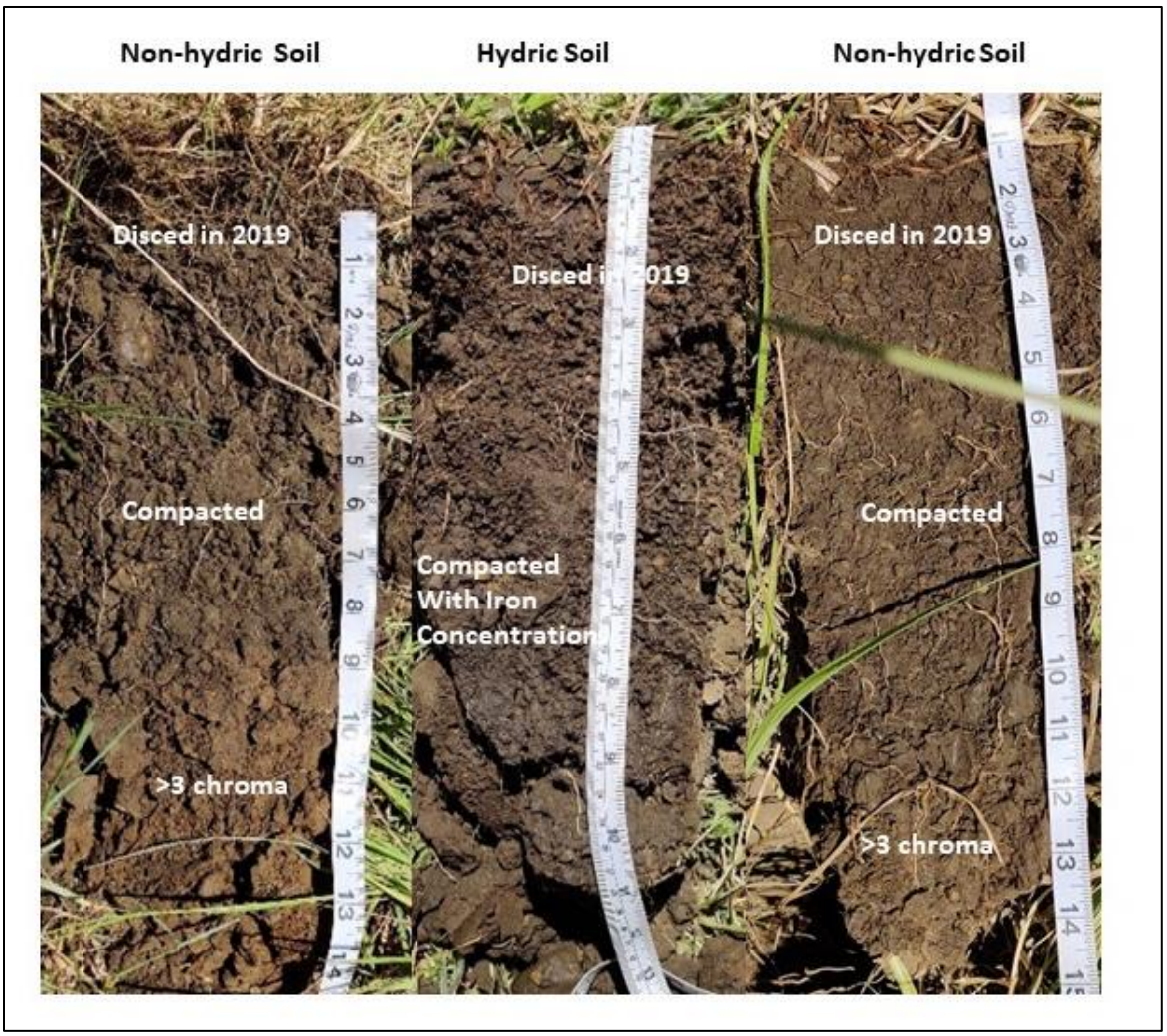
