

Wetlands Habitat Mitigation & Monitoring Plan_Rev1

We Are Up Housing Project

We Are Up 24 March 2025

The Power of Commitment



Prepared for:



We Are Up 144 Weirup Lane McKinleyville, CA 95519

Project name We Are Up Community Development Project								
Docume	nt title	Wetlands Habitat	Mitigation & M	onitoring Plan_	Rev1 We Are	Up Housing	Project	
Project number		12560473						
Statue	Revision		Reviewer		Approved fo	r issue		
Code		Revision Auth	Author	Name	Signature	Name	Signature	Date
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1. Introduction

This document supports the Project's permitting and construction planning as deemed appropriate. This report is subject to, and must be read in conjunction with, the limitations set out in **Section 10**, Scope and Limitations, and the assumptions and qualifications contained throughout the report.

1.1 Project Location

The Project is located in the unincorporated community of McKinleyville, within Section 5, Township 06 North, Range 01 East, Arcata North USGS 7.5 Minute Quadrangle, Humboldt Base and Meridian, in Humboldt County, California. McKinleyville is situated on the Pacific Coast, approximately 14 miles north of Eureka, California and 90 miles south of the Oregon border.

The Project is located on Assessor's Parcel Numbers (APNs) 509-181-61, 509-181-03, 509-181-12, and 509-181-05, encompassing approximately 17.38 acres (**Appendix A, Figure 1**). The Project Area is situated within an established commercial and residential area and within the Urban Development Area as defined by the McKinleyville Community Plan (Humboldt County 2017). The northwest portion of APN 509-181-61 consists of a vacant field, two-unit residential structure (duplex), three outbuildings, and a barn. The remainder of the parcel is undeveloped. APNs 509-181-03, 509-181-12, and 509-181-05 contain existing residential structures and maintained lawns. Terrain across the Project Area gradually slopes to the southeast. Vegetation throughout the Project Area consists of non-native grasses and other low-habitat value vegetation (GHD 2024).

1.2 **Project Description**

The Project is to be funded and operated by We Are Up, a 501(c)(3) non-profit organization. We Are Up was founded in 2021 with the mission to support seniors, adults on the autism spectrum and/or I/DD, and those with physical, intellectual and/or developmental disabilities by providing a secure, integrated, community-based, long-term, and affordable place to call home. The Project will facilitate training and education that leads to improved life skills and opportunities for employment, allowing people with disabilities to contribute to our community and enrich their lives.

The Project will offer safe housing opportunities for people with autism and/or I/DD needs who would not otherwise be able to live on their own. The Project will consist of new infill residential development within a Housing Opportunity Zone located in McKinleyville, California (**Appendix B**). The Project will address the urgent need for new accessible housing in the region with a focus on the shortage of housing specifically for individuals with disabilities.

The Project will construct housing units, a community center, a greenhouse, and install associated site improvements, including an access road, walking trails, related lighting, stormwater features, wetland creation, riparian planting, and community access (**Appendix B**).

In addition to housing, the Project will create functional and community spaces to be used by We Are Up residents for resident enrichment and education. The community spaces are comprised of a greenhouse, garden space, orchard, walking trails, and shelters/pens for livestock to provide practical opportunities for resident enrichment, social interaction, and education. Wetland and streamside habitat areas on the Project site will be created and enhanced.

1.3 Purpose

This Wetland Habitat Mitigation and Monitoring Plan (WHMMP) has been prepared on behalf of We Are Up for the We Are Up Housing Project (Project) for the U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB, or Regional Board) to satisfy water quality permit requirements. The Project will impact regulated jurisdictional wetlands. The Project will thus require authorization from the USACE under Section 404 of the Clean Water Act (CWA) and a corresponding Section 401 Certification from the Regional Board. As part of the Section 404

permitting process, the USACE will review the Project under NEPA and Section 106 of the National Historic Preservation Act.

Wetlands and other regulated waters impacted by the Project will require compensatory mitigation in coordination with the USACE and Regional Board, which will occur onsite and the project is self-mitigating.

Additionally, the Conservation and Open Space Element of the Humboldt County General Plan (2017a) summarizes policies relevant to the protection of biological resources. Policies include establishing Streamside Management Areas (SMA) for watercourses and wetlands (Policy BR-P5, BR-P7, BR-S5, BR-S7, BR-S10, and BR-S11). Buffers established for riparian corridors are 100 feet measured horizontally from the edge of top of bank or edge of riparian dripline, whichever is greater, and the SMA width applied to wetlands is designated as 50 feet for seasonal wetlands and 150 feet for perennial wetlands. The site contains a perennial creek and seasonal wetlands. The setback begins at the edge of the delineated wetland.

The purpose of the WHMMP is to provide detailed methods for creation and monitoring the success of wetlands and riparian habitat to compensate for impacts to federal and state jurisdictional three-parameter wetlands resulting from Project implementation.

This WHMMP is patterned on Regulatory Program Regulation (33 CFR) guidance published by the USACE (2015), along with guidance from the Regional Board Clean Water Act Section 401 Water Quality Certification application (*Wetland Mitigation Checklist*). This WHMMP provides information on impacts to and creation of wetlands and enhancement of existing riparian habitat. Both USACE and NCRWQCB jurisdictional three-parameter wetlands will be impacted by the Project. The Project will be compensated at a ratio that satisfies regulatory agencies at a ratio that achieves no net loss of wetland habitat. Consultation with both agencies has occurred on behalf of the Project and mitigation ratios have been proposed and agreed upon. The Project will monitor wetlands in accordance with a WHMMP to ensure no net loss of these resources. This WHMMP provides mitigation and monitoring details for wetlands and riparian habitat in accordance with Project permit requirements, including the following elements:

- 1. Baseline information on location and extent of existing resources.
- 2. Identification of jurisdictional resources to be impacted by Project activities and calculations of impacts.
- 3. Identification of mitigation sites for each resource impacted.
- 4. Proposed mitigation objectives and ratios.
- 5. Mitigation design and maintenance plan.
- 6. Monitoring protocols and reporting responsibilities.
- 7. Adaptive management plan.
- 8. Ecological performance standards for each resource mitigated for.
- 9. Site protection instrument.
- 10. Responsible parties for actions identified in this WHMMP.

2. Baseline Information

2.1 Studies within the Project Area

An Aquatic Resources Delineation and Sensitive Habitat Report (GHD 2024) was prepared to assess baseline aquatic resources within the Project Area and is included as **Appendix C**. These studies evaluate the potential for any special status plants, wildlife species, or any sensitive natural communities (SNCs) or aquatic resources to occur and an analysis of potential impact. Furthermore, the accompanying data collected from these studies was used to inform the mitigation design for wetland creation and riparian enhancement, using existing conditions and species lists derived

from the studies to guide the design. A comprehensive species list and all vegetation communities within the Project Area were mapped during these studies. The existing communities on-site and associated species assemblages have helped guide what vegetation assemblages the Project will aim to re-establish post-construction, with special attention paid to establishing native communities.

The following subsections present the location, function, and value of existing wetlands in the Project Area that are anticipated to be affected by implementation of the Project. Additionally, existing resources (wetland habitat, upland habitat surrounding wetlands, and riparian vegetation communities) will be summarized, as they have informed the mitigation design for wetland creation and riparian habitat enhancement and provide a baseline by which to compare future results. **No impact to riparian habitat will occur during Project implementation**. The Project seeks to enhance existing riparian habitat as part of the wetland mitigation package.

2.2 Jurisdictional Areas

Project Background and Regulatory History

On behalf of We Are Up, GHD prepared the Nationwide Authorization and Section 401 Certification application package and accompanying appendices in support of the We Are Up Development Project in April 2023.

The application package was reviewed and approved by NCRWQCB and USACE in November and December of 2023 under water quality certification WDID No. 1B23047WNHU and Nationwide Permit (NWP) 29 for Residential Developments (USACE File ID: SPN-2023-00205), which outlined conditions for the Project based on all permit application materials provided in the original submittal (April 2023) and subsequent responses to the USACE's and NCRWQCB's requests for more information. The information included in the original submittals regarding wetlands were based on the delineation of potential jurisdictional aquatic resources in the Project Area outlined in the *Aquatic Delineation and Sensitive Habitat Report_Rev2* (GHD 2024), which encompassed parcel APN 509-181-61.

Since the date of those approvals some Project adjustments have occurred, namely (1) expansion of the Project Area to include three new parcels (APNs 509-181-03, 509-181-12, and 509-181-05) to the west of APN 509-181-61 (**Appendix A, Figure 1**), for which proposed design features have been shifted and (2) the Project is preparing a new CEQA document (previously an IS/MND). The Project has expanded its footprint since the first iteration of design located on APN 509-181-61; however, the total area of permanent impacts to jurisdictional wetlands has been reduced as a result. The footprint has been shifted geographically to be positioned more exclusively within the expanded Project Area parcels and on the western edge of APN 509-181-61. GHD has completed a delineation of potential jurisdictional aquatic resources for the expanded Project Area outlined in *Aquatic Resources Delineation and Sensitive Habitat Report* (GHD 2024).

The Project team re-engaged the NCRWQCB and USACE in December 2024 to discuss updates to the Project. The updated wetland delineation results were reviewed during a site visit on January 31, 2025 with Stephen Ryan (USACE). It was determined during this site visit that only Wetland-1 is federally jurisdictional. The Project received formal written verification via email on February 18th, 2025 that the Project will need to apply for a new NWP 29 that focuses on federally jurisdictional wetland impacts only. Thereafter, the Project received written verification via email on March 6th, 2025 that the Project qualifies for an amendment to the existing 401 Certification based on Project updates. In his March 6th, 2025 response, Ryan Bey also agreed that Wetland-4 is not a State jurisdictional aquatic feature based on rationale provided by GHD, which is briefly outlined in this WHMMP (Ryan Bey, personal communication, March 6th, 2025). Therefore, Wetland-4 is not included in total three-parameter wetland calculations for the Project henceforth. In the first 401 Certification application review in 2023, it was determined that the fill of a stormwater detention pond historically constructed by the McKinleyville Community Services District (MCSD) (**Appendix A, Figure 2.1**) located on APN 509-181-61 is state jurisdictional, and therefore will be included in three-parameter wetland fill calculations for state jurisdictional wetlands.

Jurisdictional Resources within the Project Area

A wetland delineation was completed in 2024 (**Appendix C** and **Appendix A**, **Figure 2.1**) to determine the extent of wetlands and Other Waters within the Project Area based on hydrophytic vegetation, hydric soils, and wetland hydrology using methods and indicators outlined in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (USACE 2010). In addition, under the McKinleyville Community Plan (Humboldt County 2017) Section 3422 (7), Wetland Areas shall be defined as satisfying at least one of the following three criteria: (1) the presence of at least periodic predominance of hydrophytic vegetation; (2) predominately hydric soils; (3) periodic inundation for seven (7) consecutive days (i.e., one-parameter wetlands). One one-parameter wetland jurisdictional to the County of Humboldt under the Mckinleyville Community Plan was detected onsite outside of the delineated three-parameter wetlands. Wetlands jurisdictional to the County will be addressed during CEQA review and therefore will not be addressed further in this WHMMP. Within the boundaries of mapped vegetation communities, no wetlands were mapped.

Mill Creek, a third order stream and tributary of the Mad River, flows just along the southern boundary of the Project Area. No instream work or work within the ordinary high-water mark (OHWM) is planned, nor in areas with riparian vegetation.

One contiguous three-parameter palustrine emergent wetland (Wetland-1) was mapped within the APN 509-181-61 totaling 8.68 acres and due to the hydrologic connection with Mill Creek is confirmed jurisdictional to the USACE and RWQCB. A historically constructed stormwater feature delineated as a three-parameter palustrine emergent wetland was also mapped within APN 509-181-61 and is jurisdictional to the state, but not the USACE (**Appendix A, Figure 2.1**).

Three three-parameter wetland areas were delineated and mapped (**Appendix A, Figure 2.1**) on APNs 509-181-03, 509-181-12, and 509-181-05: Wetland-2 (0.1 acres), Wetland-3 (0.03 acres), and Wetland-4 (0.05 acres). These wetlands do not have hydrologic connectivity to Mill Creek or to Wetland-1 and therefore are not federally jurisdictional wetlands. Correspondence with the NCRWQCB in March 2025 confirmed that Wetland-4 is not jurisdictional to the state; therefore, Wetland-2 and Wetland-3 are jurisdictional to the state within these parcels, but not the USACE.

Wetland-4 Jurisdictional Determination

Wetland-4 was delineated and mapped as a three-parameter wetland within 509-181-12 and 509-181-05. Wetland-4 (0.05 ac) is an isolated wetland in a residentially developed, regularly mowed, and maintained yard and was likely artificially developed due to stormwater from the adjacent uphill dwellings draining toward and collecting in this feature. Water roof downspouts from the dwellings upslope of Wetland-4 were pointing directly onto a concrete slab that conveyed the water downslope into the lawn. Additionally, a gravel road was also conveying water from upslope developments (including the parking lot of the commercial businesses that immediately border the northern parcel). The elevation of the site slopes generally southeast toward the Mill Creek drainage; therefore, stormwater runoff would naturally drain through this lawn on the site. However, the volume of runoff was artificially magnified as a result of the directional drainage on the site, thereby artificially creating hydrology that created the wetland.

Wetland-4 is less than an acre in size, does not have a surface hydrological connection to any Other Water of the State or Water of the U.S., and does not otherwise satisfy the criteria for Waters of the State set forth in Section II.2, II.3.a, II.3.b, or II.3.c of the State Water Resource Control Board (SWRCB) Procedures for Discharges of Dredged or Fill Material into Waters of the State (SWRCB 2021). The stormwater conveyance to this area does not satisfy II.3.d.iii of the Procedures because it was not a feature designed to be part of a stormwater permitting program; however, it appears that the site layout had informally created an area of stormwater infiltration in this maintained lawn by proxy of landscape position.

It is assumed that without the direct conveyance of stormwater directed at this portion of the lawn ("ongoing maintenance"), Wetland-4 would cease to exist naturally (i.e., not a "relatively permanent part of the natural landscape"). Wetland-4 was therefore recommended to not to be considered jurisdictional to the NCRWQCB, which was agreed upon and confirmed in March 2025 in correspondence with the NCRWQCB.

A summary of wetlands delineated within the Project Area is included in Table 2.2-1.

