

AQUATIC RESOURCES DELINEATION REPORT

2725 & 2707 Central Ave, McKinleyville, 95519, Humboldt County, CA

Assessor Parcel Number (APN):

510-081-002-000 & 510-081-001-000



Prepared For:

Black Dog Partnership

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McKinleyville, CA, 955

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Date Prepared:

January 7th, 2026

Certification I certify that the information and conclusions presented in this wetland delineation and aquatic resources report are based on my direct observations, data collection, and professional analysis, and are true and correct to the best of my knowledge, judgment, and belief.

X

A handwritten signature in cursive script, reading "Mason London".

Mason London, MSc Biology

Naiad Biological Consulting Principal Biologist

Table of Contents

Section 1 Executive Summary	3
Section 2 Introduction, Background, and Project Understanding	4
2.1 Purpose and Need	4
2.2 Delineator's Qualifications	4
2.3 Study Area Description and Geographic Setting	5
Section 3 Regulatory Framework	8
3.1 Federal Regulatory Framework.....	8
3.2 California State and Regional Regulatory Framework	8
3.2.1 California Department of Fish and Wildlife	8
3.2.2 North Coast Regional Water Quality Control Board	9
3.3 Local Regulatory Framework and One-Parameter Wetlands.....	9
Section 4 Methods	10
4.1 Pre-Site Visit Data Compilation and Preparation	10
4.2 Field Survey	11
4.2.1 Soils	12
4.2.2 Hydrology	12
4.2.3 Vegetation	13
Section 5 Results	14
5.1 Aquatic Resources	14
5.1.1 Watercourses	14
5.1.2 Wetlands.....	16
5.1.2.1 Soils.....	16
5.1.2.2 Hydrology	17
5.1.2.3 Vegetation	17
Section 6 Conclusions, Discussion, and Recommendations.....	19
6.1 Conclusions	19
6.2 Discussion.....	19
6.3 Recommendations.....	20
6.4 Conditions and Limitations	20
Section 7 References.....	22
Appendices:	
Appendix A – Web Soil Survey Map and Report	
Appendix B – National Wetland Mapper	
Appendix C – Antecedent Precipitation Tool Graph	
Appendix D – Wetland Determination Data Forms	
Appendix E – Prior Wetland Delineation Data	

FIGURES

Figure 1. Study Area Locator Map.....	6
Figure 2. Wetland and aquatic resources delineation overview for the Black Dog Residential Development, McKinleyville, Humboldt County, California. The map depicts areas previously evaluated by Streamline Planning (2015) and SHN (2020), as well as the portion of the Study Area requiring additional delineation effort that was evaluated as part of the current study (December 5, 2025).	7
Figure 3. Aerial view of the Study Area showing Assessor's Parcel Numbers 510-081-001-000 and 510-081-002-000 in McKinleyville, Humboldt County, California. The map depicts parcel boundaries, locations of four wetland delineation plots (P1–P4), and areas evaluated as part of the current delineation effort. All delineation plots shown were determined to be non-wetland based on field observations conducted on December 5, 2025.	15

TABLES

Table 1. WETS Table Analysis for the December 5 th , 2025 Survey	11
Table 2. Wetland Plot Summary (Datasheets Provided in Appendix D).....	16

PHOTOS

Photo 1. P1 Location.....	23
Photo 2. P1 Soil Profile.....	23
Photo 3. P2 Location.....	24
Photo 4. P2 Soil Profile.....	24
Photo 5. P3 Location.....	25
Photo 6. P3 Soil Profile.....	25
Photo 7. P4 Location.....	26
Photo 8. P4 Soil Profile.....	26

Section 1 Executive Summary

Naiad Biological Consulting (NBC) conducted a wetland and aquatic resources delineation for portions of a multi-parcel property located in McKinleyville, Humboldt County, California, consisting of Assessor's Parcel Numbers 510-081-001, and 510-081-002. This delineation was requested to supplement prior biological and wetland studies and to evaluate areas of the site that had not been fully assessed during earlier investigations, in support of ongoing County of Humboldt planning and development review.

The purpose of this delineation was to determine whether wetlands or other jurisdictional aquatic features are present within the portion of the Study Area requiring additional delineation effort, specifically the eastern portion of APN 510-081-001 and a small portion of the southeastern area of APN 510-081-002. Wetland indicators were evaluated using the U.S. Army Corps of Engineers (USACE) three-parameter methodology (hydrophytic vegetation, hydric soils, and wetland hydrology), as well as local County land use policies that apply a one-parameter wetland definition within the McKinleyville area.

Fieldwork was conducted on December 5, 2025, under winter conditions. Four wetland delineation plots (P1–P4) were established within the delineation focus area to capture representative site conditions, including flat pasture areas and subtle topographic variation. The site has been historically managed as pasture, and the landowner indicated that the area has been periodically mowed, tilled, and seeded with a commercial pasture mix. Observed vegetation composition and site conditions were consistent with this land management history.

None of the delineation plots exhibited hydric soils, wetland hydrology, or a dominance of hydrophytic vegetation. Although individual facultative species were present, vegetation across the site was dominated by upland and facultative upland pasture species, and prevalence metrics did not meet hydrophytic thresholds. Soil profiles were consistent with mapped well-drained, non-hydric soils, and no indicators of prolonged saturation or surface water were observed, despite seasonal timing when hydrologic expression would be most likely if wetlands were present.

Based on the results of the field investigation and supporting desktop review, no wetlands or other jurisdictional aquatic features were identified within the portion of the Study Area requiring additional delineation effort. These findings indicate that the evaluated areas do not qualify as wetlands under federal, state, or County one-parameter wetland criteria. The results of this delineation are intended to support County planning review and inform project design and permitting considerations. Final determinations regarding regulatory jurisdiction remain the responsibility of the appropriate agencies.

Section 2 Introduction, Background, and Project Understanding

2.1 Purpose and Need

The purpose of this wetland and aquatic resources delineation is to identify and map wetland features and other waters of the United States and/or waters of the State of California that may occur within the boundaries of Assessor's Parcel Numbers 510-081-001, 510-081-002, and 510-081-003, located in McKinleyville, Humboldt County, California. This delineation was conducted to supplement prior biological and wetland studies completed for the site and to support ongoing land use and development planning review by the County of Humboldt.

Previous site evaluations include an upland clearance assessment completed by Streamline Planning in 2015 and a wetland delineation conducted by SHN in 2020 (Appendix E). Review of these prior studies indicates that a portion of the southeastern area of the project site was not previously evaluated for wetland resources (Figure 2). The current delineation effort was undertaken to assess this remaining area, fill the identified data gap, and provide a more complete and continuous characterization of wetland and non-wetland features across the project site.

The delineation is intended to determine whether any wetlands or other regulated aquatic features are present within the study area and to document their extent and regulatory status pursuant to applicable federal, state, and local regulations, including the Clean Water Act (Sections 401 and 404), the Porter-Cologne Water Quality Control Act, and County of Humboldt wetland protection policies. Based on site conditions and regulatory context, wetlands meeting one-parameter criteria under state and local jurisdiction were anticipated and evaluated as part of this effort.

Fieldwork for this delineation was conducted outside of the typical flowering season for many plant species. Accordingly, the delineation relies on observable site conditions present at the time of the site visit, including hydrology, soil characteristics, geomorphic setting, and available vegetation indicators. Potential limitations associated with seasonal timing are acknowledged, and appropriate caveats are included where relevant. The results of this delineation are intended to inform County review, project feasibility, and identification of any required avoidance, setback, or mitigation measures associated with future development of the site.

2.2 Delineator's Qualifications

The aquatic resource delineation described in this report was conducted by Mason London. Mr. London holds an M.Sc. in Biology with a specialization in aquatic ecology from Cal Poly Humboldt (formerly Humboldt State University) and serves as the Principal Biologist at Naiad Biological Consulting (NBC). He has over 18 years of professional experience spanning wildlife biology, botany, aquatic ecology, and university-level instruction. His prior roles include wildlife biologist with The Nature Conservancy, botanist with the Bureau of Land Management in Medford, Oregon, and aquatic research scientist with the HSU River Institute. Mr. London has worked extensively on CEQA and NEPA projects, conducting protocol-level surveys for special-status species such as willow flycatcher, Swainson's hawk, California red-legged frog, foothill yellow-legged frog, and western pond turtle, as well as botanical surveys across a variety of upland and aquatic habitats. He also has significant experience in pre-construction and compliance monitoring surveys focused on amphibians, reptiles, nesting birds, and mammals throughout California. In addition, Mr. London has over five years of experience conducting wetland delineations and has

completed a 40-hour Introduction to Wetland Delineation course taught by Joe Seney, a Certified Professional Soil Scientist (#243) and retired USDA-NRCS and USDI-NPS Soil Scientist. Mr. London is currently an instructor with the Wetland Training Institute and assistants with leading wetland delineations courses in Northern California.

2.3 Study Area Description and Geographic Setting

The Study Area encompasses two contiguous parcels identified as Assessor's Parcel Numbers (APN) 510-081-001, and 510-081-002, located in the community of McKinleyville, an unincorporated area of Humboldt County, California. The parcels are situated south of Murray Road and east of Central Avenue, within a developed residential and commercial setting. The Study Area is associated with the proposed Black Dog Residential Development and includes areas previously evaluated by Streamline Planning (2015) and SHN (2020), as well as portions that had not been formally delineated prior to the current effort (Figure 1 and Figure 2; Appendix E).

The parcels comprising the Study Area total approximately 6.84 acres. APN 510-081-001 encompasses approximately 1.84 acres, and APN 510-081-002 encompasses approximately 5.00 acres, based on assessor and GIS mapping data. Review of prior studies indicates that the area requiring additional delineation effort includes approximately the eastern 30% of APN 510-081-001, as well as a small section along the southeastern portion of APN 510-081-002 (Figure 2). These areas were not fully evaluated during previous site assessments and are the focus of the current delineation effort to address the identified gap in coverage.

Topography across the Study Area is generally low relief, with subtle elevation changes and a gradual rise toward the northeastern portion of the site. Land cover consists primarily of disturbed grassland and ruderal vegetation, with localized landscaped or maintained areas. The Study Area is bordered by residential development along the northern and eastern margins and commercial development to the west. Portions of the site exhibit evidence of historic grading, drainage alteration, and prior land use associated with agricultural or commercial activities.

Regionally, the Study Area is located within the Luffenholtz Creek–Frontal Pacific Ocean subwatershed (Hydrologic Unit Code [HUC] 180101020503), which encompasses small, coastal-draining catchments that discharge directly to the Pacific Ocean. Surface hydrology within the Study Area is characterized by shallow swales, low-gradient drainage features, and areas of seasonal saturation consistent with local precipitation patterns and shallow groundwater conditions. No perennial streams are present within the Study Area; however, wetlands meeting one-parameter criteria under state and local jurisdiction were anticipated and evaluated.