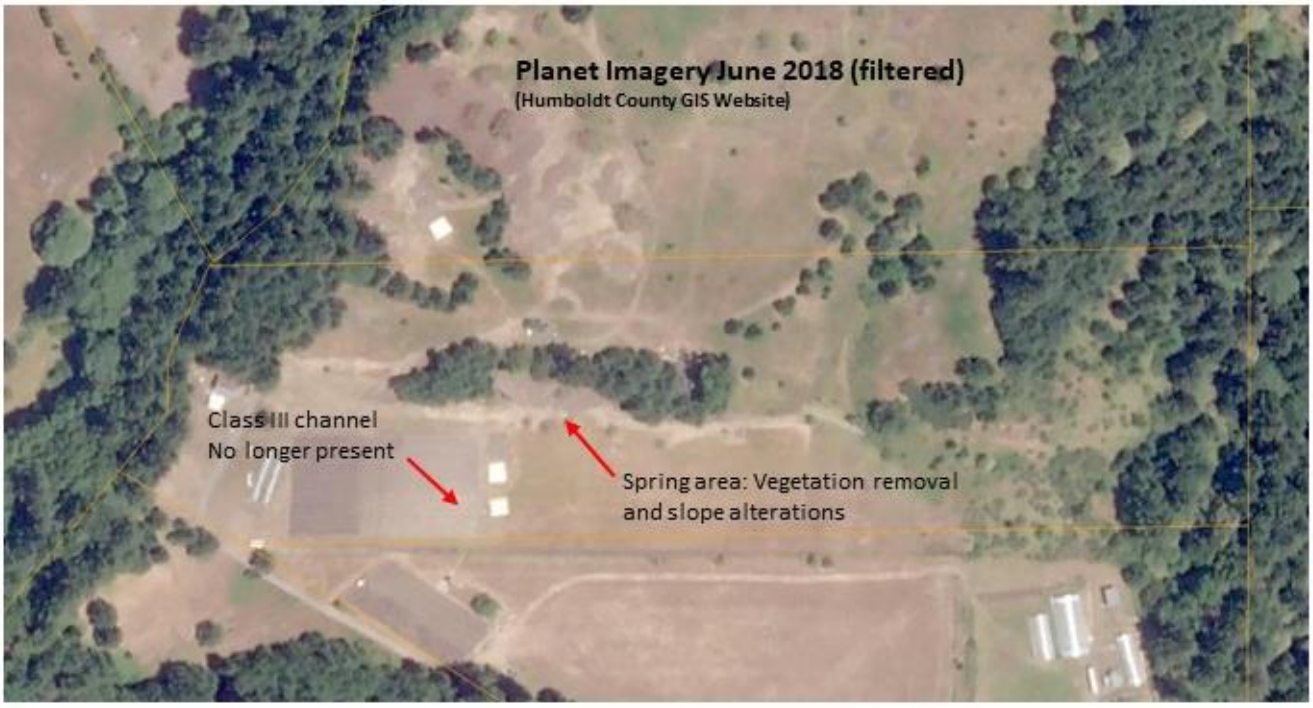