Wetland ID	Wetland Type	Location (APN)	Jurisdictional Status ¹	Total Area (square feet / acres)
Wetland-1	Palustrine emergent three-parameter (PEM)	509-181-61	USACE / NCRWQCB	377,918 sf / 8.68 ac
MCSD Stormwater Facility	PEM	509-181-61	NCRWQCB	1,520 sf / 0.03 ac
Wetland-2	Palustrine scrub- shrub (PSS)	509-181-12	NCRWQCB	4,436 sf / 0.10 ac
Wetland-3	PSS	509-181-03 and 509-181-12	NCRWQCB	1,404 sf / 0.03 ac
Wetland-4	PEM	509-181-12 and 509-181-05	Non-jurisdictional	2,094 sf / 0.05 ac

Table 2.2-1 Delineated wetlands within the Project Area

1. Jurisdictional status of each wetland area has been confirmed through agency correspondence.

2.3 Existing Habitat in the Project Area

The parcels collectively contain pasture and residential lawns dominated by non-native grasses that comprise a mosaic of wetlands and uplands with vegetation assemblages meeting the *Manual of California Vegetation Online* (CNPS 2022) definition of Coastal willow thickets and Sitka spruce stands around the north-eastern and south-eastern edge of the Project Area, some of which is functioning as riparian vegetation along the Mill Creek corridor.

Three Parameter Wetlands

Wetland-1 was open and mostly free of rooted woody vegetation and is classified according to the Cowardin system as a palustrine emergent wetland (PEM) (FGDC 2013). The vegetation was primarily characterized by redtop (*Agrostis stolonifera*, FAC, invasive non-native), reed fescue (*Festuca arundinacea*, FAC, invasive non-native), common velvetgrass (*Holcus lanatus*, FAC, invasive non-native), Italian rye grass (*Festuca perennis*, FAC, invasive non-native), slough sedge (*Carex obnupta*, OBL, native), and small fruited bullrush (*Scirpus microcarpus*, OBL, native). Wetland-1 passed the dominance test for hydrophytic vegetation (in wetland plots), but in some plots, only passed for hydrophytic vegetation due to dominance of facultative species. When prevalence index and the FAC-neutral test were employed, the vegetation did not pass. In short, vegetation proved to be problematic in some areas of the wetland, as it was overwhelmingly non-native facultative grass species. Presence of hydrology indicators and hydric soils were replied upon heavily to help determine upland and wetland boundaries.

Wetland-2 and Wetland-3 are dominated by woody vegetation (Arroyo willow [*Salix lasiolepis*], FACW) and therefore classified as palustrine scrub-shrub (PSS) wetlands according to the Cowardin system of classification (FGDC 2013). Despite the presence of Arroyo willow in the tree stratum, the understory herb composition was very similar to that of Wetland-1—dominated by non-native herbaceous herbs and grasses (Kentucky blue grass [*Poa pratensis*], redtop, creeping buttercup [*Ranunculus repens*], and common velvet grass), with a minor presence of native species (slough sedge and horsetail [*Equisetum telmateia*], and California blackberry [*Rubus ursinus*] and Himalayan blackberry [*R. armeniacus*]).

The upland areas around these wetlands were dominated exclusively by non-native species, including maintained residential lawns. Upland areas were dominated by redtop (FAC, invasive non-native), sweet vernal grass (*Anthoxanthum odoratum*, FACU, invasive non-native), ribwort (*Plantago lanceolata*, FACU, invasive non-native), and hawkbit (*Leontodon saxatillis*, FACU, non-native).

Riparian Corridor

The riparian corridor of Mill Creek was mapped to the drip line and no wetlands were assessed underneath the canopy. The riparian dripline was mapped as displayed in **Appendix A, Figure 2.1**. Much of the two vegetation communities are present within the Mill Creek riparian corridor and function as riparian vegetation.

Sitka Spruce Alliance

The Sitka Spruce Alliance corresponds to the Rapid Assessment datasheet WEIR001 in **Appendix C**. The Sitka Spruce Alliance was observed in the north, northwest, and southwest edges of the Project Area and covers 0.75 acres of the Project Area. This community contained a tree canopy cover of 40% Sitka spruce (*Picea sitchensis*, FAC, native), 35% red alder (*Alnus rubra*, FAC, native), and 20% incense cedar (*Thuja plicata*, FAC, native), and is associated with California blackberry (*Rubus ursinus*, FACU, native).

Coastal Willow Alliance

The Coastal Willow Alliance corresponds to the Rapid Assessment datasheet WEIR002 in **Appendix C**. The Coastal Willow Alliance was observed in the north, northwest, and southwest edges of the Project Area and covers 0.85 acres of the Project Area. This community contained a tree canopy cover of 2% red alder, a shrub layer of 85% coastal willow (*Salix hookeriana*, FACW, native), and 20% California blackberry.

2.4 Project Impacts to Jurisdictional Wetlands

Impacts to Jurisdictional Wetlands within the Project Area

Based on the current design, the Project will have temporary and permanent impacts to three-parameter wetlands (**Table 2.4-1** and **Appendix A, Figure 2.1**). Permanent fill of wetlands will occur due to the construction of buildings, and of the asphalt driveway and parking areas (**Appendix A, Figure 2.1** and **Appendix B**). Temporary impacts will occur due to temporary road construction for equipment to access the wetland mitigation sites and temporary construction impacts from grading around the perimeter of building construction and culvert installation.

Wetland ID and Type	Jurisdictional Status	Total Area (square feet / acres)	Temporary Impact	Permanent Impact
Wetland-1: PEM three- parameter wetland	USACE / NCRWQCB	377,918 sf / 8.68 ac	9,852 sf	6,207 sf
MCSD Stormwater Facility: PEM three- parameter wetland	NCRWQCB	1,520 sf / 0.03 ac	0	1,520 sf
Wetland-2: PSS three- parameter wetland	NCRWQCB	4,436 sf / 0.10 ac	0	4,436 sf
Wetland-3: PSS three- parameter wetland	NCRWQCB	1,404 sf / 0.03 ac	0	1,404 sf
	Total	385,276 sf	9,852 sf / 0.22 ac	13,594 sf / 0.31 ac

Table 2.4-1	Approximate in	npacts to	iurisdictional	wetlands
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3. Mitigation Plan

3.1 Mitigation Objectives

To compensate for the impact to wetlands during Project construction, two primary methods of compensation are proposed that will in total create a synergistic effect toward habitat recovery and enhancement: (1) creation of palustrine emergent and palustrine scrub shrub wetland habitat on-site and in-kind with revegetation of native wetland plant species and (2) enhancing existing riparian habitat through expansion of the Mill Creek riparian corridor through planting with native tree and shrub species that associate with vegetation communities observed on-site (**Appendix A**, **Figure 2.2**).

The overarching goal of the mitigation is to ensure that potential impacts to sensitive resources resulting from Project implementation are adequately and successfully compensated to achieve no net loss of sensitive resources.

Mitigation Ratio and Methods of Compensation

Installation of new stormwater facilities and development area grading will require filling wetlands. Based on the current conceptual plan approximately 13,594 square feet (0.31 acres) of three-parameter wetlands will be filled; however, the jurisdictional status of each wetland varies and therefore the mitigation area required to compensate for wetland loss for each jurisdictional agency is different. **Table 3.1-1** summarizes the total permanent impacts to jurisdictional wetland and the proposed mitigation strategy to compensate for wetland loss. All mitigation proposed is on-site and wetland creation is in-kind and adjacent to existing three-parameter wetlands.

Temporary impacts to wetlands would be restored in place immediately following construction at a 1:1 ratio, to an equal or better condition, using an appropriate native seed mix to revegetate disturbed areas.

There are two compensatory wetland mitigation sites that will create three-parameter palustrine emergent and palustrine scrub shrub wetlands along the edges of existing upland islands that exist within the larger contiguous three-parameter wetland on APN 509-181-61 (**Appendix A, Figure 2.2**). Proposed wetland creation consists of the expansion of existing wetland areas by excavating uplands adjacent to the wetlands and replanting of the excavated areas with native wetland plant species. The proposed hydrologic design will result in a consistent and relatively simple management of natural processes, leading to a high likelihood of success. There is one riparian enhancement site that borders the edge of the existing riparian dripline of Mill Creek (**Appendix A, Figure 2.2**). The Project seeks to convert 15,834 square feet of uplands to three-parameter wetlands with a seasonally flooded water regime and enhance 6,600 square feet of the riparian corridor with native riparian plantings (**Appendix A, Figure 2.2**).

Wetland ID and Type	Jurisdictional Status	Permanent Impacts	Mitigation Ratio	Mitigation Area Required	Method of Compensation ¹	
Waters of the U.S.	Waters of the U.S.					
Wetland-1: PEM	USACE / NCRWQCB	6,207 sf	1.3:1	8,069 sf	-Creation of 8,069 sf of PEM three- parameter wetlands	
Waters of the State						
- Wetland-1: PEM three-parameter wetland	NCRWQCB	13,594 sf	1.64:1 *Note: This mitigation ratio is split between two	22,294 sf	-Creation of 15,834 sf of PEM / PSS three- parameter	

Table 3.1-1 Pro	oposed mitigation	for permanent i	impacts to ju	urisdictional	wetlands
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Wetland ID and Type	Jurisdictional Status	Permanent Impacts	Mitigation Ratio	Mitigation Area Required	Method of Compensation ¹
- MCSD Stormwater			distinct		wetlands at
Facility: PEM			compensation, wetland		1.1 6 :1 fauo
- Wetland-2: PSS			creation and riparian		-Enhancement of 6,600 sf of
- Wetland-3: PSS			ennancement.		Mill Creek riparian corridor at 0 48:1 ratio
					0.40.1 ratio

1. Compensation for each agency is distinct for each jurisdictional wetland area. The wetland area created to compensate for NCRWQCB jurisdictional wetlands in inclusive of the wetland area created to compensate for USACE jurisdictional wetlands, as all Waters of the U.S. are also considered Waters of the State. Impacts to Wetland-1 are only counted once for mitigation purposes.

Riparian Enhancement

The filling of state jurisdictional wetlands will be mitigated at a 1.64:1 ratio, which would be achieved by providing new onsite wetland areas (creation) as described above and providing approximately 6,600 square feet (0.15 acres) of riparian plantings at a 0.48:1 ratio. Riparian plantings would be installed along the south-eastern corner and eastern portions of the project site adjacent to existing riparian vegetation associated with Mill Creek. This area would be enhanced by planting native riparian vegetation (mainly trees, limited shrubs). Riparian habitat will be enhanced using native species that mimic a similar natural community composition to that which is adjacent to it.

Ethnobotanically Significant Species

A Wiyot tribe botanist was consulted during the development of this WHMMP to create a species list for planting that includes culturally significant species. Species chosen for wetland and riparian plantings that are also considered sources of food, medicine, and/or use in other culturally important practices include: red alder, California blackberry, cascara, grand fir, Sitka spruce, wax myrtle, and ninebark (Adam Canter, personal communication, February 27, 2023).

3.2 Wetlands Creation Site Selection

Wetland creation sites are in two locations within the Project Area (**Appendix A, Figure 2.2**). Design criteria is modelled after juxtaposed wetlands in the Project Area, both topographically and through groundwater monitoring of upland and wetland areas. Each location was chosen based on topography and water table data obtained from monitoring wells installed in or near those areas. The wetland creation sites are directly adjacent to, and will become integrated with, the larger palustrine emergent three-parameter wetland that comprises most of the Project Area.

Wetland Reference Site

Baseline conditions were characterized in the We Are Up aquatic resource delineation report (GHD 2024), and success will largely be determined with the criteria listed in **Section 7**. Due to the high occurrence of non-native species dominating the Project Area, native species within delineated wetland plots were targeted for the planting plan and helped inform planting zones. Additional species were chosen based on site suitability and regional native plant communities.

The data collected from groundwater monitoring in and around Wetland-1 will create target depths that the wetland mitigation sites will be excavated to, ensuring adequate hydrology to support wetland creation.

To ensure successful design and implementation of created three-parameter wetlands, the proposed depth for wetlands created will be determined in final design plans and will use elevation data from existing juxtaposed wetlands (Wetland-1) to guide the grade established. The mitigation wetlands will be graded on the uphill slope at a 3:1 or 4:1 slope into a flattened "bottom" that grades into and generally matches the elevation of the juxtaposed wetlands. Current drainage patterns at the mitigation sites are surface overflow and groundwater conveyance from the surrounding slopes to the north and west of the Project Area, which drain generally southeast to Mill Creek. The wetland mitigation sites are situated mid-slope near a swale and will be fed primarily through groundwater discharge in winter, promoting success of establishment.

Groundwater Monitoring Wells

Ten monitoring wells (piezometers) were installed onsite on January 11, 2022. The wells were installed in potential wetlands and mapped uplands. Wells installed in potential wetlands were installed to determine if wetlands hydrology exists or does not exist (groundwater within 12 inches of the surface for 14 consecutive days). Other wells were installed in uplands to inform wetlands creation and stormwater infiltration (to inform the stormwater engineering design).

Once half of the annual average rainfall occurred monitoring of the wells commenced. Monitoring started on January 17, 2023, and was completed on February 21, 2023. Depth to groundwater was measured with an electronic groundwater measurement device that "beeped" when water was encountered. Depth to groundwater was measured in a tenth of a foot and is recorded in **Table 3.2-1**.

The results from MW-5 through MW-10 (bolded in the table), in conjunction with hydrology soil pit data (described below), were used to discern suitable excavation depth for each wetland creation site.

	DATE:	1/17/2023	1/24/2023	1/31/2023	2/7/2023	2/14/2023	2/21/2023
	Rainfall						
	YTD:	20.97	21.80	21.93	23.34	23.69	23.89
	Normal						
	YTD:	18.93	20.39	21.77	23.15	24.52	25.96
	Current %						
	Norm:	110.8%	106.9%	100.7%	100.8%	96.6%	92.0%
	Name(s) of Data						
	Recorders:	M.Schwarz	M.Schwarz	M.Schwarz	M.Schwarz	A.Crowe	M.Schwarz
		Water	Water	Water	Water	Water	Water
Monitoring	TOC	Depth	Depth	Depth	Depth	Depth	Depth
Well	(feet ags)	(feet bgs)					
Number	(leet ags)	(DTW -					
		TOC)	TOC)	TOC)	TOC)	TOC)	TOC)
MW-1	0.90	1.00	1.55	2.08	1.60	1.27	2.08
MW-2	0.85	1.36	1.90	2.40	1.60	0.76	2.30
MW-3	1.04	0.61	1.06	1.71	0.71	0.50	1.58
MW-4	0.69	0.91	1.36	1.94	1.36	1.06	1.96
MW-5	0.90	1.00	1.50	2.55	1.55	1.86	2.74
MW-6	1.04	0.76	0.97	1.22	0.76	0.50	1.11
MW-7	1.02	0.68	0.78	1.01	0.73	0.17	0.73
MW-8	0.98	0.82	2.12	2.64	1.92	3.03	3.64
MW-9	1.08	1.32	2.22	3.52	1.54	1.12	3.07
MW-10	1.06	0.84	1.44	2.17	0.99	0.56	1.87

Table 3.2-1Results from Monitoring Wells

NOTES:

TOC = Top of Casing (measured in inches and converted to decimal-feet)

DTW = Depth to Water (measured at TOC)

Bgs = below ground surface, Ags = above ground surface

Hydrology Soil Pits

Two hydrology soil pits (HP) were excavated just downslope of MW-9 and MW-10, to investigate the groundwater level in finer detail between and around the monitoring wells, concurrent with the dates that piezometers were monitored. This data was used to inform grading depths for wetland mitigation areas, since the monitoring wells were installed upslope of the area outlined for wetland creation. The hydrology pits surrounding MW-9 and MW-10 were monitored on February 7 and February 21, 2023. The depth to the water table (DTW) was measured from the ground surface, and results for each date and hydrology pit are as follows:

<u>HP-8</u>

2/7/2022: DTW = 8.5 inches

2/21/2023: DTW = 13.5 inches

<u>HP-9</u>

2/7/2022: DTW = 15 inches

2/21/2023: DTW = 18 inches

Results from these hydrology pits provided additional data to inform excavation depths for the wetland mitigation sites.