The Study Area occurs within Land Resource Region A (LRR-A) and a Major Land Resource Area representative of the Northern California coastal plain and foothills. The region is characterized by a cool, maritime climate with winter-dominated precipitation, frequent soil saturation during the wet season, and soils derived from coastal sedimentary and alluvial deposits. These conditions contribute to the potential presence of wetlands and other aquatic resources subject to regulation under federal, state, and local frameworks, necessitating a site-specific delineation to inform land use planning and regulatory review.



Figure 1. Study Area Locator Map

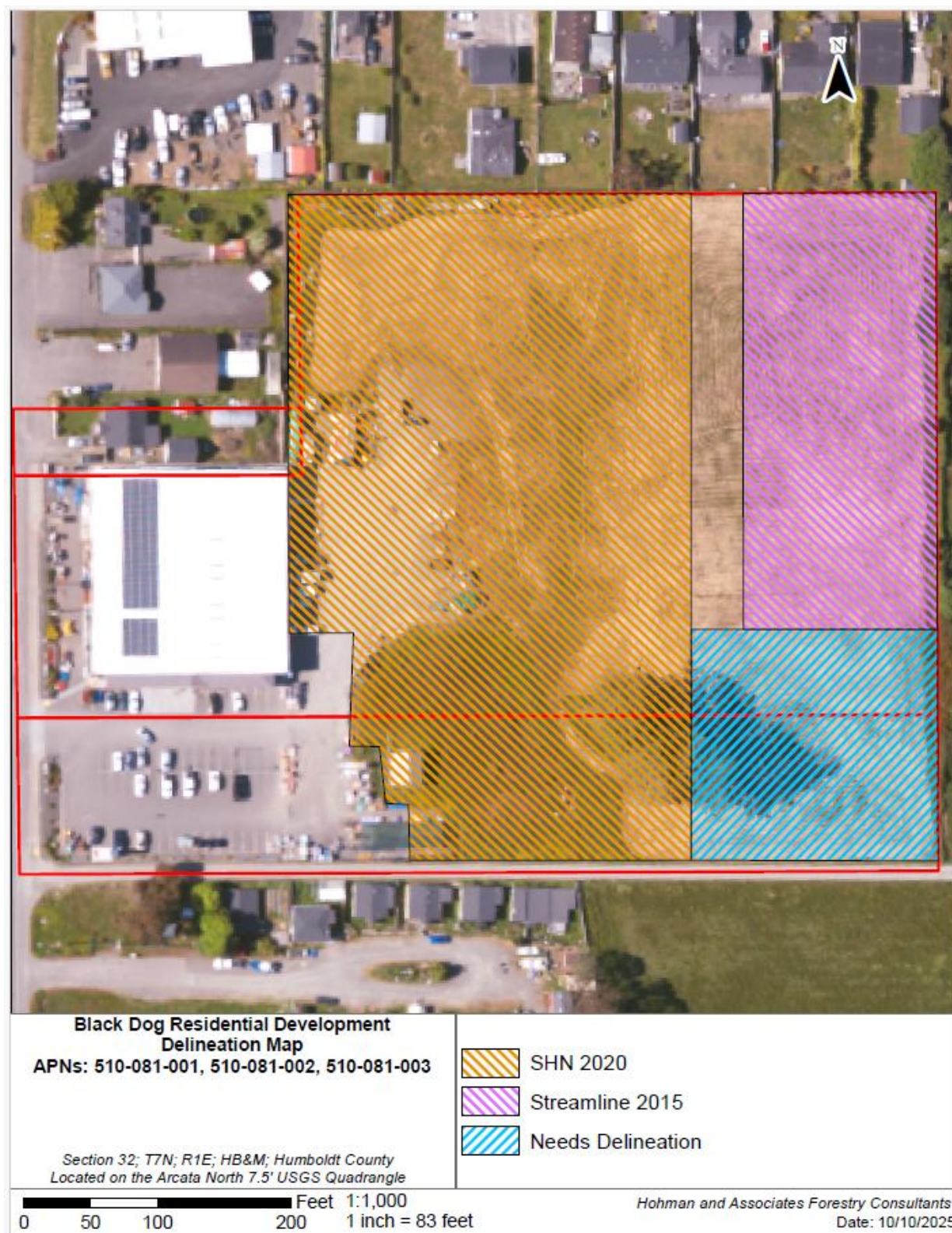


Figure 2. Wetland and aquatic resources delineation overview for the Black Dog Residential Development, McKinleyville, Humboldt County, California. The map depicts areas previously evaluated by Streamline Planning (2015) and SHN (2020), as well as the portion of the Study Area requiring additional delineation effort that was evaluated as part of the current study (December 5, 2025).

Section 3 Regulatory Framework

This section summarizes the federal, state, and local regulatory framework applicable to wetland and aquatic resource delineation for the Study Area located in McKinleyville, Humboldt County, California. Although the property is located outside of the California Coastal Zone, wetland identification and regulation are subject to federal and state water quality laws as well as local County policies, including the use of one-parameter wetland criteria for land use planning purposes.

3.1 Federal Regulatory Framework

At the federal level, regulation of Waters of the United States (WOTUS) is governed primarily by Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act (RHA). These regulations apply to certain aquatic features, including traditional navigable waters, their tributaries, impoundments, and wetlands that meet the definition of federal jurisdiction.

The U.S. Army Corps of Engineers (USACE) administers the Section 404 permitting program and is responsible for conducting Jurisdictional Determinations (JDs) to identify whether aquatic features qualify as WOTUS. The U.S. Environmental Protection Agency (EPA) provides regulatory oversight and enforcement authority under the CWA.

Federal jurisdiction is currently evaluated under the Revised Definition of Waters of the United States, which became effective on September 8, 2023. Under this framework, wetlands and other aquatic features must meet the three-parameter criteria—hydrophytic vegetation, hydric soils, and wetland hydrology—and demonstrate a continuous surface connection to a traditional navigable water or other qualifying jurisdictional waterbody. Certain features, such as isolated depressions, ephemeral drainages lacking a continuous surface connection, or artificial conveyances, may be excluded from federal jurisdiction depending on site-specific conditions.

Any project proposing the discharge of dredged or fill material into federally jurisdictional waters would require authorization from the USACE, typically through a Nationwide Permit or an Individual Permit, depending on the nature and extent of impacts. A formal wetland delineation and, where applicable, a jurisdictional determination are used to support this regulatory process.

3.2 California State and Regional Regulatory Framework

3.2.1 California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW) regulates activities that may substantially alter the bed, bank, or channel of rivers, streams, or lakes pursuant to Sections 1600–1607 of the California Fish and Game Code. This authority applies to perennial, intermittent, and ephemeral watercourses, as well as associated riparian habitats.

Projects that may result in such alterations require the submittal of a Lake and Streambed Alteration (LSA) Notification to CDFW. If CDFW determines that the activity may adversely affect fish or wildlife resources, an LSA Agreement must be executed prior to construction. CDFW also administers the California Endangered Species Act (CESA), which regulates the take of state-listed threatened and endangered species.

3.2.2 North Coast Regional Water Quality Control Board

The Study Area lies within the jurisdiction of the North Coast Regional Water Quality Control Board (RWQCB), Region 1, which enforces the Porter-Cologne Water Quality Control Act. Under Porter-Cologne, the RWQCB regulates discharges to “Waters of the State,” defined broadly to include all surface and groundwater, including wetlands, regardless of whether they are subject to federal jurisdiction.

Discharges of dredged or fill material into waters of the State may require Waste Discharge Requirements (WDRs) or water quality certification under Section 401 of the Clean Water Act. The State Water Resources Control Board’s State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (effective May 28, 2020) establishes standardized procedures for wetland delineation, impact assessment, and permitting. While the State Wetland Definition relies on the three-parameter method, it allows the State to assert jurisdiction over aquatic features that may not qualify as WOTUS.

3.3 Local Regulatory Framework and One-Parameter Wetlands

Although the Study Area is located outside the California Coastal Zone, wetlands within the McKinleyville area are subject to Humboldt County land use policies that apply a one-parameter wetland definition for planning and development review. Under this approach, the presence of any single wetland indicator—hydrophytic vegetation, hydric soils, or wetland hydrology—may be sufficient to classify an area as a wetland for local regulatory purposes.

As a result, features that may not meet federal or state three-parameter wetland criteria may still be considered wetlands under County jurisdiction and subject to development setbacks, avoidance requirements, or mitigation. Accordingly, this delineation evaluates wetland indicators using both federal and state methodologies, while also identifying areas that meet one-parameter wetland criteria relevant to County review.

The results of this delineation are intended to inform Humboldt County Planning review, identify potential regulatory constraints, and support future permitting and project design decisions.

Section 4 Methods

4.1 Pre-Site Visit Data Compilation and Preparation

Prior to conducting the field delineation, Mason London conducted a comprehensive desktop review to characterize existing site conditions and inform the scope and focus of the field investigation. Desktop review materials included recent and historic aerial imagery, topographic mapping, watershed boundaries, and Natural Resources Conservation Service (NRCS) soil survey data for the Study Area and surrounding landscape (Appendix A and Appendix B). In addition, available background information from prior site assessments, including the 2015 Streamline Planning upland clearance assessment and the 2020 SHN wetland delineation, was reviewed to identify areas previously evaluated and to define the portions of the site requiring additional delineation effort.

This review was used to identify areas with the potential to support wetlands or other aquatic resources based on geomorphic position, soil mapping units, drainage patterns, and land use history, with particular attention given to the eastern portion of APN 510-081-001 and the southeastern portion of APN 510-081-002 where prior delineation coverage was incomplete. The desktop analysis also informed expectations regarding the likely presence of one-parameter wetlands subject to local jurisdiction.

Prior to the site visit, the Study Area boundary and relevant background imagery were uploaded into the Avenza Maps mobile application and used in conjunction with a Skadi Global Navigation Satellite System (GNSS) receiver to facilitate navigation, data collection, and feature mapping during fieldwork.

Antecedent hydrologic conditions were evaluated prior to the field visit using the Wetland Ecosystem Technical Standard (WETS) table generated through the Antecedent Precipitation Tool (APT) version 2.0.0, developed jointly by the NRCS and the U.S. Army Corps of Engineers (Appendix C). The APT evaluates historical precipitation data from nearby weather stations to determine whether conditions during the period preceding the site visit were drier than normal, normal, or wetter than normal relative to long-term precipitation averages. This analysis provides important context for interpreting hydrologic indicators observed in the field. The region exhibits a strongly seasonal precipitation pattern, with the majority of annual rainfall occurring during the wet season (approximately October through April) and minimal precipitation during the dry season (approximately May through September).