Image 5. Representative soil profiles for non-hydric and hydric soils.



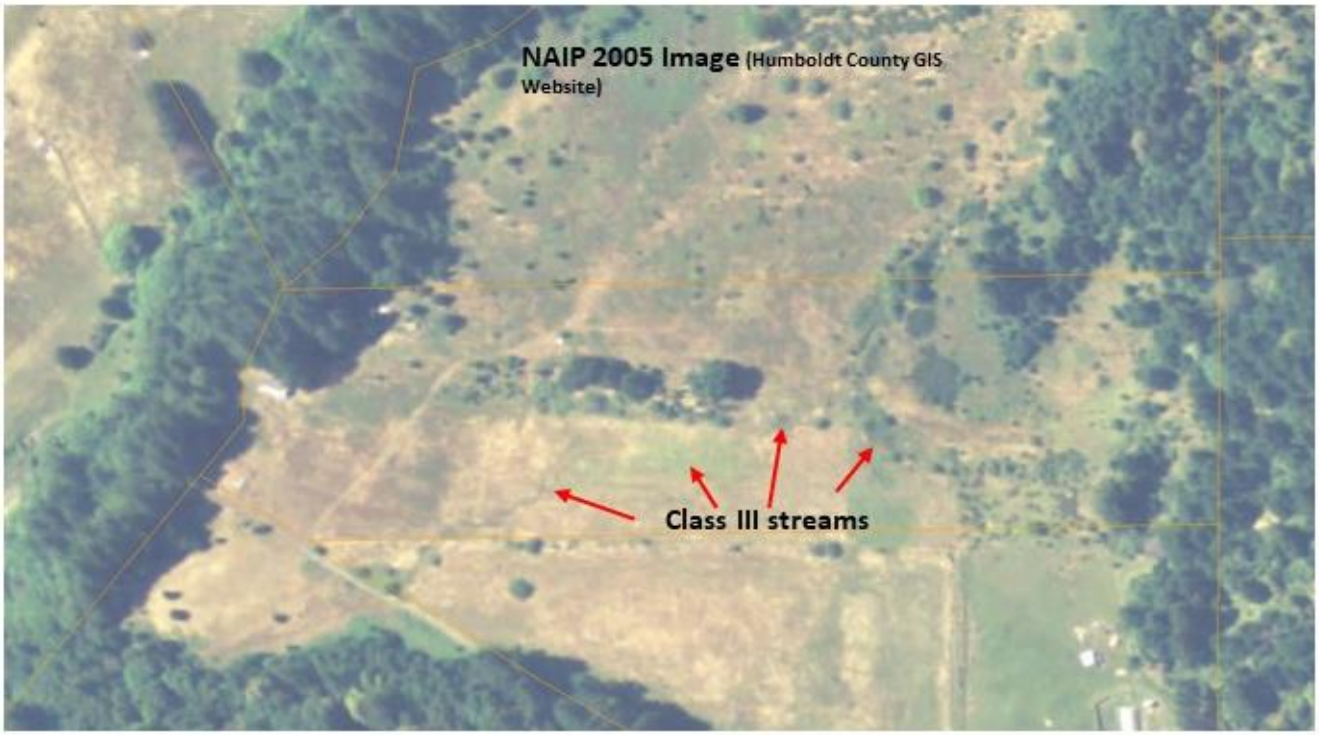


Image 6. NAIP 2005 image shows a Class III crossing through the parcel, northeast to southwest. Channel continues onto and through parcel to the southwest. The June 2018 image shows that the Class III is no longer present or active. Notice vegetation removal and road just south of spring.

Photo 3. Reach 1 flowing southwest across parcel to the north (APN 104-321-001-000). Looking north from property line

Photo 1. Reach 1 flowing southwest across parcel to the north (APN 104-321-001-000). Looking northeast from property line

Image 7. Photographs document surface flow during a January 2021 significant rainfall event of 5.41 inches over a 2-day period, Jan. 27th and 28th, (from Water Investigation Report, Natural Resources Management Corporation. Feb. 2021).

Appendix B
Plot Data

WETLAND DELINEATION REPORT

APN 104-321-001

May 2021

Table A. Summary of plot data 118-121.