3.3 Wetland Mitigation Planting Zones

Planting zones at the wetland mitigation sites have been separated into four planting zones: the bottom of the created wetland (Zone 1), the side(s) (Zone 2 and Zone 3), and the rim to the outer edge of the wetland (10-15 feet from rim, Zone 4).

The excavated areas will be planted with the following species found in **Table 3.3-2** using a mix of container stock and hydro-mulch. The suggested planting lists follow along with the most current reference, *National USACE 2020 Wetland Plant List* as defined by the USACE 2020 Western Valleys, Mountain, and Coasts (WMVC) designation (**Table 3.3-1**).

The following steps will be taken to revegetate the mitigation wetland. The bottom of the excavated area (**Zone 1**) and up a portion of the sides (**Zone 2**) will be planted with the species found in **Table 3.3-2**, using container stock. The upper slope up to the edges of the three-parameter wetlands being established will be hydroseeded with the species shown in **Table 3.3-2** for **Zone 3**, with a 10-15 foot halo around the edge of the wetland that will be scarified and planted with ReGreen, yarrow, and a native upland-associated grass seed (either single species or mix) (**Zone 4**). The proposed planting list for created wetlands is based on the native species composition present in wetland habitats (and those adjacent) as described in the wetland delineation report (GHD 2024) and supplemented with additional native species, including those recommended by CDFW. The planting plan supports the goal of in-kind establishment. All species proposed for planting have been cross-referenced with local native plant nurseries based on their available stock; however, suitable substitutions for species in the table may occur with oversight and guidance from a professional botanist/plant ecologist if stock becomes unavailable at the time of revegetation.

Any soil impacted from temporary road impacts or from temporary construction impacts will be disked and seeded with a native wetland grass and herb mix (**Zone 3**).

Indicator Status	Abbreviation	Definitions
Obligate	OBL	Almost always occur in wetlands.
Facultative Wetland	FACW	Usually occur in wetlands, but may occur in non-wetlands.
Facultative	FAC	Occur in wetlands and non-wetlands.

Table 3.3-1 USACE wetland indicator status definitions for WMVC

Indicator Status	Abbreviation	Definitions
Facultative Upland	FACU	Usually occur in non-wetlands, but may occur in wetlands.
Upland	UPL	Almost never occur in wetlands.

Table 3.3-2Wetland planting zones

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Scientific name	Common name	Lifeform	WMVC Indicator Status	Unit	Plant Spacing ¹	Number of plants / Lbs. per acre ³
Planting List for Wetland Bottom (Zone 1)						
Carex obnupta	slough sedge	perennial sedge	OBL	plant band / plug	2 ft	686
Potentilla anserina	silver weed cinquefoil	perennial herb	OBL	plant band / plug	2 ft	686
Scirpus microcarpus	small-fruited bulrush	perennial grass-like herb	OBL	plant band / plug	3 ft	305
Planting List for Sides	(Zone 2)					
Salix lasiolepis ²	Arroyo willow	shrub/tree	FACW	container	15 ft	81
<i>Juncus</i> species (<i>J. balticus, J. effuses</i> var. <i>pacifica,</i> and/or <i>J. hesperius</i>)	wire rush, Pacific rush, and/or coast rush	perennial rush	FACW	plug	2 ft	686
Planting List for Sides	and Temporary Impacts	s (Zone 3)				
Sisyrinchium californicum	golden blue-eyed grass	perennial herb	FACW	plant band / plug	2 ft	686
Stachys chamissonis	coastal hedge nettle	perennial herb	FACW	plant band / plug	3 ft	305
Danthonia californica	California oatgrass	perennial grass	FAC	seed		10 lbs.
Deschampsia caespitosa	tufted hair grass	perennial grass	FACW	seed		6 lbs.
Planting List for Wetlar	nd Edge (10-15 feet from	n edge of cro	eated wetlar	nd, Zone 4)		
ReGreen	sterile grass mixture	grass	NA	seed		40 lbs.
Achillea millefolium	yarrow	perennial herb	FACU	seed		1 lb.
Native grass seed— single species or mix Recommended mix includes: -Bromus sitchensis var. carinatus, -Elymus glaucus, -Festuca rubra,	Native grass seed— single species or mix Recommended mix includes: -California brome -blue wildrye -red fescue -meadow barley	grass	variable status	seed		10 lb.

Scientific name	Common name	Lifeform	WMVC Indicator Status	Unit	Plant Spacing ¹	Number of plants / Lbs. per acre ³
-Hordeum brachyantherum ssp. californicum						

- 1. Recommended spacing is measured on-center and is the recommended spacing for each individual plant, not each individual species, from each other, regardless of species.
- 2. Other Salix species may be mixed with Arroyo willow, like coast willow (Salix hookeriana) or Pacific willow (Salix lasiandra)
- 3. All quantities of plantings proposed are approximated based on the total mitigation area.

3.4 Riparian Enhancement Site Selection

The riparian enhancement site will be at the edge of the existing riparian dripline of Mill Creek in the eastern portion of the Project Area (**Appendix A, Figure 2.2**). The species list chosen for plantings is based primarily on those which already exist, to promote compatible expansion of the corridor using species that are known to thrive on-site (**Table 3.5-1**). Topography of this site has been referenced to maximize the success of plantings in relation to their access to groundwater.

Scientific name	Common name	Lifeform	WMVC Indicator Status	Unit	Spacing ¹	# per acre
Tree Stratum						
Abies grandis	grand fir	Tree	FACU	1-gal	30 ft	6
Alnus rubra	Red alder	Tree	FAC	1-gal	15 ft	20
Morella californica	Wax myrtle	Tree	FACW	1-gal	15 ft	20
Picea sitchensis	Sitka spruce	Tree	FAC	1-gal	30 ft	6
Thuja plicata	Western red cedar	Tree	FAC	1-gal	20 ft	10
Salix lasiolepis	Arroyo willow	Tree	FACW	Cutting	20 ft	10
Shrub Stratum						
Physocarpus capitatus	Ninebark	Shrub	FACW	1-gal	20 ft	14
Ribes sanguineum	Flowering currant	Shrub	FACU	1-gal	20 ft	14
Rubus ursinus	California blackberry	Shrub	FACU	1-gal	10 ft	14

Table 3.5-1 Riparian enhance site planting mix

1. Recommended spacing is measured on-center and is the recommended spacing for each individual plant from each other, regardless of species.

4. Mitigation Maintenance Plan

4.1 Revegetation and Post-planting Maintenance

All implementation of mitigation site planting and monitoring will be the responsibility of the Applicant.

Construction is anticipated to occur within one or two construction seasons, commencing in 2026. Wetlands creation and riparian planting will happen concurrently with construction of the Project.

Revegetation will occur in fall and winter months following earth work and will be timed with hydrologic conditions to maximize plant survival. Irrigation is not planned but may occur based on the installer (contractor) procedures. Each planting will be watered the day of planting, regardless of soil moisture at the time of planting.

The Applicant shall inspect all deliveries of the container plantings prior to installation to ensure (1) accurate quantities, (2) correct species, (3) vigor (root growth and overall health), and (4) that all plant material is visibly free of pests and diseases.

Following initial construction, the wetlands and riparian enhancement areas are expected to be self-maintaining and dynamic into the long-term future. No watering or maintenance activities such as mowing or pruning would be needed to maintain these areas. The planting lists do not include any particularly aggressive species and were chosen based on the predominant vegetation in the adjacent similar habitat types (GHD 2024).

Soil Preparation

The following specifications should be implemented by the grading/earthwork contractor:

- all earthwork and grading of the site shall be complete prior to beginning soil preparation
- soil preparation shall occur in all areas to be seeded or planted as shown on the Plans and any additional
 areas disturbed by construction (including non-paved access, staging, stockpiling, and haul routes necessary
 to access sediment application areas) to be seeded or planted as specified herein
- contractor shall coordinate with the Construction Manager to confirm the limits of soil preparation
- contractor shall review soil preparation areas for presence of rock, debris, chemicals, or other harmful substances and notify the Construction Manager if such conditions are observed
- contractor shall prepare the soil as follows in areas to be seeded or planted and upon completion of grading:
 - scarify mechanically to a depth of two (2) inches using a spike harrow, lightweight ring-roller/cultipacker or by hand methods, and as approved by the Construction Manager
 - in areas where excessive compaction has occurred such as haul routes and construction access associated with wetlands temporary impacts, at the discretion of the Construction Manager, the Contractor shall disk or rototill a minimum twelve (12) inches deep using conventional farming implements and then smooth with a ring-roller/cultipacker or harrow prior to seeding. Finished ground elevations should be restored back to pre-project or design elevations

Riparian Planting Design

Planting holes will be no deeper than the container and twice as wide. Each tree and shrub planted should receive one to two packets of mycorrhizae.

Trees and shrubs planted in the riparian enhancement area will be protected from deer browsing with anti-browse cages, excluding California blackberry, and will be mulched around the base post-planting.

Weeds will be removed at the base of each plant while plants are becoming established. Weeding will occur in the spring of each year after the first year of establishment (beginning the second spring). Weeds within a 3x3 foot area around the base of each planted tree and shrub will be pulled by hand, collected, and disposed of at an acceptable offsite location or composted, which can only be used in the designated garden footprint and cannot be applied to or adjacent to wetlands.

Avoidance and Minimization Measures to Protect Juxtaposed Wetlands

Avoidance and minimization measures have been developed to protect juxtaposed wetlands during Project construction, including equipment exclusion zones being clearly delineated and marked, and suitable perimeter control

measures (silt fences or straw wattles) being implemented to reduce sedimentation from clearing or grading. All measures will be implemented or installed prior to any clearing or grading activities.

4.2 Invasive Species Controls

Non-native and invasive plant competition will be considered throughout the mitigation timeframe. Highly invasive nonnative plants can inhibit successful establishment of native species and therefore reduce the value of the created and enhanced habitats. To allow native species to grow and persist, invasive species management and weed control are required. Species observed in the mitigation area that are currently rated Limited-High in the California Invasive Species Council (Cal-IPC) Inventory will be targeted as a priority for removal at the mitigation site. **Table 4.2-1** provides the Cal-IPC definitions for their ratings.

Weed management such as with a mower, weed whacker, weed wrench, or hand pulling will be conducted. Removal methods will primarily include hand removal with brush cutters and removal of the entire root mass. Additional invasive species management may be implemented on an as-needed basis.

Cal-IPC Rating	Definition
High	These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.
Medium	These species have substantial and apparent-but generally not severe-ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.
Limited	These species are invasive, but their ecological impacts are minor on a state-wide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

Table 4.2-1 Cal-IPC Rating Definitions

5. Mitigation Monitoring Plan

5.1 Monitoring Plan

We Are Up or its qualified designee will maintain the Project mitigation sites over the course of the five-year monitoring period and will maintain them in such a way to meet success criteria, including the treatment of invasive plant species by hand or handheld equipment such as weed whackers. Maintenance in the riparian enhancement area is not proposed for the Project. However, documentation of the riparian plantings will be required in the first year's monitoring report.

All maintenance activities within the four designated wetland mitigation monitoring areas will be documented and included in the annual monitoring report. If monitoring and/or observations yield a deficiency or adverse conditions among planted vegetation, then supplemental planting would occur. Similarly, if a particular species is not doing well at the sites, a species of similar ecological function can be supplemented for original plant species.

Monitoring will occur annually to document overall site conditions, and should include an assessment of:

- mitigation site plantings overall vigor and health, and recommendations for corrective action if a site is observed to be failing
- photo documentation at each established photo point
- notable encroachment of non-native species into a mitigation area
- removal of non-native species from mitigation areas
- disturbance around or within the mitigation sites (i.e., browsing of plants, trampling, or other disturbance)
- signs of permanently ponding water within wetland mitigation sites
- any other pertinent information regarding the overall success of the mitigation areas

An annual monitoring report will be submitted to the Regional Board and USACE summarizing each monitoring event, to be submitted at the end of the calendar year in the year following mitigation site planting.

Some flexibility to account for annual variation in weather conditions is acceptable but vegetative monitoring should be conducted in June, July, or August.

Monitoring in Year-1, Year-3, and Year-5 will include additional environmental data collection that will support the analysis of performance criteria set forth for each mitigation site, as described in **Section 7**. The additional environmental data collection will include:

- vegetation sampling according to methods outlined in this document for all wetland mitigation sites
- hydrology monitoring according to methods outlined in this document for all wetland mitigation sites

All data collection from these monitoring years will be analyzed and compared to the performance criteria set forth for that habitat type in that year. Following monitoring, We Are Up will submit to the Regional Board and USACE one report summarizing (1) vegetation and hydrology monitoring methods, (2) results, and (3) and any necessary adaptive management such as targeted replanting, removal of invasive species, or future considerations for design adjustment, to better achieve Project objectives.

Reporting will include captioned photographs (including those taken at established photo points) and mapping results, where appropriate. Reporting will also highlight how the Project Area has changed since as-built construction, including all information outlined to be included in each annual monitoring report. The monitoring report will be submitted to the Regional Board and USACE by the end of year. The monitoring schedule and details for each monitoring year are summarized in **Table 5.1-1**.

In Year-5, a wetland delineation will confirm the area of wetlands created. The report should make a thorough analysis of whether the mitigation is successful and if on-going monitoring is required. A separate wetland delineation report will be prepared to document the results of the wetland delineation effort and submitted to the Regional Board and USACE for a jurisdictional determination.

Annual reports will be prepared and submitted to the Regional Board and USACE no later than December 31 of each year, for a total of five reports over the monitoring period. Reports will include observations made during site monitoring including descriptions of conditions on-site, identified issues, outlined remedial measures implemented or needed, and photographs of the mitigation area(s).