Table 1. WETS Table Analysis for the December 5th, 2025 Survey

Precipitation Data from the Last 30 Years (1995 – 2025) ¹			Recent Field Conditions Compared to Precipitation Data from the Last 30 Years, and Analysis ¹					
Date	30 th Percentile (inches)	70 th Percentile (inches)	Date	Recorded Rainfall (inches)	Rainfall Condition Compared to Previous 30 years ²	Numeric Condition Value ³	Weighting Factor ⁴	Product of Condition Value and Weighting Factor ⁵
Dec	4.173228	7.682677	Dec 5 2025	3.334646	Dry	1	3	3
Nov	1.942913	3.940945	Nov 5 2025	5.401575	Wet	3	2	6
Oct	0.582283	1.180315	Oct 6 2025	1.708661	Wet	3	1	3
¹ All precipitation data is obtained from Weather Station: Arcata Eureka AP, McKinleyville 1.5 NE, McKinleyville 1.7 NE, McKinleyville 2.3 NE, Eureka WFO Woodley IS ² Below 30th percentile = dry; between 30th and 70th percentile = normal; above 70th percentile = wet. ³ Relative rainfall conditions are then translated to a numeric condition value, as follows: dry = 1, normal = 2, wet = 3. ⁴ Greater weight is given to the most recent month as this would most likely influence what hydrologic or vegetative characteristics are observed. ⁵ The numeric condition value is then multiplied by the weighting factor, then the subtotals are added to get the total value. Total value equivalents: 6-9 = dry; 10-14 = normal; 15-18 = wet								TOTAL ⁵
								12, or Normal

4.2 Field Survey

A wetland and aquatic resources delineation of the Study Area was conducted on December 5, 2025, beginning at approximately 12:00 p.m., by NBC Principal Biologist Mason London. Weather conditions during the site visit were overcast, with an ambient temperature of approximately 56 degrees Fahrenheit. Field conditions were suitable for evaluating hydrologic indicators, soils, and general site characteristics.

During the site visit, Mr. London traversed accessible portions of the Study Area, with particular focus on the eastern portion of APN 510-081-001 and the southeastern portion of APN 510-081-002, which had not been fully evaluated during prior assessments. Field observations included evaluation of vegetation communities, soil characteristics, geomorphic setting, and hydrologic indicators consistent with established wetland delineation practices.

Wetland indicators were evaluated using the three-parameter approach outlined in the U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual (Environmental Laboratory, 1987) and the Western Mountains, Valleys, and Coast Regional Supplement (Version 2.0). In addition, because the Study Area is subject to local land use policies within McKinleyville that apply a one-parameter wetland definition, areas exhibiting hydrophytic vegetation, hydric soils, or wetland hydrology were also identified and documented for purposes of County review, regardless of federal jurisdiction.

Multiple delineation data points were established in representative locations across the Study Area to document site conditions. A total of four wetland delineation plots (P-1 through P-4) were evaluated to characterize vegetation, soils, hydrology, and geomorphic setting within areas of interest. These plots

were placed to capture variability in site conditions, particularly within portions of the Study Area that had not been previously delineated. Representative photographs were taken at each plot location to document observed habitat features, soils, and hydrologic indicators. Spatial data were collected using the Avenza Maps mobile application in conjunction with a Skadi Global Navigation Satellite System (GNSS) receiver to document the location and extent of observed wetland indicators and other aquatic features.

The delineation was conducted outside the typical flowering period for many plant species. As a result, vegetation assessments relied on observable structural characteristics, species that were identifiable at the time of the site visit, and supporting soil and hydrologic indicators. Where applicable, limitations related to seasonal timing are acknowledged, and delineation conclusions are based on the best available field evidence observed during the December site visit.

4.2.1 Soils

At each data point, soil profile pits were excavated using a rounded drain spade shovel, and an examination was conducted to identify positive hydric soil indicators. These indicators are characteristic features resulting from anaerobic conditions and persist in the soil during both saturated (reduced) and dry (oxidized) states within the upper 12 inches of soil. Examples include mottled color patterns from iron or manganese reduction and reoxidation, and the accumulation of organic matter due to saturated environments promoting slow decomposition rates. Hydric soil field indicators exhibit distinct morphologies due to the accumulation or loss of iron, manganese, sulfur, or carbon compounds in anaerobic conditions. These indicators include assessing features such as low matrix chromas, redox features, gleys, and the presence of iron and manganese concretions. Detailed records of soil color and texture encountered at each layer were documented on delineation forms. Soil color was determined using a Munsell soil color chart (Kollmorgen, 2000), while soil texture was assessed using a standardized chart endorsed by the California Native Plant Society (CNPS), adapted from Brewer and McCann (1982). Prior to assessment, all soil samples were moistened. Soil map units were cross-referenced with both the California hydric soils list (SCS, 1993) and the national hydric soils list (SCS, 1991). Determination of whether the hydric soil criterion was met followed guidelines outlined by the National Technical Committee for Hydric Soils and the 2010 Regional Supplement: Western Mountains, Valleys, and Coast Region (Version 2.0) (USACE, 2010). Typically, soils with a matrix chroma of 1, and mottled soils with a matrix chroma of 2 or less, are considered to meet hydric soil criteria. Additionally, soils not exhibiting low matrix chromas but experiencing inundation or saturation within 12 inches of the surface for at least 5 percent of the growing season (14 consecutive days) are also classified as hydric.

4.2.2 Hydrology

Indicators of wetland hydrology were noted at each data point, such as the presence of surface water, surface soil cracks, saturated soil, water-stained vegetation, drainage patterns, and sediment deposits. Hydrological connectivity was investigated throughout the study area and surrounding habitats. 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 (A1), ponded (A1), or has groundwater within 12 inches of the ground surface (A2) 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 (A1), a high-water table (A2) (groundwater within 12 inches of soil surface), saturated soil (A3), oxidized iron along live root channels or on live root surfaces (C3), sparsely vegetated concave surfaces (B8), water-stained leaves (B9), sediment deposits (B2), stunted vegetation or stressed plants (D1) or drainage patterns (B10). Examples of secondary indicators include presence of a “dry season water table” between 12 and 24 inches below the ground surface (C2), a shallow aquitard (D3), a dense layer within 24 inches of the soil surface, the FAC Neutral Test (D5), and “geomorphic position” (D2) of the site (e.g., toe slopes, drainageways, depressions, and swales). The presence of one primary or two secondary indicators confirms wetland hydrology.

The delineation was conducted during and throughout the wet season with “normal” precipitation and therefore normal potential wetland conditions (Table 1).

4.2.3 Vegetation

At each delineation data point, all herbaceous plant species within a five-foot radius were identified and a visual estimate of percent coverage for each species was recorded. Additionally, shrub species, when present, were identified within a five-foot radius, and trees species, when present, were identified within a twenty-five-foot radius at all delineation data points. Plant species cover estimations were calibrated using CNPS percent cover templates – see the following website:

http://www.cnps.org/cnps/vegetation/pdf/percent_cover_diag-cnps.pdf.

The indicator status of each species was then checked using the most recent USACE National Wetland Plant List—Version 3.5 (USACE, 2020).

Indicator status categories are as follows:

- OBL = obligate wetland; >99% probability of occurring in a wetland
- FACW = facultative wetland; 67%-99% probability of occurring in a wetland
- FAC = facultative; 33%-67% probability of occurring in a wetland
- FACU = facultative upland; 1%-33% probability of occurring in a wetland
- UPL = obligate upland; <1% probability of occurring in a wetland
- NI = no indicator (plants not listed in the 2020 ACOE National Wetland Plant List—Version 3.5)

The wetland vegetation criterion is met when the dominant plants pass the dominance test, showing that over 50 percent of these species are designated as OBL, FACW, or FAC wetland indicators. Dominant plant species collectively account for 50 percent of the total cover within their stratum (tree, sapling/shrub/subshrub, herb, or woody vine), listed in descending order of percent cover. Additionally, any species with at least 20 percent coverage within a stratum are always considered dominant. Plant names follow Baldwin et al. (2012) and/or the Calflora database (2019). If the dominance test is not met, vegetation may still be considered hydrophytic if it meets the prevalence index, morphological adaptations, or addresses problematic wetland situations (USACE 2008).

Section 5 Results

5.1 Aquatic Resources

A wetland and aquatic resources delineation was conducted on December 5, 2025, by Principal Biologist Mason London of Naiad Biological Consulting. Four delineation plots (P1–P4) were established within the Study Area to evaluate the presence or absence of wetlands and other aquatic resources potentially subject to federal, state, or local jurisdiction (Figure 3; Photos 1–8; Appendix D). The delineation was conducted using the Routine Determination Method outlined in the 1987 U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual and the Western Mountains, Valleys, and Coast Regional Supplement (Version 2.0).

Plot sizes were stratified by vegetation layer and selected to be appropriate for site conditions and vegetation structure observed in the field. The herbaceous stratum was evaluated within 5-meter radius plots, and shrub cover was documented where present. No tree stratum was present within most plots due to the pasture setting. These plot dimensions allowed for representative sampling of site conditions while avoiding inclusion of adjacent, uncharacteristic habitat.

Several species observed during the delineation, including *Spergula arvensis* and other non-native pasture species, were assigned appropriate indicator statuses based on the current National Wetland Plant List for the Western Mountains, Valleys, and Coast Region. Species not listed were evaluated based on regional ecology and site context and did not influence hydrophytic vegetation determinations.

5.1.1 Watercourses

No watercourses, springs, seeps, or other surface hydrology features were observed within the Study Area during the December 5, 2025 site visit. No defined channels, bed and bank features, sediment transport indicators, or scour features were present within the delineation area.

A shallow topographic low within the pasture was evaluated to determine whether it functioned as a watercourse or wetland feature. Field observations indicated no channel morphology, no evidence of concentrated flow, and no indicators of episodic or seasonal runoff. Vegetation within this area was consistent with surrounding pasture and showed no signs of hydrologic stress or disturbance.

Based on field indicators, no features within the Study Area met the criteria for a watercourse under California Department of Fish and Wildlife (CDFW) jurisdiction, the USACE definition of Waters of the United States, or County stream protection policies.



Figure 3. Aerial view of the Study Area showing Assessor's Parcel Numbers 510-081-001-000 and 510-081-002-000 in McKinleyville, Humboldt County, California. The map depicts parcel boundaries, locations of four wetland delineation plots (P1–P4), and areas evaluated as part of the current delineation effort. All delineation plots shown were determined to be non-wetland based on field observations conducted on December 5, 2025.

5.1.2 Wetlands

Four delineation plots (P1–P4) were established across the Study Area to evaluate the three wetland indicators: hydrophytic vegetation, hydric soils, and wetland hydrology (Photos 1–8). Plot locations were selected to capture representative site conditions across flat pasture areas and subtle topographic variation.

Plots P1, P2, and P3 were located within flat, historically mowed and lightly tilled pasture areas. Plot P4 was located in a pasture area containing limited shrub cover (in the form of encroaching and sprouting *Rosa californica* along the pastures edge) but otherwise similar soil and hydrologic conditions. None of the plots met the criteria for wetlands under the USACE three-parameter approach or under the County's one-parameter wetland definition.