Plot #	118	119	120	121
Wetland	no	no	yes	yes
Location	0396348	0396354	0396360	0396375
	4458686	4458680	4458678	4458689
Local Relief	planar	concave	concave	concave
Hydrology	yes	yes	yes	yes
Water Table	no	no	no	no
Saturation	no	no	no	no
Oxidized Rhizospheres	no	no	no	no
Geomorphic position	yes	yes	yes	yes
Indicators	D2, D3	D2, D3	D2, D3, D5	D2, D3
Soils				
Layer 1	0-5" l 10YR 2/2	0-5" l 10YR 2/2	0-4" l 10YR 2/2	0-5" l 10YR 3/2
Layer 2	5-12" l 10YR 2/2 compacted	5-9" l 10YR 2/2 compacted	4-9" 10YR 2/2 5% 10YR 4/6 compacted	5-9" l 10YR 3/2 5% 10YR 4/6 compacted
Layer 3	12-17" cl 10YR 3/2 compacted	9-15" cl 10YR 4/3 compacted	9-15" 10YR 4/3 compacted	9-15" cl compacted
Hydric Soil	no	no	yes	yes
Indicators	none	none	F6- redox dark surface	F6-Redox dark surface
Vegetation				
Species 1	*Trifolium tomentosum 25% FAC/**Dom***	*Schedononrus arundinaceus 60%*/FAC/**Dom**	*Schedononrus arundinaceus 60%*/FAC/**Dom**	*Schedononrus arundinaceus 95%*/FAC/**Dom**
Species 2	*Unknown 25% FACU/**Dom***	*Agroistis capillaria 35%*/FAC/**Dom**	*Mentha pulegium 35%*/OBL/**Dom**	*Agroistis capillaria 10%*/FAC
Species 3	*Vulpia bromoides 20% FAC/**Dom***	*Festuca perennis 3%*/FAC	*Vulpia bromoides 15% FAC*	*Anthoxanthum odoratum 3% FACU*
Species 4	*Avena barbata 15% UPL*	*Avena barbata 5% UPL*	*Anthoxanthum odoratum 15% FACU*	
Species 5	*Rumex acetosella 10% FACU*	*Vulpia bromoides 5% FAC*	*Agroistis capillaria 10%*/FAC	
Species 6	*Bromus hordeaceus 5% FAC*	*Anthoxanthum odoratum 5% FACU*		
Species 7	*Briza minor 1% FAC*	*Briza minor 1% FAC*		
Species 8				
Dominant Species	FACU, FACU, FAC	FAC, FAC	FAC, OBL	FAC
Hydrophtyic Vegetation	no	yes	yes	yes
Pass FAC Neutral Test	no	no	yes	no

Wetland Hydrology Indicators: A2 = Water Table; A3 = Saturation; C3 = Oxidized rhizospheres along living root channels; D2 = Geomorphic position, D3 Shallow aquitard and D5 = Passes FAC Neutral Test

Table B. Summary of plot data 122-124.

Plot #	122	123	124
Wetland	yes	no	no
Location	0396401	0396395	0396378
	4458719	4458740	4458730
Local Relief	concave	convex	convex
Hydrology	yes	no	no
Water Table	0	no	no
Saturation	0	no	no
Oxidized Rhizospheres	0	no	no
Geomorphic position	yes	no	no
Indicators	D2, D3	none	none
Soils			
Layer 1	0-5" l 10YR 3/2	0-7" l 10YR 3/2	0-7" l 10YR 3/2
Layer 2	5-12" cl 10YR 3/2 10% 7.5YR 4/6 compacted	7-20" grl 10YR 2/2	7-15" grl 10YR 2/2
Layer 3	12-17" cl 10YR 2/2 10% 7.5YR 4/4 compacted		
Hydric Soil	yes	no	no
Indicators	F6-Redox dark surface	none	none
Vegetation			
Species 1	*Schedononrus arundinaceus 95%*/FAC/**Dom**	*Anthoxanthum odoratum 50% FACU/**Dom***	*Avena barbata 30% UPL/**Dom***
Species 2	*Agroistis capillaria 10%*/FAC	*Mentha pulegium 20%*/OBL/**Dom**	*Juncus effusus 25% FACW/**Dom***
Species 3	*Anthoxanthum odoratum 10% FACU*	*Rubus armeniacus 25% FAC/**Dom***	*Rubus armeniacus 20% FAC/**Dom***
Species 4		*Agroistis capillaria 10%*/FAC	*Bromus hordeaceus 15% FAC*
Species 5		*Juncus effusus 5% FACW*	
Species 6			
Species 7			
Species 8			
Dominant Species	FAC	FACU, OBL, FAC	UPL, FACW, FAC
Hydrophtyic Vegetation	yes	yes	yes
Pass FAC Neutral Test	no	no	no