Monitoring Year	Summary of Conditions On- site	Vegetation Sampling	Hydrology Sampling	Report
Year-1	х	х	х	Baseline summary of conditions on-site in each mitigation area. Results from vegetation monitoring.
Year-2	х			Baseline summary of conditions on-site in each mitigation area.

 Table 5.1-1
 Annual Monitoring and Reporting Schedule

Monitoring Year	Summary of Conditions On- site	Vegetation Sampling	Hydrology Sampling	Report
				Baseline summary of conditions on-site in each mitigation area.
Year-3	Х	Х	Х	Results from hydrology and vegetation monitoring.
Year-4	х			Baseline summary of conditions on-site in each mitigation area.
				Baseline summary of conditions on-site in each mitigation area.
Year-5	Х	Х	х	Results from hydrology and vegetation monitoring and analysis of success of mitigation sites.
Year-5 Wetlar	nd Delineation		Perform wetland delineation per USACE protocols in Year-5 and submit separate wetland delineation report documenting findings, to be verified with a jurisdictional determination by the USACE.	

5.2 Monitoring Methodology

Vegetation Monitoring Methodology

Transects will be located randomly within the created wetland areas. The location of the first quadrat will be randomized relative to the beginning of the baseline, with quadrats at set distances thereafter. Percent absolute vegetative cover of each species present in the quadrat will be recorded and separated by categories post-field visit to compare to success criteria. All plant species present within each quadrat will be identified and noted. The number of quadrats sampled will be sufficient to achieve an adequate sample size.

Post-field visit, data collected will be separated out in the following categories by plot:

- (1) absolute cover of native vegetation,
- (2) absolute cover of native wetland vegetation (FAC, FACW, OBL species),
- (3) absolute cover of non-native vegetation with assigned Cal-IPC rank, and
- (4) absolute cover of Cal-IPC Moderate to High rated species (target invasive species).

The absolute cover of native vegetation and non-native vegetation will be used to analyze data for comparison to success criteria for relative native cover. The absolute cover of Cal-IPC Moderate to High rated species will be analyzed for comparison to success criteria regarding target invasive species.

Cal-IPC Limited species will not be considered in the analysis for success criteria of target invasive species; however, they will still be monitored and targeted for removal. Cal-IPC Limited species are those that are "invasive, but their ecological impacts are minor on a state-wide level…their reproductive biology and other attributes result in low to moderate rates of invasiveness" (Cal-IPC 2023).

Data sheets with results from each quadrat sampled during each site visit will be included as an appendix submitted with each annual report.

To determine wetland indicator status, the most current wetland indicator plant list will be used to determine the ranking of species present in the mitigation area during monitoring. Wetland species are defined as those rated with

the indicator status FAC, FACW, or OBL by the most current wetland indicator plant list: *National USACE 2020 Wetland Plant List* (USACE 2020).

The progress of the mitigation site will be monitored and documented in an annual report and with accompanying photographs.

Soil Monitoring Methodology

Hydric soil indicators may take more time develop than what is within the anticipated timeframe for monitoring activities. Hydric soils will be assumed if wetland hydrology and hydrophytic vegetation are present.

Hydrology/Groundwater Monitoring Methodology

Wetland mitigation site elevations shall be within ranges that maintain suitable groundwater wetland hydrology, as defined by the USACE. The U.S. Army Corps of Engineers (2005) provides a technical standard for monitoring hydrology. This standard requires 14 or more consecutive days of flooding or ponding, or a water table within 12 inches of the soil surface, during the growing season at a minimum frequency of five years in ten (50 percent or higher probability) (National Research Council 1995).

Piezometers (wells) will be installed post-construction to monitor groundwater elevations. Groundwater will be monitored once 50 percent of the average annual rainfall has been met, for four (4) consecutive weeks (Day 0, 7, 14, and 21), or until success criteria has been met (a minimum of three monitoring events or two weeks), after the 50 percent of average annual rainfall. A WETs table for the Arcata Airport Station in McKinleyville, CA will be referenced to determine if rainfall averages are normal for the given year.

Post-construction hydrology monitoring at the site will be implemented to monitor groundwater levels. Hydrology will be monitored in Year-3 and Year-5.

Photo Monitoring Stations

Permanent photo-documentation points will be established within the Project site in the wetland creation areas. A minimum of one photo point is required for each monitored created wetland unit, and the riparian enhancement area will receive a one-time photo point documentation of as-built conditions to include in the Year-1 monitoring report. Photo point locations will be included on a map that will accompany monitoring reports, along with their GPS coordinates to maintain consistency through the duration of monitoring.

Photographs will be taken of wetland creation areas annually during the monitoring period. Long-term photo monitoring will not be employed for the riparian enhancement area. Photographs will be taken from each monitoring point and cardinal directions recorded for repeatability. Photos will be taken with a digital camera with a moderate wide-angle lens. The make and model of camera and type will be noted in monitoring documentation. Photographs will be taken from about five feet in height, consistent from year to year.

6. Adaptive Management Plan

Adaptive management is a tool used to cope with the inherent changes and instability fundamental to natural resources and the ecological processes that encompass them. It is a process derived from a collection of practical methods based in research and monitoring. As a philosophy, it holds that conservation and restoration programs should be designed in ways that accumulate knowledge as quickly and accurately as possible so that the management plan can be adapted promptly to better management efforts. This approach allows managers to learn by experience within site specific environments and apply lessons learned to remedy deficiencies using a controlled and scientific approach.

Adaptive management procedures will be recommended on a case-by-case basis, to address any issues identified at the sites during monitoring or maintenance activities. Adaptive management actions could include one or more of the following activities (not exclusive) if success criteria are not met:

- adjusted weeding method to reduce weeds around the planted wetland or upland to decrease competition from non-native grasses and forbs;
- supplemental planting for areas that have deficiencies in the seeding or planted material stock (may be inkind, or if a particular species is not doing well at the site, a suitable replacement species can be supplemented for original plant species);
- supplemental replacement (may be in-kind, or if a particular species is not doing well at the site, a suitable replacement species can be supplemented for original plant species);
- supplemental watering (for non-performing plants that required supplemental planting);
- additional erosion control; and/or
- hydrologic modification or minor regrading.

Unpredictable natural changes could alter the mitigation area and consequently necessitate changing the goals, objectives, strategies, and actions set forth in this plan. These changed conditions include but are not limited to:

- unusual weather patterns, such as extended drought or excessive rainfall;
- change in species composition, such as through invasion of a new invasive plant or wildlife species to the site, increase in spread of existing non-native plants rated as Cal-IPC Limited which exhibit similar adverse characteristics of a plant ranked Moderate or High in this particular habitat setting, or a change in the ranking of invasive plants;
- change in the listing of species status species that could occur or have potential to occur in the habitat mitigation area; or;
- erosion or deposition of sediments.

Adaptive management may be implemented if the mitigation ratios are not achieved after a period of five years, as detailed in submitted monitoring reports. If adaptive management is determined to be necessary, appropriate regulatory agencies will be consulted to propose any necessary remedial action. A meeting will then be scheduled with the appropriate resource agencies, depending on the specific issue(s), to discuss the best method(s) to address the issue.

7. Final Success Criteria/Performance Standards

7.1 Ecological Performance Standards

Monitoring of the wetlands will be conducted to evaluate achievement of vegetation success criteria. The wetland mitigation site post-planting shall meet the following criteria described in **Section 7.2**, and in **Table 7.2-1**.

If at the end of Year-5 the performance standards have not been met, then additional monitoring and/or adaptive management will continue until performance criteria have been met. The prior year monitoring report will state whether the Project is on track to meet the success criteria or whether corrective actions will be necessary in order to meet the Year-5 success criteria. If success criteria are met in earlier years, this will be demonstrated in the report, and monitoring will cease.

7.2 Wetland Success Criteria

The wetland area that will be monitored for performance includes the bottom of the created wetlands to the outer toe of the excavated slope and will coincide with Zone 1 and Zone 2 (**Section 3.3**).

The wetland mitigation will be considered successful when:

 the three-parameter wetland creation site hosts at least 70 percent relative cover of native wetland species (and no more than 15 percent absolute cover of target invasive species) in Year-5, supports wetland hydrology, and 8,069 square feet of three-parameter palustrine emergent wetlands are created to compensate for USACE jurisdictional wetlands and 15,834 square feet of palustrine emergent / palustrine scrub-shrub wetlands are created to compensate for NCRWQCB jurisdictional wetlands (to be assessed with a wetland delineation in Year-5 and verified by agencies).

If the success criteria for vegetation and hydrology are met by Year-5, and a wetland delineation proves successful establishment of 15,834 square feet of wetlands (inclusive of the 8,069 square feet of USACE wetlands created), then the mitigation project will be considered successful and monitoring will be complete at Year-5.

Vegetation Success Criteria

The mitigation site will be considered successful if at least 70 percent relative cover of native wetland species and no more than 15 percent absolute cover of target invasive species are present at the conclusion of the five-year monitoring period.

Monitoring of the wetlands will be conducted to evaluate achievement of vegetation success criteria. The mitigation site post-planting shall meet the following criteria described in **Table 7.2-1**.

Soils Success Criteria

Hydric soil indicators may take more time develop than what is within the anticipated timeframe for monitoring activities. Hydric soils will be assumed if wetland hydrology and hydrophytic vegetation are present.

Hydrology Success Criteria

The mitigation site will be considered successful if one out of two winter hydrology events meet wetland hydrology standards (**Section 5.2**).

Year	Success Criteria Description
Year-1	50 percent (\geq) relative cover ¹ of native wetland species.
	No more than 25 percent absolute cover ² of target invasive ³ plants.
Year-3	65 percent (\geq) relative cover ¹ of native wetland species.
	No more than 20 percent absolute cover ² of target invasive ³ plants.
	70 percent (\geq) relative cover ¹ of native wetland species.
Year-5	No more than 15 percent absolute cover ² of target invasive ³ plants.
	Wetland hydrology is met for two out of three monitoring events.
Year-1, -3, and -5	Native wetland species consist of OBL/FACW/FAC species.

 Table 7.2-1
 Performance standards for wetland creation sites

Year

Success Criteria Description

No large non-vegetated bare spots (greater than 25 percent) or erosional area and no permanent inundation during five-year monitoring period.

- 1 Relative cover refers to a proportion of absolute cover of intended vegetation category (i.e., native cover) to total vegetative cover present.
- 2 Absolute cover is the proportion of ground surface covered by a particular category of vegetation.
- 3 Target invasive species are those rated Moderate-High in the Cal-IPC inventory.

8. Site Protection Instrument

A site protection instrument (e.g., deed restriction) is required to protect the wetland mitigation site in perpetuity, per section 230.97(a) (Site protection) of the SWRCB Procedures (2019), which states:

(4) Site protection instrument. A description of the legal arrangements and instrument, including site ownership, that will be used to ensure the long-term protection of the compensatory mitigation project site (see § 230.97(a)).

The applicant shall comply with the Project Deed Restriction through the following pathway:

-once the wetlands are constructed (anticipated in 2026 along with site grading) their location will be surveyed and a deed restriction will be filed with the County of Humboldt for those locations. Evidence of this filing will be submitted to the Regional Board by December 31 of 2026 (or within the year the wetlands are created if site grading/wetland creation is delayed due to funding or other construction constraints).

The site protection instrument will address the wetland mitigation sites in the Project Area.

9. Responsible Parties

It will be the responsibility of We Are Up to implement all mitigation outlined in the document and subsequent actions as outlined in the 401 Certification and Army Corps NWP 29 conditions of approval.

10. Scope and Limitations

This report: has been prepared by GHD for We Are Up and may only be used and relied on by We Are Up for the purpose agreed between GHD and We Are Up.

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The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

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Accessibility of documents

If this report is required to be accessible in any other format, this can be provided by GHD upon request and at an additional cost if necessary.

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Appendix A Figures



Paper Size ANSI A 120 180 240

Feet Map Projection: Lambert Conformal Conic Horizontal Datum: North American 1983 Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

60 0



Mary Keehn Property Development Keehn Development

Project No. 12560473 Revision No. -Date 2024-11-19

FIGURE 1

Project Study Boundary

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Data source: World Imagery: Maxar, Microsoft Hybrid Reference Layer (WGS84): Esri Community Maps Contributors, California State Parks, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, Safe/Gaph, GeoTechnologies, Inc, METINASA, USGS, Bureau of Land Management, EPA, NPS, US Consus Bureau, USDA, USFNS, Created by jjope24









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Appendix B Project Components



Appendix C

Aquatic Resource Delineation and Sensitive Habitat Report (2024)



Aquatic Resources Delineation and Sensitive Habitat Report We Are Up Housing Project

May 21, 2024



Aquatic Resources Delineation and Sensitive Habitat Report We Are Up Housing Project

This document has been prepared for:



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May 21, 2024

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1. Summary

GHD prepared this Aquatic Resources Delineation and Sensitive Habitat Report and accompanying appendices on behalf of We Are Up (Client), in support of the proposed We Are Up Housing Project (Project) within the community of McKinleyville, California (**Appendix A Figure 1**). GHD conducted aquatic resource delineation fieldwork, hydrological monitoring, and sensitive habitat surveys within the original Project Study Boundary (PSB) on APN 509-181-061 from September 2021 to February 2023 (**Appendix A, Figure 2**). The PSB was subsequently expanded in 2024 to include APNs 509-181-03, 509-181-12, and 509-181-05. This updated document reflects the results of the subsequent aquatic resource delineation and surveys on APNs 509-181-03, 509-181-12, and 509-181-05. United States Army Corps of Engineers (USACE) three-parameter wetlands were mapped based on wetland indicative vegetation, hydric soils, and wetland hydrology. GHD mapped the riparian drip-line (as required by the 2017 Humboldt General Plan), three-parameter wetlands, and one-parameter wetlands as shown in **Appendix A, Figure 3**. The Project is within the plan area of the McKinleyville Community Plan which requires mapping of one-parameter wetlands as well as three-parameter wetlands (McKinleyville Community Plan, 2002).

Four three-parameter wetlands and one one-parameter wetland were identified and mapped as shown in **Figure 3.** There were two Sensitive Natural Communities (SNCs) observed within the PSB. The total area of three-parameter wetlands mapped within the PSB is 8.86 acres, the total area of one-parameter wetlands mapped within the PSB is 0.03 acres, and the total area of SNCs mapped within the PSB is 1.6 acres (**Appendix A, Figure 3**).

Wetland 1, Wetland 2, and Wetland 3 are three-parameter wetlands hydrologically connected to each other and Mill Creek, a tributary of Mad River (a navigable water) and is likely USACE and Regional Water Quality Control Board (RWQCB) jurisdictional. Wetland 4 is an artificially induced three-parameter wetland isolated from other waters and is assumed not to be under USACE or RWQCB jurisdiction. Wetland 5 is a one-parameter wetland regulated only under the McKinleyville Community Plan.