Table 2. Wetland Plot Summary (Datasheets Provided in Appendix D)

Plot	Soils	Hydrology	Vegetation	Wetland Status
P1	-	-	-	Non-Wetland
P2	-	-	-	Non-Wetland
P3	-	-	-	Non-Wetland
P4	-	-	-	Non-Wetland

5.1.2.1 Soils

Soils within the Study Area are mapped by the Natural Resources Conservation Service (NRCS) as Soil Map Unit 225, consisting primarily of Arcata and Candy Mountain soils. These soils occur in low-relief coastal terrace and pasture settings and are classified as well-drained, non-hydric soils. Field observations at all delineation plots were consistent with the mapped soil conditions and did not indicate the presence of hydric soil components.

Soil profiles were examined at each delineation plot to depths of up to approximately 18 inches, where feasible, to evaluate the presence or absence of hydric soil indicators in accordance with U.S. Army Corps of Engineers wetland delineation methodology.

- **Plot P1** was located within a flat, actively managed pasture area exhibiting evidence of light tilling and mowing. Soils at this location consisted of loam in the upper approximately 11 inches, transitioning to loam and silty clay at depth. The surface horizon exhibited a dark matrix color (7.5YR 2.5/1); however, redoximorphic features were observed only below approximately 20 centimeters and did not occur within a depleted matrix. No gleying, oxidized rhizospheres, or saturation indicators were present within the upper soil profile. Based on these observations, no hydric soil indicators were met at P1.
- **Plot P2**, also located within a flat pasture setting, exhibited sandy loam soils throughout the profile to approximately 18 inches. The soil matrix was uniform (7.5YR 2.5/1) with no redox concentrations, depletions, or other hydric soil indicators observed. No restrictive layers or evidence of prolonged saturation were present.
- **Plot P3**, positioned within a subtle topographic low, was excavated to a depth of approximately 18 inches and exhibited a uniform sandy loam profile throughout. The soil matrix color remained consistent, with no gleying, depleted matrices, redoximorphic features, or saturation indicators

observed. Although this plot occupies a slightly lower geomorphic position, the absence of hydric soil indicators suggests that any hydrologic expression at this location is brief and insufficient to support hydric soil development.

- **Plot P4** was located on a gently sloping pasture area with limited shrub cover. Soils at this plot exhibited a dark surface horizon (7.5YR 2.5/1); however, no redoximorphic features were present within the upper portion of the profile, and the criteria for the F7 (Depleted Dark Surface) hydric soil indicator were not met. No other hydric soil indicators were observed.

In summary, none of the delineation plots (P1–P4) exhibited hydric soil indicators. Hydric soils were therefore determined to be absent within the Study Area.

5.1.2.2 Hydrology

No indicators of wetland hydrology were observed at any delineation plot during the December 5, 2025 site visit. Specifically, no surface water, soil saturation, water table, water-stained leaves, oxidized rhizospheres, iron deposits, or other primary or secondary hydrology indicators were present.

Antecedent precipitation conditions preceding the site visit were evaluated using the Antecedent Precipitation Tool (APT) and indicated seasonally appropriate conditions for the time of year. Despite winter timing, no hydrologic expression sufficient to support wetland conditions was observed.

As such, wetland hydrology was determined to be absent at all four delineation plots.

5.1.2.3 Vegetation

Vegetation across the Study Area consists of disturbed, non-native pasture dominated by upland and facultative upland herbaceous species. According to the landowner, the site has been historically managed as pasture and has been periodically mowed, tilled, and seeded with a commercial pasture seed mix (Bardenbrug Pasture Mix). Field observations during the December 5, 2025 site visit were consistent with this management history and seed composition.

Vegetation within all delineation plots (P1–P4) was characterized by dense, uniform herbaceous cover dominated by common pasture grasses and forbs, including *Schedonorus pratensis*, *Bromus* spp., *Agrostis stolonifera*, *Hypochaeris radicata*, *Rumex acetosella*, and *Lotus corniculatus*. These species are typical components of managed pasture systems and are well adapted to periodic disturbance, mowing, and soil turnover. The dominance of these species, coupled with the absence of wetland obligate or facultative wetland dominants, is indicative of upland pasture conditions rather than wetland plant communities.

The delineation was conducted outside of the peak growing and flowering season, which limited the ability to positively identify all species present within the Study Area. Vegetation assessments therefore focused on species that were identifiable at the time of the site visit, overall community composition, dominance structure, and supporting soil and hydrologic indicators. Despite these seasonal limitations, the observed species composition, dominance patterns, and prevalence metrics were sufficient to evaluate wetland indicators.

At all delineation plots (P1–P4), the Dominance Test was not met, and calculated Prevalence Index values ranged from approximately 3.7 to 4.1, exceeding the ≤ 3.01 threshold required to support a hydrophytic vegetation determination. Although individual facultative species such as *Agrostis stolonifera*

and *Ranunculus repens* were present, these species occurred in association with upland and facultative upland dominants and are commonly included in pasture seed mixes or occur as secondary species in managed grasslands. Their presence does not indicate hydrophytic vegetation in the absence of hydric soils or wetland hydrology.

Overall, the vegetation observed within the Study Area reflects a long-standing, actively managed pasture system. Based on species composition, dominance structure, and supporting field indicators, hydrophytic vegetation was determined to be absent across the Study Area, including under local one-parameter wetland evaluation criteria.

Section 6 Conclusions, Discussion, and Recommendations

6.1 Conclusions

Based on the results of the field survey conducted on December 5, 2025, and review of supporting desktop data, no wetlands or other jurisdictional aquatic features were identified within the portion of the Study Area requiring additional delineation effort, including the eastern portion of APN 510-081-001 and the southeastern portion of APN 510-081-002. Wetland indicators were evaluated using the U.S. Army Corps of Engineers (USACE) three-parameter methodology, as well as local County land use policies that apply a one-parameter wetland definition within the McKinleyville area.

All four delineation plots (P1–P4), which were strategically located within the areas not previously evaluated, failed to meet the minimum thresholds for wetland identification under both federal and local criteria (Figure 3):

- Hydrophytic vegetation was not present at any plot, based on Dominance Test results and Prevalence Index values exceeding hydrophytic thresholds.
- Hydric soils were absent across the delineation focus area, with no observed indicators such as depleted matrices, gleying, or redoximorphic features meeting hydric criteria.
- Wetland hydrology was not observed or inferred at any plot, and no primary or secondary hydrology indicators were present at the time of the survey.

Although the delineation was conducted outside of the peak growing and flowering season, sufficient vegetation, soil, and hydrologic indicators were observable to support a reliable wetland determination. The collective results indicate that no portion of the delineation focus area qualifies as a wetland under USACE criteria, state water quality regulations, or Humboldt County's one-parameter wetland evaluation approach.

6.2 Discussion

The results of this delineation address prior concerns regarding the potential presence of wetlands or aquatic features within portions of the site that had not been fully evaluated during earlier studies. The four delineation plots (P1 – P4) were strategically located to capture representative conditions across flat pasture areas, subtle topographic variation, and managed upland settings.

Vegetation throughout the Study Area reflects a long-standing history of pasture management. The landowner indicated that the site has been historically mowed, tilled, and seeded with a commercial pasture mix (Bardenbrug Pasture Mix). Observed species composition and dominance patterns were consistent with this management history and included common upland and facultative upland pasture species. While some facultative species were present, they occurred within a disturbed pasture matrix and did not form hydrophytic plant communities.

Soils across the Study Area were consistent with the mapped Arcata and Candy Mountain soil series, which are well drained and non-hydric. Field observations confirmed the absence of hydric soil development, even in lower topographic positions. Similarly, no indicators of wetland hydrology were observed, despite winter-season timing when hydrologic expression would be most likely if wetland conditions were present.

Taken together, the absence of hydrophytic vegetation, hydric soils, and wetland hydrology across all plots indicates that wetland conditions are not present within the Study Area. Based on site conditions, land use history, and field observations, it is unlikely that undetected wetlands occur elsewhere within the delineation area under existing conditions.

6.3 Recommendations

Based on the findings of this delineation, the following recommendations are provided:

1. Proceed with County Planning Review:

The delineation confirms the absence of wetlands subject to federal, state, or County jurisdiction within the Study Area. This report should be provided to Humboldt County Planning to support project review and to document that no wetland setbacks, buffers, or mitigation measures are required.

2. No Additional Delineation Recommended Under Current Conditions:

Provided that site conditions remain substantially unchanged, no further wetland delineation is recommended. If significant grading, drainage modification, or changes in vegetation management occur prior to project implementation, a supplemental site review may be warranted.

3. Retain Delineation Documentation:

It is recommended that the applicant retain this delineation report, associated data forms, and mapping in project records to address any future questions related to wetland status or regulatory compliance.

4. Monitor for Unanticipated Features:

If previously unobserved features such as persistent standing water, seeps, or saturated depressions are identified during future site activities, consultation with Humboldt County or a qualified biologist is recommended to determine whether additional evaluation is necessary.

6.4 Conditions and Limitations

This delineation report represents the professional judgment of the preparer based on site conditions observed on **December 5, 2025**, available background information, and applicable regulatory guidance in effect at the time of the survey. The delineation was conducted during the winter season, outside the peak growing and flowering period for many plant species. As a result, not all plant species present within the Study Area could be positively identified to species level at the time of the site visit. Vegetation determinations therefore relied on identifiable species, overall community composition, dominance structure, and supporting soil and hydrologic indicators.

Despite seasonal limitations, field conditions were adequate to evaluate wetland indicators, particularly soils and hydrology, which are less dependent on flowering phenology. The absence of hydric soils, wetland hydrology, and hydrophytic vegetation dominance across the delineation focus area supports the conclusions presented in this report. However, changes in vegetation, soils, hydrology, land use, or topography—whether due to natural processes or human activities—may affect the presence or expression of wetland indicators and could alter regulatory determinations.

This report does not constitute a formal jurisdictional determination by the U.S. Army Corps of Engineers or any other regulatory agency. Final determinations regarding wetland jurisdiction remain the responsibility of the appropriate permitting authorities. The applicant is responsible for submitting this delineation to relevant agencies as required and for ensuring compliance with all applicable local, state, and federal laws and regulations.



Section 7 References

- 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. Department of the Interior, Fish and Wildlife Service, Washington, D.C. FWS/OBS-79/31.
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- Natural Resources Conservation Service (NRCS). 2024. *Web Soil Survey for Humboldt County, California*. U.S. Department of Agriculture, Natural Resources Conservation Service. Available at: <https://websoilsurvey.nrcs.usda.gov>. Accessed June 2025.
- U.S. 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)*. ERDC/EL TR-10-3. U.S. Army Engineer Research and Development Center, Vicksburg, Mississippi.
- U.S. Army Corps of Engineers (USACE). 2020. *National Wetland Plant List: Western Mountains, Valleys, and Coast Region*. U.S. Army Corps of Engineers. Available at: <https://wetland-plants.sec.usace.army.mil>.
- U.S. Environmental Protection Agency (EPA) and U.S. Army Corps of Engineers (USACE). 2008. *Compensatory Mitigation for Losses of Aquatic Resources; Final Rule*. Federal Register 73(70):19594–19705.
- U.S. Geological Survey (USGS). 2024. *USGS National Map Viewer*. Available at: <https://apps.nationalmap.gov>.
- Western Regional Climate Center (WRCC). 2025. *Antecedent Precipitation Tool (APT)*. U.S. Army Corps of Engineers Regulatory Program. Available at: <https://www.wcc.nrcs.usda.gov>. Accessed June 2025.

Photo Documentation



Photo 2. P1 Location.



Photo 1. P1 Soil Profile.



Photo 4. P2 Location.



Photo 3. P2 Soil Profile.

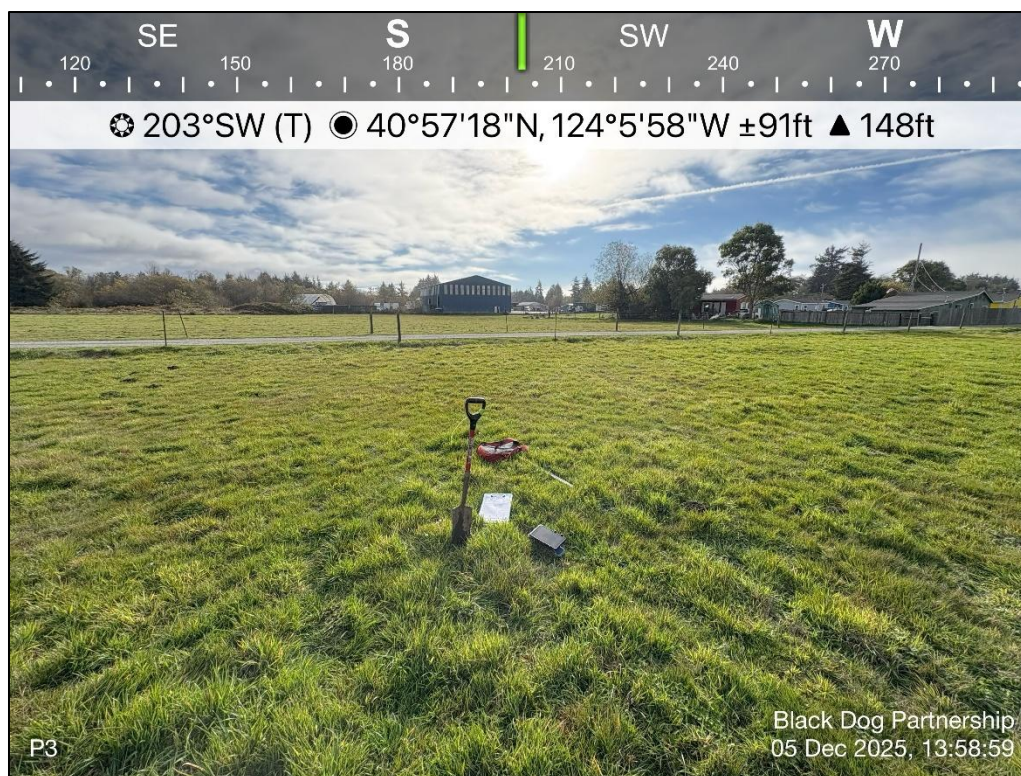


Photo 6. P3 Location.



Photo 5. P3 Soil Profile.



Photo 7. P4 Location.



Photo 8. P4 Soil Profile.

Appendix A

Web Soil Survey Map and Report

AQUATIC RESOURCES DELINEATION

2725 & 2707 Central Ave, McKinleyville, 95519, Humboldt County, CA

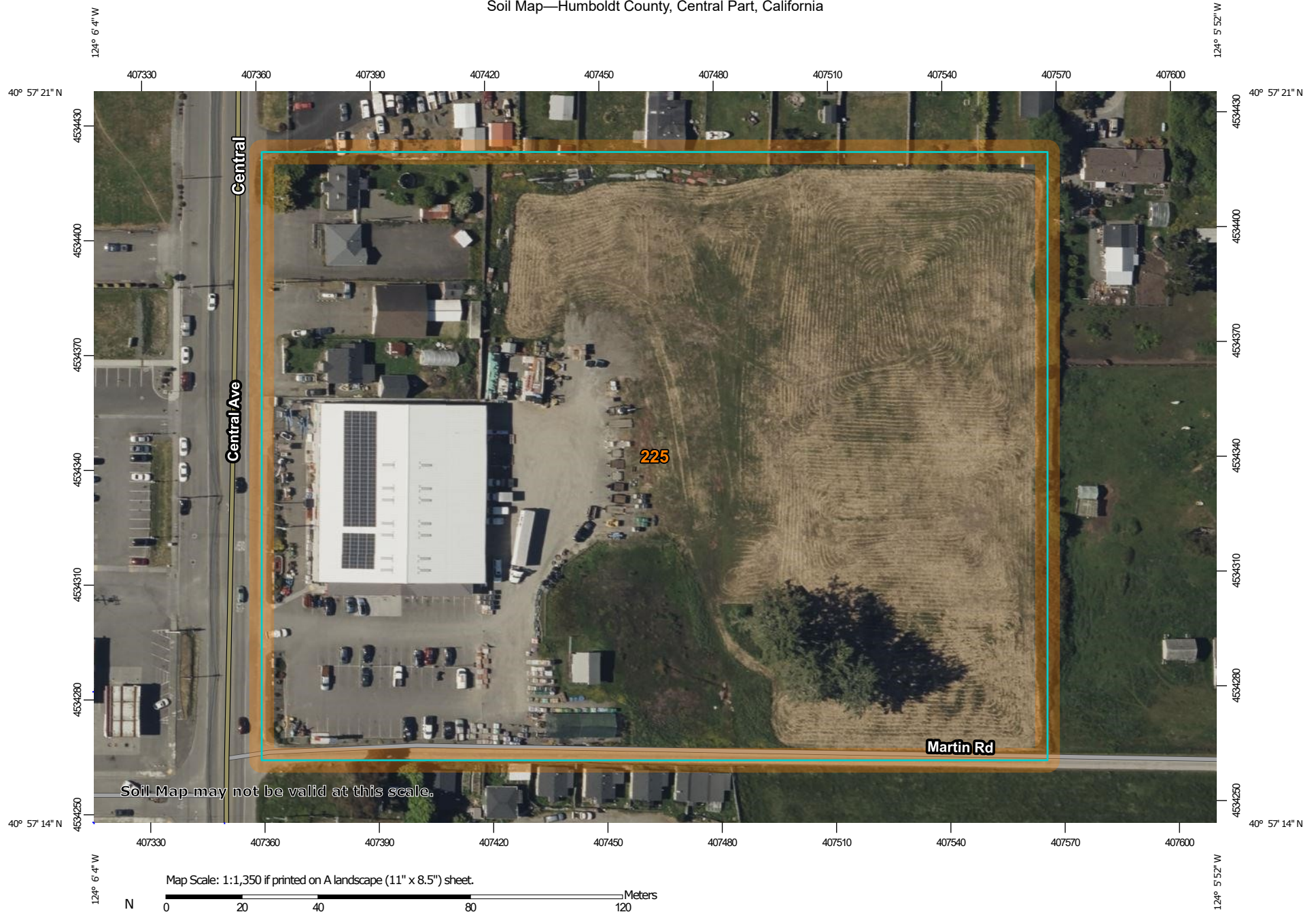
Assessor Parcel Number (APN):

510-081-002-000 & 510-081-001-000

January 2026



Soil Map—Humboldt County, Central Part, California



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

1/5/2026
Page 1 of 3

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Humboldt County, Central Part, California

Survey Area Data: Version 12, Sep 5, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 1, 2022—Jun 19, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
225	Arcata and Candymountain soils, 0 to 2 percent slopes	8.1	100.0%
Totals for Area of Interest		8.1	100.0%

Humboldt County, Central Part, California

225—Arcata and Candymountain soils, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2lmt0

Elevation: 10 to 290 feet

Mean annual precipitation: 35 to 90 inches

Mean annual air temperature: 52 to 55 degrees F

Frost-free period: 275 to 325 days

Farmland classification: Prime farmland if irrigated

Map Unit Composition

Arcata and similar soils: 50 percent

Candymountain and similar soils: 35 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Arcata

Setting

Landform: Marine terraces

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Marine deposits derived from mixed

Typical profile

A - 0 to 23 inches: fine sandy loam

AB - 23 to 37 inches: very fine sandy loam

Bw - 37 to 51 inches: fine sandy loam

C - 51 to 67 inches: fine sandy loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: Moderate (about 8.9 inches)

Interpretive groups

Land capability classification (irrigated): 1

Land capability classification (nonirrigated): 2s

Hydrologic Soil Group: B

Ecological site: F004BX121CA - Redwood-Sitka spruce/salal-California huckleberry/western swordfern, marine terraces, marine deposits, sandy loam and loam

Hydric soil rating: No

Description of Candymountain

Setting

Landform: Marine terraces

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Marine deposits derived from mixed

Typical profile

A1 - 0 to 11 inches: fine sandy loam

A2 - 11 to 19 inches: fine sandy loam

Bt1 - 19 to 38 inches: fine sandy loam

Bt2 - 38 to 48 inches: fine sandy loam

BCt - 48 to 55 inches: sandy loam

C - 55 to 63 inches: loamy fine sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: Moderate (about 8.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2s

Hydrologic Soil Group: B

Ecological site: F004BX121CA - Redwood-Sitka spruce/salal-California huckleberry/western swordfern, marine terraces, marine deposits, sandy loam and loam

Hydric soil rating: No

Minor Components

Urban land, residential

Percent of map unit: 4 percent

Landform: Marine terraces

Hydric soil rating: No

Timmons

Percent of map unit: 3 percent

Landform: Marine terraces

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: F004BX121CA - Redwood-Sitka spruce/salal-California huckleberry/western swordfern, marine terraces, marine deposits, sandy loam and loam

Hydric soil rating: No

Halfbluff

Percent of map unit: 3 percent

Landform: Marine terraces

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: F004BX118CA - Sitka spruce-redwood/salal/western brackenfern, marine terraces, marine deposits, fine sandy loam

Hydric soil rating: No

Megwil,

Percent of map unit: 3 percent

Landform: Marine terraces

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: F004BX120CA - Redwood-Sitka spruce/California huckleberry-salmonberry/western swordfern-deer fern, marine terraces, loam

Hydric soil rating: No

Talawa

Percent of map unit: 2 percent

Landform: Marine terraces

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Tread

Down-slope shape: Concave

Across-slope shape: Concave

Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Humboldt County, Central Part, California

Survey Area Data: Version 12, Sep 5, 2025

Appendix B

National Wetland Mapper

AQUATIC RESOURCES DELINEATION

2725 & 2707 Central Ave, McKinleyville, 95519, Humboldt County, CA

Assessor Parcel Number (APN):