2. Introduction

The updated PSB encompasses approximately 17.38 acres (**Appendix A Figure 3**). Field work was originally conducted on APN 509-181-061 on September 17th, 22nd, November 19th, December 2nd, 2021, January 25th, 2022. A USACE Nationwide Permit (SPN-2023-00205) and RWQCB Water Quality Certification (WDID 1B23047WNHU) were issued permitting the placement of fill within 0.28 acres of seasonal wetlands on APN 509-181-061.

Three parcels (APNs 509-181-003, 509-181-012, and 509-181-005) were subsequently added to the PSB in 2024 after the USACE Nationwide Permit and RWQCB Water Quality Certification were issued for APN 509-181-061. Field work for the additional parcels was conducted on April 16th, 2024.

This report supports the Project's environmental documentation, permitting, and construction planning as deemed appropriate. This report is subject to, and must be read in conjunction with, the limitations set out in Section 6, Special Terms and Conditions, and the assumptions and qualifications contained throughout the report.

2.1 Site Location and Project Description

The PSB consists of developed, partially developed, and grassy, vegetated open space, on four parcels (APNs 509-181-061, 509-181-003, 509-181-012, and 509-181-005) just west and south of Grocery Outlet in McKinleyville, California (**Appendix A, Figure 1**). The PSB is bordered by residential areas to the north and west, and by Mill Creek to the south, and a forested lot to the east. The property is a generally flat to mildly sloped grassland field, with several small clumps of trees within, and bordered by trees to the south and west of the property. The study of this Project is an investigation of uplands, wetlands, and SNCs on the four parcels to inform future proposed development.

2.2 Regulatory Background

2.2.1 Federal

The Code of Federal Regulations (CFR), 40 CFR § 120.2 states the following:

a) Waters of the United States means:

1) Waters which are:

i) Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

ii) The territorial seas; or

iii) Interstate waters, including interstate wetlands;

2) Impoundments of waters otherwise defined as Waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section.

3) Tributaries of waters identified in paragraph (a)(1) or (2) of this section:

i) That are relatively permanent, standing or continuously flowing bodies of water;

4) Wetlands adjacent to the following waters:

i) Waters identified in paragraph (a)(1) of this section; or

ii) Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3) of this section and with a continuous surface connection¹ to those waters

¹ The duration of the surface connection is undefined and considered on a case by case basis; however, the wetland does not have to hydrologically connected every day of the year to be considered waters of the United States, just continuous seasonal flow...wetlands within the floodplain of Waters of the United States will likely be considered jurisdictional (sourced from pers. comm. with W. Connor, USACE North Branch Chief).

5) Intrastate lakes and ponds, streams, or wetlands not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3) of this section.

b) The following are not "waters of the United States" even where they otherwise meet the terms of paragraphs (a)(2) through (5) of this section:

1) Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act;

2) Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA;

3) Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;

4) Artificially irrigated areas that would revert to dry land if the irrigation ceased;

5) Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;

6) Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;

7) Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and

8) Swales and erosional features (e.g., gullies, small washes) characterized by low volume, infrequent, or short duration flow.

(c) In this section, the following definitions apply:

(1) Wetlands means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

(2) Adjacent means bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes, and the like are "adjacent wetlands."

(3) High tide line means the line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

(4) Ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

(5) Tidal waters means those waters that rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of

the water surface can no longer be practically measured in a predictable rhythm due to masking by hydrologic, wind, or other effects.

Wetlands Definition

40 CFR § 230.3 continues and defines, "(t) The term wetlands are defined as those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas" (40 CFR § 230.3).

Wetland Delineation Manual

The 1987 USACE Wetland Delineation Manual provides guidelines and methods to determine whether an area is a wetland subject to federal regulation under Section 404 of the Clean Water Act. The manual specifies that wetland hydrology, soil, and vegetation indicators must be present to identify a wetland (USACE 1987, p. 10). In addition, the Wetlands Delineation Manual states, "If hydrophytic vegetation is being maintained only because of man-induced wetland hydrology that would no longer exist if the activity (e.g., irrigation) were to be terminated, the area should not be considered a wetland," (USACE, 1987).

Federal Geographic Data Committee (FGDC) Wetland Classification Standard

The Classification of Wetlands and Deepwater Habitats of the United States (FGDC, 2013) provides a nationally standardized hierarchical system for classifying wetland and deepwater habitats based on Cowardin et al. (1979). The National Wetland Inventory (NWI), a publicly available resource that provides information on the distribution of wetlands in the U.S., classifies wetlands according to the FDGC standard. The FDGC classification is based on a definition of wetlands with at least one of the three wetland attributes: predominantly hydrophytic vegetation, predominantly hydric soil, and hydrology. However, they state that all available information should be used, and all three attributes should be considered if they are present (FGDC, 2013).

2.2.2 State

Wetlands

The State Water Resources Control Board's (SWRCB) April 2019 Procedures for Discharges of Dredged or Fill Material to Waters of the State says the following:

An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes, or the area lacks vegetation.

The Water Code defines "waters of the state" broadly to include "any surface water or groundwater, including saline waters, within the boundaries of the state." "Waters of the state" includes all "waters of the U.S." The following wetlands are waters of the state:

- 1. Natural wetlands,
- 2. Wetlands created by modification of a surface water of the state, and
- 3. Artificial wetlands that meet any of the following criteria:

a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;

b. Specifically identified in a water quality control plan as a wetland or other water of the state;

c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or

d. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not waters of the state unless they also satisfy the criteria set forth in 2, 3a, or 3b):

i. Industrial or municipal wastewater treatment or disposal,

ii. Settling of sediment,

iii. Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program,

iv. Treatment of surface waters,

v. Agricultural crop irrigation or stock watering,

vi. Fire suppression,

vii. Industrial processing or cooling,

viii. Active surface mining – even if the site is managed for interim wetlands functions and values,

ix. Log storage,

x. Treatment, storage, or distribution of recycled water, or

xi. Maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or

xii. Fields flooded for rice growing.

All artificial wetlands that are less than an acre in size and do not satisfy the criteria set forth in 2, 3.a, 3.b, or 3.c are not waters of the state. If an aquatic feature meets the wetland definition, the burden is on the applicant to demonstrate that the wetland is not a water of the state" (SWRCB, 2019).

The February 2020 Draft Guidance State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State further clarifies as follows:

Human activity can cause changes to the surrounding landscape (e.g., grading activities, road construction, direct hydromodification) such that wetlands form where wetlands did not previously exist. Where such artificial wetlands are now a relatively permanent part of the natural landscape, and are not subject to ongoing operation and maintenance, they are waters of the state. By requiring that the wetlands are relatively permanent, the framework excludes wetlands that are temporary or transitory. That they are part of the natural landscape also indicates the relative permanence of the wetlands and suggests that the wetland is self-sustaining without

ongoing operation and maintenance activities and provides similar ecosystem services as natural wetlands. By way of example, this category of wetlands includes situations where water flow is permanently redirected as the result of human activity, such as grading in another area, such that new wetlands form in areas that were previously dry. These wetlands may not be natural wetlands because they result from human activity and they were not formed by modifying a water of the state (rather they were an indirect result), but nevertheless they take on the function of natural wetlands such that they should be considered waters of the state. This category would not include artificial wetlands constructed for specific purposes listed in section II.3.d because the construction of the artificial wetlands would be too recent to be deemed "historic" and the artificial wetland would likely require ongoing maintenance such that they would not be deemed "relatively permanent," and/or the artificial wetland is not part of the "natural landscape" (SWRCB, 2020).

The RWQCB carry out and regionally regulate the SWRCB's definition of Waters of the State.

Sensitive Natural Communities

Natural vegetation communities listed as Sensitive in the California Natural Diversity Database (CNDDB) and on the California Sensitive Natural Communities List are to be addressed within the CEQA review process (CDFW 2023b). Sensitive Natural Communities (SNCs) are primarily classified at the Alliance level according to A Manual of California Vegetation (Sawyer et al. 2009). Legacy SNCs are listed in CNDDB according to the Holland classification system (1986), and Holland types may be used when a current Alliance-level classification does not exist (CDFW 2023b). CDFW considers alliances with a NatureServe State Rank of S1 to S3 to be Sensitive Natural Communities, and therefore these alliances are considered during the CEQA process (CDFW 2023b). Vegetation alliances are further classified into smaller associations which are finer-scale groupings characterized by different species compositions and environmental conditions. Some associations are considered sensitive even though the alliance in which they nest are not and therefore included for project-level environmental review (CDFW 2023b).

2.2.3 Local

McKinleyville Community Plan

The McKinleyville Community Plan (2002, updated 2017) defines wetland areas using a 1-parameter definition as follows (p. 49):

Wetland Areas shall be defined according to the criteria utilized by the CA Dept. of Fish and Game (also included in the County's Open Space Implementation Standards). In summary, the definition requires that a given area satisfy at least one of the following three criteria:

- 1. The presence of at least periodic predominance of hydrophytic vegetation; or,
- 2. predominately hydric soils; or,
- 3. periodic inundation for seven (7) consecutive days.

For this study, "hydrophytic vegetation" is deemed to be plants that have their roots in saturated soil (reduced conditions) during the growing season (i.e., water table at the surface). Hydrophytic plants are FACW or wetter (OBL) per the wetlands indicator status as defined by the *2020 National Wetland Plant List* (USACE 2020) and are the dominant plant species in any given plot.

3. Methodology

3.1 Aquatic Resources Delineation Approach

GHD scientists conducted the aquatic resource delineation on September 17th, 22nd, November 19th, December 2nd, 2021, January 25th, 2022, and April 16th, 2024. GHD scientists visited this site to assess the presence or absence of aquatic resources. Groundwater monitoring occurred in the winter of 2022-2023 to further investigate hydrology on-site and aided in determining wetland boundaries.

To define a wetland, the USACE requires that vegetation, soil, and hydrology (three-parameters) all show wetland attributes (USACE 1987; USACE 2010). The wetland delineation used USACE criteria from the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region (Version 2.0)* (USACE 2010). The current standard field forms provided by the USACE (2010) were used to collect vegetation, soils, and hydrology data (**Appendix B**).

In potential three-parameter wetland areas, vegetation, soil, and hydrology data were collected in a transect across the upland/wetland boundary with two plots (upland/wetland) per transect. The naming convention used on datasheets to designate upland or wetland plots associated with a transect is -U or -W, respectively.

Three-parameter wetland/upland boundaries and plots were mapped in the field with an Eos Arrow 100 Submeter Global Positioning System (GPS) Receiver with Global Navigation Satellite System (GNSS) and an iPad running ArcGIS Collector software. The wetland/upland boundary was recorded with the GPS unit as needed to map the wetland's spatial extent. The points were then connected in the office using ArcMap software for figure creation and the boundaries were clipped to the extent of the PSB.

Each one-parameter and three-parameter wetland area was designated with a number (e.g., W1). The wetland points were also labeled with their respective wetland number. In addition to the wetland sampling points, upland sampling points were described. These were labeled beginning with a "U" and numbered in sequence (e.g., U1, U2). The upland sampling points were completed to confirm and document the absence of any wetland indicators (soils, hydrology, and vegetation). **Appendix B** contains all datasheets recorded during the delineation.

3.2 Hydrophytic Vegetation Assessment

Vegetation data collection consisted of listing the dominant species in the herbaceous, shrub, and tree layer within a standard-sized plot determined by the strata layer. Nomenclature follows *The Jepson Manual* (Baldwin et al. 2012), which was cross-checked to federal standard nomenclature to identify the indicator status. The species' wetland indicator status for the Western Mountains, Valleys, and Coast Region was denoted in the respective column, using the standard reference: *2020 National Wetland Plant List* (USACE 2020). This list classifies species based on the probability that they are found in wetlands (USACE 1987) as follows:

- Obligate (OBL): almost always in wetlands (99% probability)
- Facultative Wetland (FACW): usually occurring in wetlands (67% to 99% probability)
- Facultative (FAC): commonly occurring in wetlands and uplands (34% to 66% probability of occurring in wetlands)
- Facultative Upland (FACU): usually occurring in uplands (1% to 33% probability of occurring in wetlands)

Upland (UPL): upland obligate, rarely in wetlands (1% in wetlands)

Species that do not appear on the list are considered to be in the upland category (Lichvar et al. 2018). Standard procedures for documenting hydrophytic vegetation indicators were used per the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)* (USACE 2010). Site photographs have been included as **Appendix C**. A separate Botanical Memo contains the locations and extents of mapped vegetation alliances and Sensitive Natural Communities within the PSB (GHD 2021). Wetland vegetation is considered an assembly of plants that are FAC or wetter.

3.3 Soil Assessment

Hydric soils were defined based on the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)* (USACE 2010) procedures in combination with the Natural Resources Conservation Service's (NRCS) definitions presented in *Field Indicators of Hydric Soils in the United States* (USDA/NRCS 2018 version 8.2). Soil pits were dug to an approximate depth of 14 to 18 inches. Data on soil color, texture, and redoximorphic features were recorded. Any observed redoximorphic features (iron concentrations) were noted along with their percentage within the soil matrix, and care was taken to distinguish chromas of 1 and 2 are indicative of an iron-depleted soil within 12 inches of the soil surface (USACE 2010; USDA/NRCS 2018).

The *Munsell Soil Color Book* (COLOR, M. 2000) was used to describe the soil colors for the entire depth of the test pit. Moist, natural soil aggregate (ped) surfaces, which had not been crushed, were used to determine the soil's color. Soils with low chroma were verified as being hydric or upland with *Field Indicators of Hydric Soils in the United States* (Version 8.2, 2018).

3.3.1 Existing Soils Information

The NRCS identifies three main soil units within the PSB (**Appendix A, Figure 4; and Appendix E**). A brief map unit description, as generated by the NRCS, is provided for each soil unit below (NRCS 2022). Although NRCS soil mapping is informative, the scale is generally too broad to definitively characterize potential wetlands. Please see the full report included as **Appendix E** for complete details.

Worswick-Arlynda complex 0 to 2 percent slopes

The Worswick-Arlynda complex 0 to 2 percent slopes map unit composition contains: 55% Worswick and similar soils, 15% Arlynda and similar soils, and 10% minor components. Worswick-Arlynda soils can be found in river valleys, backslopes and mountain bases; the parent material is alluvium derived from mixed sources rock. Worswick-Arlynda complex soils consist of silty loam in the top and lower horizons, with loamy and gravelly sand in the middle horizons. Worswick-Arlynda soils would be considered prime farmland if irrigated and drained. These soils are very poorly drained, and the depth to water table is 0 to 4 inches. Worswick-Arlynda complex is considered a hydric soil. This soil type is in the southeastern corner of the PSB and comprises 9.7% of the PSB.