510-081-002-000 & 510-081-001-000

January 2026





U.S. Fish and Wildlife Service

National Wetlands Inventory

Wetlands



January 7, 2026

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Appendix C

Antecedent Precipitation Tool Graph

AQUATIC RESOURCES DELINEATION

2725 & 2707 Central Ave, McKinleyville, 95519, Humboldt County, CA

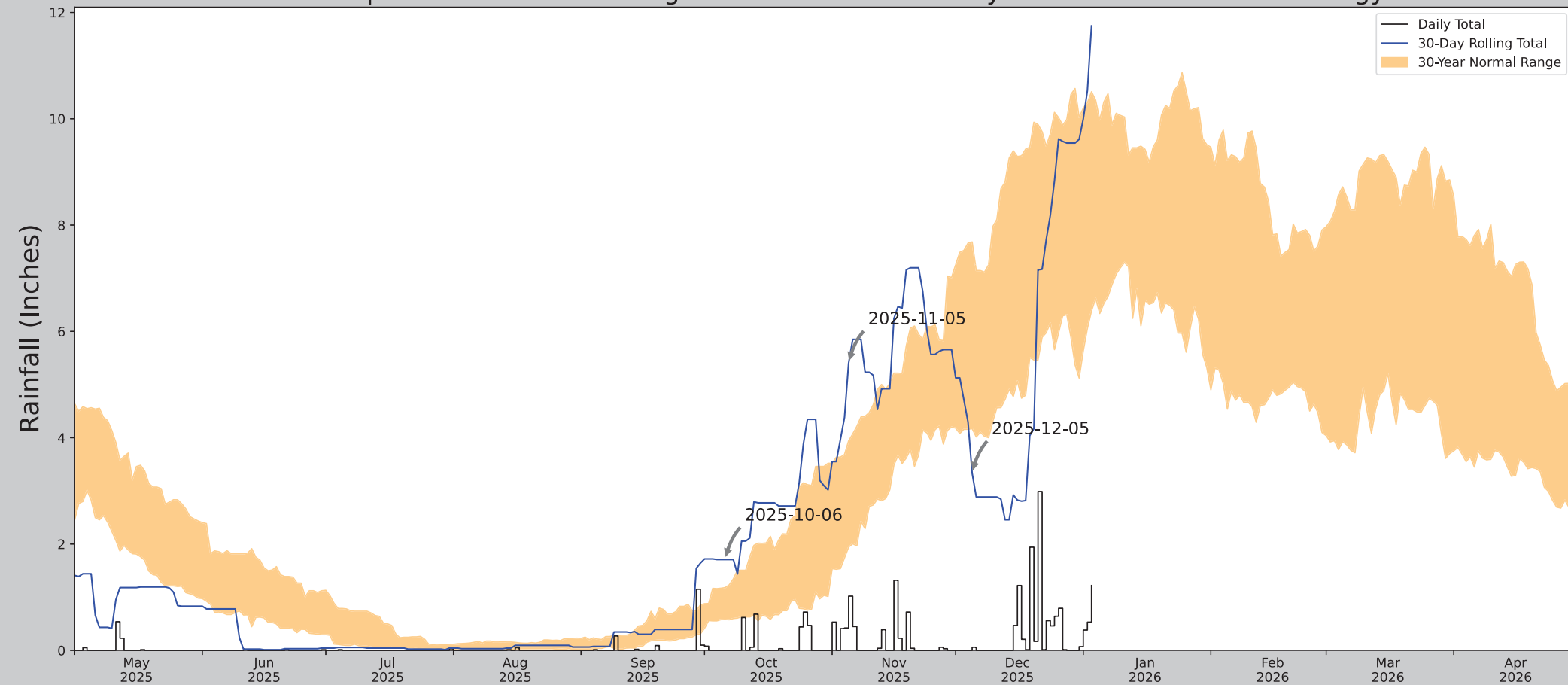
Assessor Parcel Number (APN):

510-081-002-000 & 510-081-001-000

January 2026



Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	40.95443, -124.09858
Observation Date	2025-12-05
Elevation (ft)	114.953
Drought Index (PDSI)	Mild drought (2025-11)
WebWIMP H ₂ O Balance	Wet Season

30 Days Ending	30 th %ile (in)	70 th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-12-05	4.173228	7.682677	3.334646	Dry	1	3	3
2025-11-05	1.942913	3.940945	5.401575	Wet	3	2	6
2025-10-06	0.582283	1.180315	1.708661	Wet	3	1	3
Result							Normal Conditions - 12

Figures and tables made by the
Antecedent Precipitation Tool
Version 3.0



Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and
Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
ARCATA EUREKA AP	40.9783, -124.1047	210.958	1.68	96.005	0.917	10068	89
MCKINLEYVILLE 1.5 NE	40.9667, -124.0941	252.953	0.974	41.995	0.479	2	0
MCKINLEYVILLE 1.7 NE	40.9688, -124.0906	259.843	0.986	48.885	0.492	1	0
MCKINLEYVILLE 2.3 NE	40.9778, -124.086	270.013	0.976	59.055	0.497	2	1
EUREKA WFO WOODLEY IS	40.8097, -124.1603	20.013	12.006	190.945	7.695	1280	0

Appendix D

Wetland Determination Data Forms

AQUATIC RESOURCES DELINEATION

2725 & 2707 Central Ave, McKinleyville, 95519, Humboldt County, CA

Assessor Parcel Number (APN):

510-081-002-000 & 510-081-001-000

January 2026



WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: Black Dog Partnership City/County: Mckinleyville Hum Co. Sampling Date: 12/5/25
 Applicant/Owner: Kevin Jenkins State: CA Sampling Point: P1
 Investigator(s): Mason Lomb Section, Township, Range: S32, T7N, R1E H8M
 Landform (hillslope, terrace, etc.): Pasture Local relief (concave, convex, none): None Slope (%): -
 Subregion (LRR): LRR-A Lat: 40.954694 Long: -124.098836 Datum: WGS84
 Soil Map Unit Name: 225-Arcata and Candy Mountain Soils NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☒ Soil ☒ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐ No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒	
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks: mowed & filled historically

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: $0/3 = 0\%$ (A/B) Prevalence Index worksheet: Total % Cover of: <u>1</u> Multiply by: OBL species <u>1</u> x 1 = <u>1</u> FACW species <u>22</u> x 2 = <u>44</u> FAC species <u>47</u> x 3 = <u>141</u> FACU species <u>25</u> x 4 = <u>100</u> UPL species <u>95</u> x 5 = <u>475</u> Column Totals: <u>95</u> (A) <u>355</u> (B) Prevalence Index = B/A = $355/95 = 3.74$ Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ 5 - Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
= Total Cover				
Sapling/Shrub Stratum (Plot size: <u>30</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ = Total Cover				
Herb Stratum (Plot size: <u>5</u>) 1. <u>Agrostis stolonifera</u> <u>15</u> <u>NO</u> <u>FAC</u> 2. <u>Schedonorus pratensis</u> <u>25</u> <u>Yes</u> <u>FACU</u> 3. <u>Bromus inermis</u> <u>25</u> <u>Yes</u> <u>UPL</u> 4. <u>Carex obnupta</u> <u>1</u> <u>NO</u> <u>OBL</u> 5. <u>Hypochaeris radicata</u> <u>20</u> <u>Yes</u> <u>FACU</u> 6. <u>Ranunculus repens</u> <u>5</u> <u>NO</u> <u>FAC</u> 7. <u>Rumex acetosilla</u> <u>2</u> <u>NO</u> <u>FACU</u> 8. <u>Cotus corniculatus</u> <u>2</u> <u>NO</u> <u>FAC</u> 9. _____ 10. _____ 11. _____ = Total Cover <u>95</u>				
Woody Vine Stratum (Plot size: <u>30</u>) 1. <u>Rubus bifrons</u> <u>1</u> <u>NO</u> <u>NI</u> 2. _____ = Total Cover <u>1</u>				
% Bare Ground in Herb Stratum <u>~5</u>				

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks: R. bifrons not dominant due to not enough (ie <5%)

SOIL

Sampling Point: P1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-11	7.5YR 2.5/1	100%					Loam	
11-15	7.5YR 2.5/1	95%	10YR 5/6	5%	C	M	Loam	
15-18	7.5YR 2.5/1	50%	10YR 5/6	30%	C	M	Silty clay	
15-18	7.5YR 2.5/1	50%	10YR 6/8	20%	C	M	Silty clay	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: NADepth (inches): NAHydric Soil Present? Yes ☐ No ☒

Remarks:

- Does not meet F6 because no redox occurs in the dark surface layer and redox appears only below 20 cm.
- All is not met because the layer beneath the dark surface lacks depleted matrix

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
☐ High Water Table (A2)
☐ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal Mat or Crust (B4)
☐ Iron Deposits (B5)
☐ Surface Soil Cracks (B6)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
☐ Salt Crust (B11)
☐ Aquatic Invertebrates (B13)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

- Surface Water Present? Yes ☐ No ☒ Depth (inches): _____
 Water Table Present? Yes ☐ No ☒ Depth (inches): _____
 Saturation Present? Yes ☐ No ☒ Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology indicators

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Black Dog Partnership City/County: McKinleyville HumCo Sampling Date: 12/5/25
 Applicant/Owner: Kevin Jenkins State: CA Sampling Point: P2
 Investigator(s): Mason London Section, Township, Range: S32, T7N, R1E, HB & M
 Landform (hillslope, terrace, etc.): Pasture Local relief (concave, convex, none): None Slope (%): -
 Subregion (LRR): LRR-A Lat: 40.954641 Long: -124.098477 Datum: WGS84
 Soil Map Unit Name: 22S-Arcata and Candy Mountain Soils NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation X, Soil X, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	
Remarks: <u>Mowed & tilled historically</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>1/3 = 33%</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u>35</u> x 3 = <u>105</u> FACU species <u>35</u> x 4 = <u>140</u> UPL species <u>30</u> x 5 = <u>150</u> Column Totals: <u>100</u> (A) <u>395</u> (B) Prevalence Index = B/A = <u>395/100 3.95</u>
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u>5</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Schedonorus pratensis</u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>	
2. <u>Bromus inermis</u>	<u>30</u>	<u>Yes</u>	<u>UPL</u>	
3. <u>Agrostis stolonifera</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>	
4. <u>Lotus corniculatus</u>	<u>10</u>	<u>NO</u>	<u>FAC</u>	
5. <u>Rumex acetosella</u>	<u>5</u>	<u>NO</u>	<u>FACU</u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>100</u> = Total Cover				
Woody Vine Stratum (Plot size: <u>30</u>)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u>0</u>	<u> </u> = Total Cover			
Remarks: <u> </u>				

SOIL

Sampling Point:

P2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|--|---|---|
| ☐ Histosol (A1) | ☐ Sandy Redox (S5) | ☐ 2 cm Muck (A10) |
| ☐ Histic Epipedon (A2) | ☐ Stripped Matrix (S6) | ☐ Red Parent Material (TF2) |
| ☐ Black Histic (A3) | ☐ Loamy Mucky Mineral (F1) (except MLRA 1) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Hydrogen Sulfide (A4) | ☐ Loamy Gleyed Matrix (F2) | ☐ Other (Explain in Remarks) |
| ☐ Depleted Below Dark Surface (A11) | ☐ Depleted Matrix (F3) | |
| ☐ Thick Dark Surface (A12) | ☐ Redox Dark Surface (F6) | |
| ☐ Sandy Mucky Mineral (S1) | ☐ Depleted Dark Surface (F7) | |
| ☐ Sandy Gleyed Matrix (S4) | ☐ Redox Depressions (F8) | |
- ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: NA

Depth (inches): NA

Hydric Soil Present? Yes _____ No X

Remarks:

No redox all dark sandy loam

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- | | | |
|--|--|--|
| ☐ Surface Water (A1) | ☐ Water-Stained Leaves (B9) (except | ☐ Water-Stained Leaves (B9) (MLRA 1, 2, |
| ☐ High Water Table (A2) | ☐ MLRA 1, 2, 4A, and 4B) | ☐ 4A, and 4B) |
| ☐ Saturation (A3) | ☐ Salt Crust (B11) | ☐ Drainage Patterns (B10) |
| ☐ Water Marks (B1) | ☐ Aquatic Invertebrates (B13) | ☐ Dry-Season Water Table (C2) |
| ☐ Sediment Deposits (B2) | ☐ Hydrogen Sulfide Odor (C1) | ☐ Saturation Visible on Aerial Imagery (C9) |
| ☐ Drift Deposits (B3) | ☐ Oxidized Rhizospheres along Living Roots (C3) | ☐ Geomorphic Position (D2) |
| ☐ Algal Mat or Crust (B4) | ☐ Presence of Reduced Iron (C4) | ☐ Shallow Aquitard (D3) |
| ☐ Iron Deposits (B5) | ☐ Recent Iron Reduction in Tilled Soils (C6) | ☐ FAC-Neutral Test (D5) |
| ☐ Surface Soil Cracks (B6) | ☐ Stunted or Stressed Plants (D1) (LRR A) | ☐ Raised Ant Mounds (D6) (LRR A) |
| ☐ Inundation Visible on Aerial Imagery (B7) | ☐ Other (Explain in Remarks) | ☐ Frost-Heave Hummocks (D7) |
| ☐ Sparsely Vegetated Concave Surface (B8) | | |

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? Yes _____ No _____ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

NA

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: Black Dog Partnership City/County: Nickville Hamco Sampling Date: 12/5/25
 Applicant/Owner: Kevin Jenkins State: CA Sampling Point: P3
 Investigator(s): Maion London Section, Township, Range: S32, T7N, R1E, H132M
 Landform (hillslope, terrace, etc.): Pasture Local relief (concave, convex, none): None Slope (%): —
 Subregion (LRR): LRR-A Lat: 40.954419 Long: -124.098667 Datum: WGS84
 Soil Map Unit Name: 225- Arcata and Corby Mountain Soils NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No — (If no, explain in Remarks.)
 Are Vegetation X, Soil X, or Hydrology — significantly disturbed? Are "Normal Circumstances" present? Yes X No —
 Are Vegetation —, Soil —, or Hydrology — naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>—</u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u>—</u> No <u>X</u>
Hydric Soil Present?	Yes <u>—</u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u>—</u> No <u>X</u>	
Remarks: <u>Mowed & tilled historically</u>		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0/2 = 0%</u> (A/B)
1. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	
2. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	
3. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	
4. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	
<u>—</u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u>—</u> Multiply by: <u>—</u> OBL species <u>—</u> x 1 = <u>—</u> FACW species <u>—</u> x 2 = <u>—</u> FAC species <u>22</u> x 3 = <u>66</u> FACU species <u>55</u> x 4 = <u>220</u> UPL species <u>30</u> x 5 = <u>150</u> Column Totals: <u>107</u> (A) <u>476</u> (B) Prevalence Index = B/A = <u>4.44</u>
<u>—</u> = Total Cover				
<u>—</u> = Total Cover				
<u>—</u> = Total Cover				
<u>—</u> = Total Cover				
Herb Stratum (Plot size: <u>5</u>)				
1. <u>Schedonorus pratensis</u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0' 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Bromus inermis</u>	<u>30</u>	<u>Yes</u>	<u>UPL</u>	
3. <u>Agrostis stolonifera</u>	<u>10</u>	<u>No</u>	<u>FAC</u>	
4. <u>Hypochaeris radicata</u>	<u>10</u>	<u>No</u>	<u>FACU</u>	
5. <u>Rumex acetosella</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
6. <u>Ranunculus repens</u>	<u>10</u>	<u>No</u>	<u>FAC</u>	
7. <u>Lotus corniculatus</u>	<u>2</u>	<u>No</u>	<u>FAC</u>	
8. <u>Spergula arvensis</u>	<u>1</u>	<u>No</u>	<u>NI</u>	
9. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	
10. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	
11. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	
<u>108</u> = Total Cover				
Woody Vine Stratum (Plot size: <u>30</u>)				
1. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	Hydrophytic Vegetation Present? Yes <u>—</u> No <u>X</u>
2. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>—</u>				
Remarks: <u>NA</u>				

Sampling Point: P3

[illegible]²Location: PL=Pore Lining, M=Matrix.

Indicators for Problematic Hydric Soils³:

- ___ 2 cm Muck (A10)
 ___ Red Parent Material (TF2)
 ___ Very Shallow Dark Surface (TF12)
 ___ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Type: NA
Depth (inches): NA

Hydric Soil Present? Yes _____ No ✓

HYDROLOGY

Primary Indicators (minimum of one required; check all that apply)

- Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) (LRR A)
- ___ Frost-Heave Hummocks (D7)

Surface Water Present? Yes _____ No _____ Depth (inches): _____
 Water Table Present? Yes _____ No _____ Depth (inches): _____
 Saturation Present? Yes _____ No _____ Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐ X

Remarks:

None

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: Black Dog Partnership City/County: Mehville Humco Sampling Date: 12/5/25
 Applicant/Owner: Fern Jenkins State: CA Sampling Point: PY
 Investigator(s): Mason London Section, Township, Range: S32, T7N, R1E HB&M
 Landform (hillslope, terrace, etc.): Pasture Local relief (concave, convex, none): None Slope (%): —
 Subregion (LRR): LAR-A Lat: 40.954356 Long: -124.098442 Datum: WGS 84
 Soil Map Unit Name: 225-Arcata and Candy Mountain Soils NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No — (If no, explain in Remarks.)
 Are Vegetation X, Soil X, or Hydrology — significantly disturbed? Are "Normal Circumstances" present? Yes X No —
 Are Vegetation —, Soil —, or Hydrology — naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>—</u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u>—</u> No <u>X</u>
Hydric Soil Present?	Yes <u>—</u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u>—</u> No <u>X</u>	
Remarks: <u>Mowed & tilled historically</u>		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>1/3 = 33%</u> (A/B)	
1. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>		
2. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>		
3. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>		
4. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>		
Sapling/Shrub Stratum (Plot size: <u>30</u>)	<u>X</u> = Total Cover			Prevalence Index worksheet: Total % Cover of: <u>—</u> Multiply by: <u>—</u> OBL species <u>—</u> x 1 = <u>—</u> FACW species <u>—</u> x 2 = <u>—</u> FAC species <u>40</u> x 3 = <u>120</u> FACU species <u>50</u> x 4 = <u>200</u> UPL species <u>25</u> x 5 = <u>125</u> Column Totals: <u>115</u> (A) <u>445</u> (B) Prevalence Index = B/A = <u>445/115 3.8</u>	
1. <u>Rosa Californica</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>		
2. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>		
3. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>		
4. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>		
Herb Stratum (Plot size: <u>5</u>)	<u>10</u> = Total Cover			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
1. <u>Schedonorus prantensis</u>	<u>50</u>	<u>Yes</u>	<u>FACU</u>		
2. <u>Bromus inermis</u>	<u>25</u>	<u>Yes</u>	<u>UPL</u>		
3. <u>Agrostis stolonifera</u>	<u>15</u>	<u>No</u>	<u>FAC</u>		
4. <u>Ranunculus repens</u>	<u>10</u>	<u>No</u>	<u>FAC</u>		
5. <u>Lotus corniculatus</u>	<u>5</u>	<u>No</u>	<u>FAC</u>		
6. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>		
7. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>		
8. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>		
9. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>		
10. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>		
11. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>		
Woody Vine Stratum (Plot size: <u>30</u>)	<u>105</u> = Total Cover				Hydrophytic Vegetation Present? Yes <u>—</u> No <u>X</u>
1. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>		
2. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>		
% Bare Ground in Herb Stratum <u>0</u>	<u>X</u> = Total Cover				
Remarks: <u>NA</u>					

SOIL

Sampling Point: 154

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|--|---|---|
| ☐ Histosol (A1) | ☐ Sandy Redox (S5) | ☐ 2 cm Muck (A10) |
| ☐ Histic Epipedon (A2) | ☐ Stripped Matrix (S6) | ☐ Red Parent Material (TF2) |
| ☐ Black Histic (A3) | ☐ Loamy Mucky Mineral (F1) (except MLRA 1) | ☐ Very Shallow Dark Surface (TF12) |
| ☐ Hydrogen Sulfide (A4) | ☐ Loamy Gleyed Matrix (F2) | ☐ Other (Explain in Remarks) |
| ☐ Depleted Below Dark Surface (A11) | ☐ Depleted Matrix (F3) | |
| ☐ Thick Dark Surface (A12) | ☐ Redox Dark Surface (F6) | |
| ☐ Sandy Mucky Mineral (S1) | ☐ Depleted Dark Surface (F7) | |
| ☐ Sandy Gleyed Matrix (S4) | ☐ Redox Depressions (F8) | |
- ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: NA

Depth (inches): NA

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- | | | |
|---|---|---|
| ___ Surface Water (A1) | ___ Water-Stained Leaves (B9) (except | ___ Water-Stained Leaves (B9) (MLRA 1, 2, |
| ___ High Water Table (A2) | ___ MLRA 1, 2, 4A, and 4B) | ___ 4A, and 4B) |
| ___ Saturation (A3) | ___ Salt Crust (B11) | ___ Drainage Patterns (B10) |
| ___ Water Marks (B1) | ___ Aquatic Invertebrates (B13) | ___ Dry-Season Water Table (C2) |
| ___ Sediment Deposits (B2) | ___ Hydrogen Sulfide Odor (C1) | ___ Saturation Visible on Aerial Imagery (C9) |
| ___ Drift Deposits (B3) | ___ Oxidized Rhizospheres along Living Roots (C3) | ___ Geomorphic Position (D2) |
| ___ Algal Mat or Crust (B4) | ___ Presence of Reduced Iron (C4) | ___ Shallow Aquitard (D3) |
| ___ Iron Deposits (B5) | ___ Recent Iron Reduction in Tilled Soils (C6) | ___ FAC-Neutral Test (D5) |
| ___ Surface Soil Cracks (B6) | ___ Stunted or Stressed Plants (D1) (LRR A) | ___ Raised Ant Mounds (D6) (LRR A) |
| ___ Inundation Visible on Aerial Imagery (B7) | ___ Other (Explain in Remarks) | ___ Frost-Heave Hummocks (D7) |
| ___ Sparsely Vegetated Concave Surface (B8) | | |

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? Yes _____ No _____ Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Appendix E

Prior Wetland Delineation Data

AQUATIC RESOURCES DELINEATION

2725 & 2707 Central Ave, McKinleyville, 95519, Humboldt County, CA

Assessor Parcel Number (APN):

510-081-002-000 & 510-081-001-000

January 2026



1. INTRODUCTION

The Ace Hardware property in McKinleyville, CA was traversed by Streamline Planning staff on November 4, 2015 to ascertain the presence of upland habitat (non-wetland) suitable for residential development. This assessment was performed to determine the feasibility of a lot line adjustment. The area traversed lies in the eastern portion of the parcel currently designated APN 510-081-002, which is the northern of the two parcels on the Ace property. The entire property is located south of Murray Road and east of Central Avenue.