Arcata and Candymountain, 0 to 9 percent slopes

The Arcata and Candymountain 0 to 9 percent slopes map unit composition contains: 50% Arcata and similar soils, 35% Candymountain and similar soils, and 15% minor components. Arcata and Candymountain soils can be found on marine terraces, backslopes and tread; the parent material is marine deposits derived from mixed sources. Arcata and Candymountain soils 0 to 9 percent consist of very fine to fine sandy loam.

These soils are considered Prime farmland if irrigated. These soils are well drained, and the depth to water table is more than 80 inches. Arcata and Candymountain are not considered hydric soil. This soil type is in a very thin linear line that separates the Worsick-Arlynda complex 0 to 2% slopes from the Arcata and Candymountain soils 2 to 9% slopes, thus comprises a very small portion of the project area.

Arcata and Candymountain, 2 to 9 percent slopes

The Arcata and Candymountain 2 to 9 percent slopes map unit composition contains: 50% Arcata and similar soils, 35% Candymountain and similar soils, and 15% minor components. Arcata and Candymountain soils can be found on marine terraces, backslopes and tread; the parent material is marine deposits derived from sedimentary sock. Arcata and Candymountain soils consist of loam, sandy loam, and fine sandy loam. Arcata and Candymountain soils are considered farmland of statewide importance. These soils are well drained, and the depth to water table is more than 80 inches. Arcata and Candymountain are not considered hydric soils. This soil type is in the main portion of the PSB and comprises 90.3% of the PSB.

3.4 Precipitation and Hydrology Assessment

GHD performed the investigation within the PSB during September 17th, 22nd, November 19th, December 2nd, 2021, January 25th, 2022, and April 16th, 2024, starting at the end of the dry season and continuing through the winter wet season. APNs 509-181-003, 509-181-012, and 509-181-005 were investigated in early spring 2024 after a particularly wet and above normal period of rainfall. Additionally, groundwater was monitored in the 2022-2023 water year. A WETS table showing climate data for the Arcata Eureka Airport, CA, Station is provided in **Appendix F** (NOAA 2024). The Mill Creek Wetlands overlay as defined can is shown in Figure 4 (**Appendix A, Figure 5**). The FEMA flood hazard map is included in **Appendix A, Figure 6** (FEMA 2022). Aerial photography and the National Wetland Inventory Mapper were referenced before conducting fieldwork (**Appendix A, Figure 7**) (NWI 2024). Wetland hydrology indicators, such as drainage patterns, material deposits, soil saturation, high water table, or surface water presence, were recorded in the field.

Field investigations included visual observations, test pits, and soil characterization at seven hydrology pits, and monitoring of ten groundwater monitoring wells (piezometers) after 50 percent average annual rainfall was recorded for the nearest appropriate climate station (**Appendix A, Figure 8**). Each monitoring well ("MW") was designated with a number (e.g., MW-1), and each hydrology pit ("HP") was also designated with a number (e.g., MW-1), and each hydrology pit ("HP") was also designated with a number (e.g., MW-1). Precipitation data and rainfall measurements to aid in groundwater monitoring were taken from the NOAA rain gage at the Eureka Weather Forecast Office (WFO) on Woodley Island. The Eureka NOAA rain gauge is the station nearest to the project site with sufficient historical data (at least 20 years) required to analyze the average annual rainfall. **Appendix F** presents the NRCS WETS table data applicable to the Project site for the 2023 and 2024 water year.

3.4.1 Groundwater Monitoring Well Installation

Ten monitoring wells (piezometers) were installed onsite on January 11, 2022 (MW-1 through MW-10) (**Appendix A, Figure 8**). The wells were installed in potential wetlands and mapped uplands. Wells installed in potential wetlands were installed to determine if wetlands hydrology exists or does not exist (groundwater with 12 inches of the surface for 14 consecutive days) and were used to inform this wetlands delineation (MW-2 and MW-3, located on the western portion of the property). Other wells were installed in uplands to inform wetlands creation (to be incorporated into the Wetlands Mitigation and Monitoring Plan) and stormwater infiltration (to inform the stormwater engineering design).

Wells were installed by hand auguring to a depth of four to five feet. One-inch PVC piping was used, with the bottom approximate one half of the wells being slots (and was wrapped with geofabric and had a slot size of 0.010 inches), and the top approximate one half being solid. The well was placed in the augured hole and back filled with clean, dry sand to approximately one foot from the ground surface. The remainder of the hole was filled with Bentonite hole plug, which was mounded around each well. Each well was then labelled, and prior to monitoring in 2023, the top of casing was measured (distance from the ground surface to the top of PCV pipe).

Once half of the annual average rainfall occurred monitoring of the wells commenced. Monitoring started on January 7, 2023, and was completed on February 21, 2023. Depth to groundwater was measured with an electronic groundwater measurement device that "beeped" when water was encountered. Depth to groundwater was measured in a tenth of a foot.

The U.S. Army Corps of Engineers (2005) provides a technical standard for monitoring hydrology. This standard requires 14 or more consecutive days of flooding or ponding, or a water table within 12 inches of the soil surface, during the growing season at a minimum frequency of five years in ten (50 percent or higher probability) (National Research Council 1995). Groundwater was monitored once 50 percent of the average annual rainfall had been met and was monitored for five consecutive weeks (Day 0, 7, 14, 21, 28, and 35), after the 50 percent of average annual rainfall (**Appendix F**), starting on January 7, 2023, and completed on February 21, 2023.

Depth to groundwater was measured with an electronic groundwater measurement device that "beeped" when water was encountered (Heron Instruments Little Dipper water level data logger). Weekly measurements included the water depth for each well and depth to groundwater was measured in tenths of a foot. Groundwater elevations generally correlate to rainfall data, with groundwater elevations rising following precipitation events, and falling after and between events.

3.4.2 Hydrology Soil Pits

In addition to MW-2 and MW-3 installed in the western portion of the property, "hydro-soil" pits (HPs) where excavated to determine groundwater condition surrounding MW-2 and MW-3 (**Appendix A, Figure 8**). Seven HPs were dug (HP-1 through HP-7) by hand, commencing on January 24, 2023, and terminating on February 21, 2023. During each visit each HP was hand dug with a sharpshooter to approximately 14-18 inches and remained open for 20-30 minutes prior to any measurement. For each visit, a new hole was excavated. Once the HP was left open for the time previously mentioned, depth to groundwater was measured from the surface. Measurement was in inches.

Soil Profile at Hydrology Soil Pits

At each HP location, soils data was collected on February 25, 2023, which was a sunny day. Soil pits were excavated to approximately 14 inches and data was collected regarding horizon depth, soil color, and redoximorphic features. Special attention was given to soil chroma color.

3.5 Vegetation Community Mapping

The vegetation community onsite was initially assessed in the field and classified at the alliance level according to the Manual of California Vegetation (Sawyer et al. 2009) using the Rapid Assessment method. Kelsey McDonald assessed potential SNCs according to protocol (CDFW 2018) and mapped Mill Creek's riparian drip-line on September 14, 2021, in accordance with the Humboldt County General Plan as directed by the county (2021, Trevor Estlow, pers. comm.).

Botanist Jane Cipra assessed potential SNCs on the additional eastern parcels using the same methodology on April 16th, 2024. Vegetation Rapid Assessment forms (**Appendix D**) were used to characterize the dominant vegetation and evaluate habitat quality, and this assessment provided the basis for designating vegetation as SNCs per CDFW should it qualify.

In general, CDFW considers alliances with a NatureServe State Rank of S1 to S3 to be SNCs; however, associations, may be considered sensitive by CDFW even if State ranks have not yet been determined. Some alliances that are not considered sensitive may have sensitive associations within them. Associations considered sensitive by CDFW are indicated with a "Y" in the Sensitive column of the state Natural Communities List (CDFW 2024).

Photo documentation of the habitat observed onsite can be found in **Appendix C**. The Rapid Assessment location was mapped using a point collected in the field with an Eos Arrow 100 Submeter Global Navigation Satellite System (GNSS) Receiver and an iPad running ArcGIS Collector software in the WGS84 datum. The location of the Vegetation Rapid Assessments is shown in **Appendix A Figure 3**. A Natural Resources Conservation Service (NRCS) soils map was consulted prior to conducting surveys (**Appendix A Figure 4**), as is required by CDFW's protocols for surveying and evaluating impacts to special status native plant populations and sensitive natural communities (CDFW 2018). The full NRCS Custom Soil Resource report for the PSB is available in **Appendix E**. Mapping of sensitive plant species will occur in the spring/summer of 2022 and the results will be transmitted in a separate report.

4. Results

The PSB contains three three-parameter wetlands that are likely USACE and RWQCB jurisdictional, one isolated three-parameter wetland that is likely not USACE or RWQCB jurisdictional, one one-parameter wetland regulated under the McKinleyville Community Plan, and two Sensitive Natural Communities (SNCs) as well as a riparian drip-line as defined by the Humboldt County General Plan. Upland sampling pits (plot locations) are also described to confirm and document the absence of wetland hydrology, hydric soils and hydrophytic plants in these uplands sampling areas. **Appendix A, Figure 3** shows the results of the three-parameter wetland delineation, and SNC determination based upon dominant vegetation. The riparian drip-line was mapped per guidance from the Humboldt County General Plan and county staff.

4.1 Wetlands

4.1.1 Wetland 1 (W1). Three-Parameter Wetland

Wetland 1 is a three-parameter wetland totaling 8.68 acres within the PSB and was assessed on September 17th, 22nd, November 19th, December 2nd, 2021, January 25th, 2022. Please see the USACE Data Forms in **Appendix B** for more details and see **Appendix A**, **Figure 3** for the associated map. Soil pits and vegetation plots were conducted for W1 throughout the PSB totaling twelve transect points (**Table 4.1**). An additional 143 soil pits (**Table 4.3**) were dug, of which 101 ended up being hydric and 42 were non hydric soils. The determination of hydric and non-hydric soil on these 143 soil pits was solely based on soil features and morphology.

Groundwater monitoring also occurred after 50 percent average annual rainfall was observed for the 2022-2023 water year to further investigate hydrologic patterns on-site. Monitoring occurred every seven days for 35 consecutive days beginning 1/17/2023 and extending to 2/21/2023. Results from this monitoring are summarized in **Section 4.3**.

Wetland 1 is open and mostly free of rooted woody vegetation and is classified according to the Cowardin system as a Palustrine Emergent wetland (PEM) (FGDC 2013). The vegetation was primarily characterized by redtop (*Agrostis stolonifera*, FAC), reed fescue (*Festuca arundinacea*, FAC), common velvetgrass (*Holcus lanatus*, FAC), Italian rye grass (*Festuca perennis*, FAC), slough sedge (*Carex obnupta*, OBL), and mountain bod sedge (*Scirpus microcarpus*, OBL). Wetland 1 mostly passed the dominance test for hydrophytic vegetation (wetlands plots).

Soil in Wetland 1 consists mostly of loams with a 10YR 3/2 upper horizon (0 to 4 or 6 inches) with 0% to 20% of 7.5YR 4/6 redoximorphic features and a 10YR 3/2 lower horizon (4 or 6 to14 inches) with distinct 10% to 30% of 7.5YR 4/6 redoximorphic features. The hydric soil indicator is Redox Dark Surface (F6). Wetland 1 was drier in some locations and wetter in others with standing water in the swales, appearing to drain south to Mill Creek. Primary indicators of wetland hydrology were a High Water Table (A2), Saturation (A3), and secondary indicators of wetland hydrology included geomorphic position (D2) and passing the vegetation FAC-neutral test (D5). Wetland 1 is hydrologically connected to a Mill Creek which is connected to the Mad River, a navigable waterway and is therefore assumed to be under USACE and RWQCB jurisdiction. Please see attached data forms for sample points W1T1-W and W1T1-U in **Appendix B** and **Table 4.1** for additional details.

4.1.2 Wetland 2 (W2). Three-Parameter Wetland

Wetland 2 is a three-parameter wetland totaling 0.10 acres within the PSB and was assessed on April 16th, 2024, after a particularly wet and above normal water year. Please see the USACE Data Forms in **Appendix B** for more details and see **Appendix A**, **Figure 3** for the associated map. One transect across the wetland boundary consisting of two soil pits and vegetation plots were conducted for W2 (**Table 4.1**).

Wetland 2 is dominated by woody vegetation classified according to the Cowardin system as a Palustrine Scrub-Shrub wetland (PSS) (FGDC 2013). The vegetation was primarily characterized by arroyo willow (*Salix lasiolepis*, FACW), slough sedge (OBL), and creping buttercup (*Ranunculus repens*, FAC). Wetland 2 passed the dominance test for hydrophytic vegetation.

Soil in Wetland 2 consists of loams with a 10YR 3/2 upper horizon (0 to 5 inches) with no redoximorphic features, a 10YR 3/2 middle horizon (5 to 10 inches) with prominent 8% 2.5YR 4/6 redoximorphic features, and a 10YR 5/1 lower horizon (10 to 15 inches) with prominent 25% 5YR 5/8 redoximorphic features in the matrix. Wetland 2 satisfied criteria for hydric soil indicators Redox Dark Surface (F6) and Depleted Matrix (F3).

A water table was observed at Wetland 2 at a depth of 10 inches and saturation was observed at a depth of 8 inches. Positive reactions of alpha-alpha-dipyridyl were observed at a depth of ten inches indicating the presence of reduced iron at that location within the soil profile. Wetland 2 satisfied primary indicators of wetland hydrology High Water Table (A2), Saturation (A3), and Presence of Reduced Iron (C4).

Wetland 2 may become temporarily hydrologically connected to Wetland 1 during or immediately after rain events and is therefore assumed to be under both USACE and RWQCB jurisdiction. Please see attached data forms for sample points W2T1-W and W2T1-U in **Appendix B** and **Table 4.1** for additional details.

4.1.3 Wetland 3 (W3). Three-Parameter Wetland

Wetland 3 is a three-parameter wetland totaling 0.03 acres within the PSB and was assessed on April 16th, 2024, after a particularly wet and above normal water year. Please see the USACE Data Forms in **Appendix B** for more details and see **Appendix A**, **Figure 3** for the associated map. One transect across the wetland boundary consisting of two soil pits and vegetation plots were conducted for W3 (**Table 4.1**).

Wetland 3 is dominated by woody vegetation classified according to the Cowardin system as a Palustrine Scrub-Shrub wetland (PSS) (FGDC 2013). The vegetation was primarily characterized by arroyo willow (FACW). Wetland 2 passed the dominance test for hydrophytic vegetation.

Soil in Wetland 3 consists of loams with a 10YR 3/2 upper horizon (0 to 4 inches) with no redoximorphic features, a 10YR 3/1 middle horizon (4 to 8 inches) with prominent 4% 2.5YR 4/6 redoximorphic features, and a 10YR 4/1and 2.5Y 7/6 mixed lower horizon (8 to 15 inches) with prominent 25% 7.5YR 5/8 redoximorphic features in the matrix. Wetland 2 satisfied criteria for hydric soil indicator Redox Dark Surface (F6).

A water table was observed at Wetland 3 at a depth of 13.5 inches and saturation was observed at a depth of 8 inches. Positive reactions of alpha-alpha-dipyridyl were observed at a depth of 8 inches indicating the presence of reduced iron at that location within the soil profile. Wetland 3 satisfied primary indicators of wetland hydrology Saturation (A3), and Presence of Reduced Iron (C4).

Wetland 3 may become temporarily hydrologically connected to Wetland 2 and Wetland 1 during or immediately after rain events and is therefore assumed to be under both USACE and RWQCB jurisdiction. Please see attached data forms for sample points W3T1-W and W3T1-U in **Appendix B** and **Table 4.1** for additional details.

4.1.4 Wetland 4 (W4). Three-Parameter Wetland

Wetland 4 is three-parameter wetland totaling 0.05 acres within the PSB and was assessed on April 16th, 2024, after a particularly wet and above normal water year. Please see the USACE Data Forms in **Appendix B** for more details and see **Appendix A**, **Figure 3** for the associated map. One transect across the wetland boundary consisting of two soil pits and vegetation plots were conducted for W4 (**Table 4.1**).

Wetland 4 is dominated by herbaceous emergent vegetation classified according to the Cowardin system as a Palustrine Emergent wetland (PEM) (FGDC 2013). The vegetation was primarily characterized by redtop (FAC). Wetland 4 passed the dominance test for hydrophytic vegetation.

Soil in Wetland 4 consists of loams with a 10YR 3/2 upper horizon (0 to 4 inches) with no redoximorphic features, and a 10YR 3/1 lower horizon (4 to 11 inches) with prominent 15% 2.5YR 4/8 redoximorphic features in the matrix. Wetland 4 satisfied criteria for hydric soil indicator Redox Dark Surface (F6).

A water table was observed at Wetland 4 at a depth of 4 inches and saturation was observed at the soil surface. Positive reactions of alpha-alpha-dipyridyl were observed at a depth of 2 inches indicating the presence of reduced iron at that location within the soil profile. Wetland 4 satisfied primary indicators of wetland hydrology High Water Table (A2), Saturation (A3), and Presence of Reduced Iron (C4).

Wetland 4 is an isolated wetland in a residentially developed, regularly mowed, and maintained yard and is likely an exposed seep associated with earthwork and the existing residential development. Wetland 4 is an artificially induced wetland less than an acre in size, does not have a surface hydrological connection to any other water of the state or water of the U.S., and does not otherwise satisfy the criteria for waters of the state set forth in sections 2, 3.a, 3.b, or 3.c of the SWRCB Procedures for Discharges of Dredged or Fill Material into Waters of The State (SWRCB 2019). Wetland 4 is therefore assumed not to be under USACE or RWQCB jurisdiction. Please see attached data forms for sample points W4T1-W and W4T1-U in **Appendix B** and **Table 4.1** for additional details.

4.1.5 Wetland 5 (W5). One-Parameter Wetland

Wetland 5 is a one-parameter wetland totaling 0.03 acres within the PSB and was assessed on April 16th, 2024, after a particularly wet and above normal water year. Please see the USACE Data Forms in **Appendix B** for more details and see **Appendix A**, **Figure 3** for the associated map. One soil pit and vegetation plot was sampled for W5.

Wetland 5 is dominated by herbaceous facultative vegetation consisting of Kentucky blue grass (*Poa pratensis*, FAC). Wetland 5 passed the dominance test for hydrophytic vegetation.

Soil in Wetland 5 consists of loams with a 10YR 3/2 upper horizon (0 to 8 inches) with no redoximorphic features, a 10YR 3/1 middle horizon (8 to 13 inches) with prominent 8% 7.5YR 4/6 redoximorphic features, and a 10YR 4/1and 2.5Y 6/6 mixed lower horizon (8 to 16 inches) with prominent 15% 5YR 5/8 redoximorphic features in the matrix. Wetland 5 satisfied criteria for hydric soil indicator Redox Dark Surface (F6) but may have retained remnant hydric features from before surrounding development and altered hydrology.

A water table was observed at Wetland 5 at a depth of 16 inches and saturation was observed at a depth of 13 inches. Negative reactions of alpha-alpha-dipyridyl were observed at a depth of 12 inches indicating the lack of reduced iron at that location within the soil profile. Wetland 5 did not satisfy any indicators of wetland hydrology. The observed water table at 16 inches in a particularly wet year indicates this point usually does not satisfy wetland hydrology. Hydrology on site may have been affected by surrounding development diverting sheet flow away from site and into adjacent stormwater conveyance systems.

Wetland 5 is a one-parameter wetland regulated under the McKinleyville Community Plan. It does not satisfy all three parameters for wetland determination and is not a wetland as defined by the USACE or RWQCB. Please see attached data forms for sample points W3T1-U in **Appendix B** for additional details.

4.1.6 Wetland Transect Sampling Locations

Table 4.1 below details the wetland transect location at each transect's wetland boundary.

Sample Point	Location (lat/long) Cepter of Transect (wetland/upland boundary)
W1T1 / U1T1	(40.932710409, -124.098692428)
W1T2 / U1T2	(40.932734608, -124.098625034)
W1T3 / U1T3	(40.932764517, -124.097496859)
W1T4 / U1T4	(40.933062453, -124.099412379)
W1T5 / U1T5	(40.933518773, -124.099463200)
W1T6 / U1T6	(40.934214987, -124.098043217)
W1T7 / U1T7	(40.933722303, -124.097575092)
W1T8 / U1T8	(40.932748433, -124.097355161)
W1T9 / U1T9	(40.933377525, -124.098205482)
W2T1 / U2T1	(40.93317347, -124.09975578)

Table 4.1Wetland transect location at each transect's wetland boundary.

W3T1 / U3T1	(40.93334743, -12410000935)
W4T1 / U4T1	(40.93291795, -124.10024619)

4.2 Uplands

Upland sampling points were also collected to characterize areas that are likely to be affected by the Project. The upland sample points were located throughout the PSB, wherever the ground appeared to be slightly drier and higher than the surrounding areas. Upland areas were primarily dominated by annual bluegrass (*Poa annua*, FAC) redtop (FAC), sweet vernal grass (*Anthoxanthum odoratum*, FACU), ribwort (*Plantago lanceolata*, FACU), and hawkbit (*Leontodon saxatillis*, FACU). Soils generally did not show hydric soil characteristics and contained mostly loam textures with upper horizons of 10YR 3/3 to 10YR 3/2 with no redoximorphic features, and a lower horizon of 10YR ³/₄ to 10YR 4/3 with no redoximorphic features. Upland points generally did not show primary or secondary indicators of wetland hydrology and vegetation plots did not pass the FAC Neutral Test (D5).

Facultative plants can equally occur in both upland and wetland environments. While many upland plots were dominated by facultative vegetation, these plots did not contain hydric soils or wetland hydrology indicating that the facultative plants observed were occurring in upland conditions and were thus not acting as hydrophytes. Uplands were determined using a three-parameter approach, FAC Neutral Test, and Prevalence Index (weighted metric of total coverage of all dominant and nondominant species present) when hydric soils and wetland hydrology were not present (**Table 4.2**). Additionally, a total of 42 upland pits were dug to determine upland boundaries (**Table 4.3**).

Upland Vegetation Plot ID	% Dominant Facultative or Wetter Vegetation	Pass Fac Neutral Test?	Prevalence Index	Hydric Soils?	Wetland Hydrology?	Wetland Vegetation Present?
U1T1	50%	No	-	No	No	No
U1T2	50%	No	-	No	No	No
U1T3	50%	No	-	No	No	No
U1T4	50%	No	-	No	No	No
U1T5	100%	No	3.67	No	No	No
U1T6	100%	No	3.02	No	No	No
U1T7	50%	No	-	No	No	No
U1T8	100%	No	3.11	No	No	No
U1T9	50%	No	-	No	No	No
U2T1	75%	No	3.00	No	No	No
U3T1	100%	No	3.00	Yes	No	Yes (1Par-W5)
U4T1	100%	No	3.10	No	No	No

T-11- 10	Haland Trees and Black We down hit was to the Date main a the
Table 4.2	Upland Transect Plot Wetland Vegetation Determination

Table 4.3 Total Number of Hydric and Non-Hydric and Soil Pits

Wetland	Upland
101	42

4.3 Hydrology Monitoring

4.3.1 Groundwater Monitoring

Groundwater monitoring occurred every seven days from January 17 to February 21, 2023, by GHD soil scientist Misha Schwarz and technician Alex Crowe. Results are summarized in **Table 4.4 and 4.5.** Only MW-2 and MW-3 are analyzed in this report because they were installed specifically to investigate the wetland boundary in the western portion of the PSB (results bolded and shaded blue in Table 4). Over the course of monitoring, several notable precipitation events occurred where measured rainfall was over 100 percent of average for that time of the month (January 17, 24, and 31, and February 2; **Appendix F**). Results demonstrated that groundwater levels (i.e., the water table) were not within 12 inches of the soil surface for 14 consecutive days, and thus wetland hydrology is not present at the site of MW-2 and MW-3. Hydrology monitoring from soil pits dug around these piezometers further informed the location of the wetland boundary in the western portion of the PSB, described in **Section 4.3.2**.

DA	ATE:	1/17/2023	1/24/2023	1/31/2023	2/7/2023	2/14/2023	2/21/2023
Rainfall YTD:		20.97	21.80	21.93	23.34	23.69	23.89
Normal YTD:		18.93	20.39	21.77	23.15	24.52	25.96
Current % Norm:		110.8%	106.9%	100.7%	100.8%	96.6%	92.0%
Name(s) of D Recorders:	Data	M.Schwarz	M.Schwarz	M.Schwarz	M.Schwarz	A. Crowe	M.Schwarz
Monitoring Well Number	TOC (feet ags)	Water Depth (feet bgs) (DTW - TOC)	Water Depth (feet bgs) (DTW - TOC)	Water Depth (feet bgs) (DTW - TOC)			
MW-1	0.90	1.00	1.55	2.08	1.60	1.27	2.08
MW-2	0.85	1.36	1.90	2.40	1.60	0.76	2.30
MW-3	1.04	0.61	1.06	1.71	0.71	0.50	1.58
MW-4	0.69	0.91	1.36	1.94	1.36	1.06	1.96
MW-5	0.90	1.00	1.50	2.55	1.55	1.86	2.74
MW-6	1.04	0.76	0.97	1.22	0.76	0.50	1.11
MW-7	1.02	0.68	0.78	1.01	0.73	0.17	0.73
MW-8	0.98	0.82	2.12	2.64	1.92	3.03	3.64
MW-9	1.08	1.32	2.22	3.52	1.54	1.12	3.07
MW-10	1.06	0.84	1.44	2.17	0.99	0.56	1.87

Table 4.4	Results	from	Monitorina	Wells
	Nesuns		monitoring	F CH3

DATE:	1/17/2023	1/24/2023	1/31/2023	2/7/2023	2/14/2023	2/21/2023			
NOTES:									
TOC = Top of Casing (measured in inches and converted to decimal-feet)									
DTW = Depth to Water (measured at TOC)									
Bgs = below ground surface									
Ags = above ground surface									

4.3.2 Hydrology Soil Pits

Seven hydrology soil pits were excavated around MW-2 and MW-3 to investigate the groundwater level in finer detail between and around the monitoring wells, concurrent with the dates that piezometers were monitored. Groundwater monitoring occurred every seven days from January 24 to February 21, 2023, by GHD soil scientist Misha Schwarz and Alex Crowe. Results are summarized in **Table 4.5.** Groundwater levels were not within 12 inches of the soil surface for 14 consecutive days for any of the hydrology pits. The wetland boundary was mapped in contour with HP-1, HP-3, HP-5, HP-7, and MW-3, as they appear to be at a transitional line where the water table becomes shallower. Three-parameter wetlands are delineated to the east of this line (**Appendix A, Figure 3**).

Hydro Pit	1/24/2023	1/31/2023	2/7/2023	2/14/2023	2/21/2023
	DTW (inches bgs)				
HP-1	14.50	16 (DRY)	14.50	5.25	18 (DRY)
HP-2	14 (DRY)	17 (DRY)	14.25	13.50	19 (DRY)
HP-3	15 (DRY)	17 (DRY)	16.00	11.75	21 (DRY)
HP-4	15 (DRY)	15 (DRY)	13.50	9.00	18 (DRY)
HP-5	15.25	15 (DRY)	10.00	7.50	18 (DRY)
HP-6	14 (DRY)	16 (DRY)	16.75	12.75	17 (DRY)
HP-7	14.25	15 (DRY)	10.00	4.50	18.00

Table 4.5 Water Table Results from Hydrology Soil Pits

NOTES: DTW (inches below ground surface) – Unless noted as "DRY"

4.4 Soil Monitoring

4.4.1 Soil Profile at Monitoring Wells 2 and 3

The soil profile was characterized for monitoring wells installation, summarized in **Table 4.6.** Soils throughout the profile were generally loam. Results demonstrated that the soils for MW-2 and MW-3 do not meet hydric soil indicators. While redoximorphic features were present in the soil profile, they were at a depth that does not qualify as a hydric soil indicator (in combination with matrix value and chroma). Soil matrix chromas were often too high (greater than 2) to qualify for hydric soils indicators associated with redox concentrations.

Table 4.6 Soil Profiles from Monitoring Wells

Hydro Pit	Soil Depth	Matrix	Redoximorphic Features ¹
MW-2	0-9"	10YR 2/2	None
	9-20"	10YR 3/3	None
	20-39"	2.5Y 4/3	15% FeC
	39-48"	2.5Y 5/3	10% FeC
MW-3	0-13"	10YR 3/2	None
	13-26"	10YR 4/3	15% FeC
	26-36"	10YR 4/4	5% FeC
	36-48"	10YR 5/4	5% FeC

1. FeC = iron concentrations (e.g., redoximorphic features).

4.4.2 Soil Profile at Hydrology Pits

The soil profile was characterized for hydrology pits on January 25, 2023, summarized in **Table 4.7**. Soils throughout the profile were generally loam. Results demonstrate that the soils for each hydrology pit do not meet hydric soil indicators. While redoximorphic features were present in some of the soil profiles, they were at a depth that does not qualify as a hydric soil indicator (in combination with matrix value and chroma). Soil matrix chromas were often too high (greater than 2) to qualify for hydric soils indicators associated with redox concentrations. At four of the soil pits, no redoximorphic features were observed.