While a wetland was previously mapped in the south-central portion of the property, an apparent upland was scouted for wetland and upland characteristics in November. After an initial walk around the northeastern corner by Streamline Consulting staff, a transect was run from north to south along the center of the apparent upland area to ensure buildable residential land exists onsite (See aerial photo, Attachment 1). Along this transect, a primary and two secondary pits were dug and examined using the Army Corps three parameter approach to ascertain the presence of hydrophytic vegetation, hydric soils or wetland hydrology.

2. RESULTS AND DISCUSSION

The entire parcel is surrounded by residential development on the northern and eastern boundaries. The overall site topography rises toward the northeast, where patches of upland Spanish Heather combined with the elevated topography to make a logical site to search for uplands. The entire elevated portion of the site examined during this analysis exhibited none of the three Army Corps parameters. This elevated area appears as an overall subtle convex hump on the property, with non-native pasture grasses and forbs characteristic of upland pastures. Soils were relatively deep topsoil underlain by brightly mottles subsoils, too bright to classify as hydric. No indication of wetland hydrology was present, even after significant rainfall that filled the wetland near the barn.

The Data Form from Pit #1R has been included in this Assessment to show the characteristics typical of the upland examined on this site (Attachment 2). The upland area represented by this Data Form is outlined in yellow on Attachment 1, encompassing 52,080 square feet or 1.2 acres. The north-south length of the rectangle is 336 feet long, while the west-east width is 155 feet. This rectangle appears to be approximately 120 feet from the delineated wetland to the southwest, providing adequate buffer space. If development occurs, a wetland delineation between this assessed rectangle and the wetland near the barn can occur to ensure wetlands with subtle Army Corps parameters do not exist, and to determine how far the current upland polygon can be expanded while maintaining appropriate buffer space for the wetland by the barn.

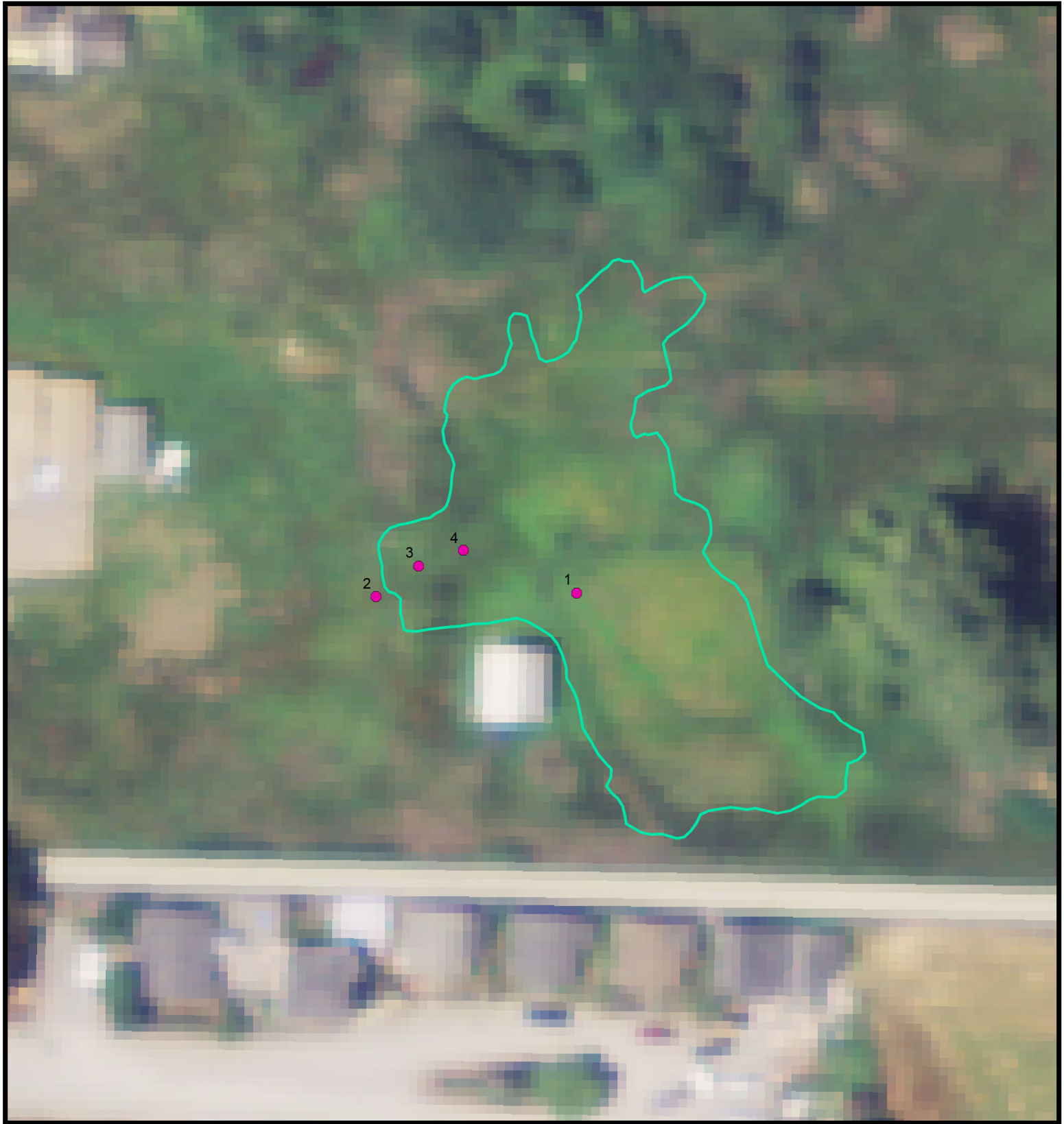


Google earth

feet 300
meters 100



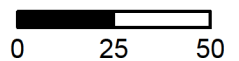
- Area delineated as upland for residential use
- Secondary confirmation pit
- Primary analysis pit



ATTACHMENT 1

Jenkins Project
Wetland Delineation
2725 Central Avenue
McKinleyville, CA 95519

1" = 50 ft



Pit Locations



Wetland Boundary



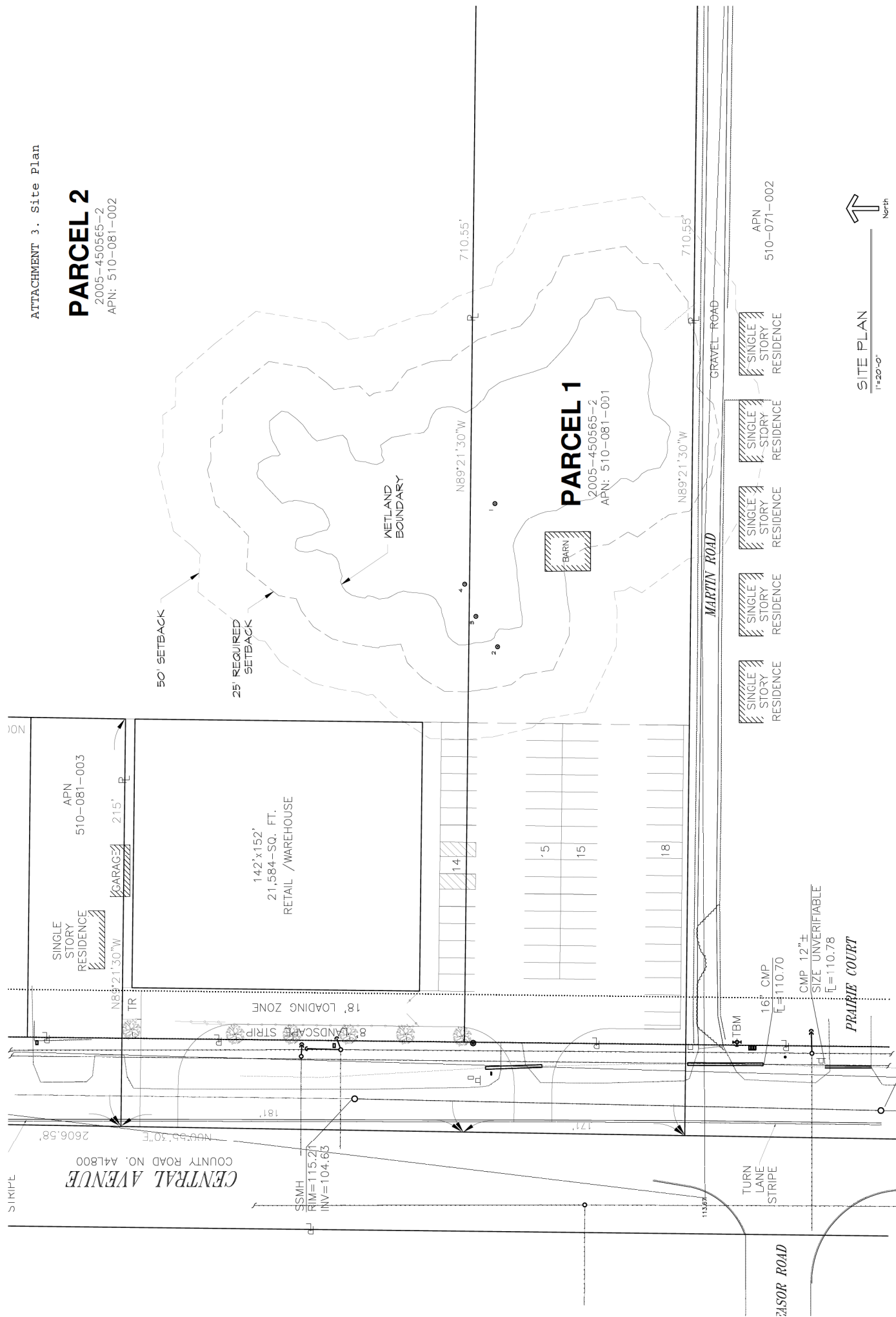
Map for display purposes only.
Caldwell 12/10/2013
Datum: NAD83 CA FIPS 1

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2005-450565-2
APN: 510-081-002



SITE PLAN
1"=20'-0"

Path: \\arcatasv1\projects\GIS-Files\Eureka\2017\017257-McKinleyville-Ace\PROJ_MXD\WD_Fig2_WetlandDelineation.mxd User Name: hhummel DATE: 5/4/20, 1:12PM