Hydro Pit	Soil Depth	Matrix	Redoximorphic Features ¹
HP-1	0-14"	10YR 3/2+	None
	0-9"	10YR 3/2+	None
	9-14"	10YR 3/2+	15% FeC
HP-3	0-14"	10YR 3/3	None
HP-4	0-10"	10YR 3/3	None
HP-4	10-14"	10YR 3/2+	5% FeC
	0-10"	10YR 3/3	None
	10-14"	10YR 3/2+	5% FeC
	0-10"	10YR 3/3	None
	10-14"	10YR 3/2+	5% FeC
HP-7	0-14"	10YR 3/2+	None

 Table 4. 7
 Soil Profiles from Hydrology Soil Pits

1. FeC = iron concentrations (e.g., redoximorphic features).

4.5 Sensitive Natural Communities

The original PSB contains two SNCs, totaling 1.6 acres outside of delineated wetlands. Please see attached Rapid Assessment datasheets in **Appendix D** for additional details and see **Appendix A**, **Figure 3** for the associated map. No additional upland SNCs were observed in the new parcels added to the PSB. **Table 4.8** contains additional details.

Area

acres

0.85 acres

1.60

bie 4. 8 Sensitive Natural Communities				
Sensitive Natural Lat/Long Community				
Sitka Spruce Alliance (S2) (40.9341790, -124.0968654)	0.75			

(40.9339933, -124.0968717)

 Table 4. 8
 Sensitive Natural Communities

4.5.1 Sitka Spruce Alliance

Coastal Willow Alliance (S3)

Total Area

The Sitka Spruce Alliance corresponds to the Rapid Assessment datasheet WEIR001 in **Appendix D**. The Sitka Spruce Alliance was observed in the north, northwest, and southwest edges of the PSB and covers 0.75 acres of the PSB. This SNC contained a tree canopy cover of 40% Stika spruce (*Picea sitchensis*), 35% red alder (*Alnus rubra*), and 20% incense cedar (*Thuja plicata*), and is associated with California blackberry (*Rubus ursinus*). The Sitka Spruce Alliance has a State ranking of S2, therefore qualifying it as an SNC.

4.5.2 Coastal Willow Alliance

The Coastal Willow Alliance corresponds to the Rapid Assessment datasheet WEIR002 in **Appendix D**. The Coastal Willow Alliance was observed in the north, northwest, and southwest edges of the PSB and covers 0.85 acres of the PSB. This SNC contained a tree canopy cover of 2% red alder (*Alnus rubra*), a shrub layer of 85% coastal willow (*Salix hookeriana*), and 20% California blackberry. The Coastal Willow Alliance has a State ranking of S3, therefore qualifying it as an SNC.

4.6 Riparian Corridor

The riparian corridor of Mill Creek was mapped to the drip-line, and no wetlands were assessed underneath the canopy. The riparian drip-line can be found in **Appendix A, Figure 3**. Most of the SNCs present are within the Mill Creek riparian corridor.

5. Conclusions

The aquatic resources delineation for the We Are Up Housing Project, completed on September 17th, 22nd, November 19th, December 2nd, 2021, January 25th, 2022, and April 16th, 2024 determined the extent of one-parameter wetlands and three-parameter wetlands within the PSB based on hydrophytic vegetation, hydric soils, and wetland hydrology using methods and indicators outlined in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Region (Version 2.0)* (USACE 2010). Groundwater monitoring was conducted in January and February of 2023 to better understand hydrologic patterns on-site. The total area of three-parameter wetlands mapped within the PSB

is 8.86 acres. Due to the hydrological connection with Mill Creek, W1, W2, and W3 are likely considered USACE and RWQCB jurisdictional. Wetland 4 is an artificially induced three-parameter wetland isolated from other waters and is assumed not to be under USACE or RWQCB jurisdiction. Wetland 5 is a one-parameter wetland regulated only under the McKinleyville Community Plan. Wetlands were not mapped within the riparian drip-line or underneath the majority of SNC canopy.

The area of SNCs outside of wetlands totals 1.6 acres. Wetland data forms are attached showing sample plot data collected in transects across wetland boundaries and additional upland sampling points (**Appendix B**) and Rapid Assessment data forms determining the SNCs are attached (**Appendix D**).

6. Special Terms and Conditions

6.1 **Purpose of this Report**

GHD prepared this report for the Client, and the Client may only use and rely on this report for the purpose agreed upon between GHD and the Client, as set out in the scope and contract for work effort reported herein. GHD Inc. is not liable for any action arising out of the reliance of any third party on the information contained within this report. GHD otherwise disclaims responsibility to any entity other than the Client arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

6.2 Scope and Limitations

This report does not authorize any individuals to develop, fill, or alter the delineated wetlands. Verification of the delineation by jurisdictional agencies is necessary prior to the use of this report for planning and development purposes. A USACE jurisdictional approval letter is required to signify confirmation of delineation results. In situations where a field investigation determines that no jurisdictional wetlands occur, jurisdictional concurrence with these findings is recommended.

The delineation conclusions were based on the information available during the period of the investigation, which took place in late 2021 to early 2022, with groundwater monitoring extending into early 2023 and 2024. The opinions, conclusions, and any recommendations in this report are based on conditions encountered and information reviewed by the date of preparation of the report. Site conditions may change after the date of this report. GHD does not accept responsibility arising from, or in connection with, any change to the site conditions. GHD is also not responsible for updating this report if the site conditions change unless contracted to do so.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions, and any recommendations in this report are based on the information obtained from and testing undertaken at or in connection with specific sample points. Conditions at other locations of the site may be different from the conditions found at the specific sample points.

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Natural Resources Conservation Service (NRCS) in cooperation with the National Technical Committee for Hydric Soils.

8. Report Preparers

8.1 Client

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Jesse Lopez. Figures and GIS Support

Appendix A Figures



World Topographic Map - labeless: California State Parks, Esri, Tom Tom, Garmin, SafeGraph, GeoTechnologies, Inc, METINASA, USGS, Bureau of Land Management, EPA, NPS, US Cassis Bureau, USA), USFNS ence Layer (WGS84): California State Parks, Esri, Tom Tom, Garmin, SafeGraph, GeoTechnologies, Inc, METINASA, USGS, Bureau of Land Management, EPA, NPS, US Cassis Bureau, USA), USFNS World Topographic Map - labelless: California State Parks, Esri, Tom Tom, Garmin, FAO, NOAA, USGS, Bureau of Land Management, World Topographic Map - labelless: California State Parks, Esri, Tom Tom, Garmin, FAO, NOAA, USGS, Bureau of Land Management, World Hilshade: Esri, NASA, NGA, USGS, FEMA Hybrid Reference Layer (WG584): California State Parks, Esri, TomTom, Garmin, SafeGraph, GeoTech



Paper Size ANSI A



Mary Keehn Property Development Keehn Development

Project No. **12560473** Revision No. -Date **2024-11-19**

FIGURE 2

. 60 120 180 240

0

Feet Map Projection: Lambert Conformal Conic Horizontal Datum: North American 1983 Grid: NAD 1983 StatePlane California I FIPS 0401 Feet



Project Study Boundary

Q:(GISI)PROJECTS(12560000s)12560473\GIS\GIS\MapsiDeliverables112560473_Wetlands_2024\12560473_Wetlands_2024.aprx Print date: 19 Nov 2024 - 14:53 Data source: Hybrid Reference Layer (WGS84): Esri Community Maps Contributors, California State Parks, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, DISDA, USFWS World Imagery, Maar: Created by Jope24

















Vghdnet/ghd/US/Eureka/Projects/561/12560473/GIS/Maps/Deliverables/12560473_Wetlands_2024/12560473_Wetlands_2024.aprx Print date: 02 May 2024 - 13:59 Data source: World Imagery: Maxar. Created by: jlopez4





Vghdnet/ghdlUS/Eureka/Projects/5611/12560473/GIS/Maps/Deliverables/12560473_Wetlands_2024/12560473_Wetlands_2024.aprx Print date: 02 May 2024 - 13:59

FIGURE 7

Date 2/05/2024





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Appendix B Wetland Delineation Datasheets

WETLAND DETE	RMINATION DATA FORM -	- Western Mountains, '	Valleys, and Coast Region
Project/Site: heen	City	County: Mckinleyville	Humbold + Sampling Date: 9/17/21
Applicant/Owner: GHD for	1 Mary Keehn i	levelopment Sta	te: Sampling Point: []
Investigator(s): K.McDonal	1d, M. Schwarz ser	ction, Township, Range: 5	5, 16N, K1E
Landform (hillslope, terrace, etc.):	sciale Lo	cal relief (concave, convex, no	one): <u>Conc-IVI</u> Slope (%): <u>S</u>
Subregion (LRR):	Lat:	13241041 Long: -	124 0486724 Datum W65 04
Soil Map Unit Name: Arcatz 2	ind Candy Monntain	2-9% slopes	NWI classification: NA PEM
Are climatic / hydrologic conditions on 1	the site typical for this time of year?	Yes V No (If)	no, explain in Remarks.)
Are Vegetation, Soil, or	Hydrology significantly dist	urbed? Are "Normal Ci	rcumstances" present? Yes No
Are Vegetation, Soil, or	Hydrology naturally proble	matic? (If needed, exp	lain any answers in Remarks.)
SUMMARY OF FINDINGS - A	Attach site map showing sa	mpling point locations	s, transects, important features, etc.
Hydrophytic Vegetation Present?	Yes No		1
Hydric Soil Present?	Yes V No	Is the Sampled Area	Yes No
Wetland Hydrology Present?	Yes No	within a wettand	
Remarks:			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:	
2	(A)
4	(B)
Sapimo/Shrub Stratum (Plot size:) 1) (A/B)
1	
2	
3	
4	
5	
Herb Stratum (Plot size: 1	
Herb Stratum (Plot size: Im) 3.5 Y FAC 1. Itals: Important in the Stratum (Plot size: Im) 3.5 Y FAC 2. Accostis stalonifecta 3.5 Y FAC 3. Manuaculus reports 3.5 Y FAC 4. Mentual plenitum 5 08L 1 - Rapid Test for Hydrophytic Vegetation Indicators: 1. Rapid Test for Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 1 - Rapid Test for Hydrophytic Vegetation 6. Anthox anthom odcostum 7 Accu 2 - Dominance Test is >50% 7. Jucus Lie specifies 5 FACu 3 - Prevalence Index is <30'	_
1 Indicuss is stolenifice2 36 Image: Stolenifice2 36 Image: Stolenifice2 Prevalence Index = B/A =	(B)
2 Account of the product of the pro	
3 Francisco Contraction 4 Mentha pule given 5 Hype chaser is codicate 6 Anthon adments 7 Jocub anthon adments 8 9 10 11 2 11 2 11 2 11 12 13 14 Morphological Adaptations' (Provide sidate in Remarks or on a separate shee 5 Welland Non-Vascular Plants'	_
4 Initial part (account) 5 Hypochaecris coalcata 6 Anthon decatum 2 7 Junus Lie specifies 8	
5. Hypochaeris Codicate	
7 JucuS Lie Specifies 8	
8	upporting et)
9.	5 M
10	(nicin
11.	v must
Woody Vine Stratum (Plot size:) 1	y must
1	
2	
% Bare Ground in Herb Stratum = Total Cover Present? Yes V No Remarks:	
Remarks	-
June 1	Inter Constraints and the second

SOIL

MBS Verby 1/12/21 Sampling Point W/TI-	MBS	Verha	1/27/21	Sampling Point: WITI-U	V
--	-----	-------	---------	------------------------	---

Depth	Matrix		Redo	x Feature	5		and the second	
A (Lolor (moist)	_%	Color (moist)	_%	Type	Loc2	Texture	Remarks
0-6	104 K 2/2	80	4.5984/6	20	<u> </u>	M	10am	and the second
-14	109R3/2	20	754 R 4/6	10	<u> </u>	m	Sil+ Coam	ana
								saya (konsultante) - saka tury sulta - sa
					-			
								and a second
vpe C=C	Incentration D=Den	lation PM	-Paducad Matrix CS	-Course			21	
dric Soil	Indicators: (Applic	able to all	LRRs, unless other	wise not	ed.)	d Sand G	Indicators	for Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Redox (S	35)			2 cm M	uck (A10)
_ Histic Ep	pipedon (A2)		Stripped Matrix	(S6)			Red Pa	rent Material (TF2)
Black Hi	stic (A3)		Loamy Mucky N	lineral (F1	1) (except	MLRA 1)	Very St	allow Dark Surface (TE12)
_ Hydroge	n Sulfide (A4)		Loamy Gleved M	Aatrix (F2)		Other (Explain in Remarks)
Depleted	Below Dark Surface	e (A11)	Depleted Matrix	(F3)	, ,			angerent intercontaine)
_ Thick Da	ark Surface (A12)	10.0	X Redox Dark Sur	face (F6)			³ Indicators o	f hydrophylic vegetation and
Sandy N	lucky Mineral (S1)		Depleted Dark S	Surface (F	7)		wetland t	vdrology must be present
Sandy G	leyed Matrix (S4)		Redox Depressi	ons (FR)	.,		unless di	sturbed or problematic
estrictive I	ayer (if present):			0110 (1 0)			l difiess di	starbed of problematic.
Туре							1.	
Depth (ind	ches)						Hydric Soil Pre	sent? Yes X No
DROLO	GY							
DROLO etland Hyc	GY Irology Indicators:				A			
DROLO etland Hyc imary Indic	GY frology Indicators: ators (minimum of or	ne required	d, check all that apply)			Secondary	/ Indicators (2 or more required)
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DROLO etland Hyc imary Indic Surface M High Wal Saturatio Water Ma Sedimen Drift Dep Algal Mal Iron Depo Surface S Inundatio Sparsely Id Observe face Water ter Table F uration Pre Surface Scapil Scribe Recc	GY frology Indicators: ators (minimum of or Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial Im Vegetated Concave ations: r Present? Yes esent? Yes lary fringe) orded Data (stream g	ne required nagery (B7 Surface (E s N s N auge, mor	<u>check all that apply</u> <u>Water-Stain</u> <u>MLRA 1</u> <u>Salt Crust (I</u> <u>Aquatic Inve</u> <u>Hydrogen S</u> <u>Oxidized Rf</u> <u>Presence of</u> <u>Recent Iron</u> <u>Stunted or S</u> <u>Other (Explained)</u> <u>V</u> <u>Depth (inchholo <u>Y</u> <u>Depth (inchholo)</u> </u>	ed Leave , 2, 4A, a 311) ertebrates ulfide Odd izosphere Reduced Reduction itressed F ain in Rem es): es): es): otos, prev	es (B9) (ex nd 4B) (B13) or (C1) es along Li l Iron (C4) n in Tilled Plants (D1) marks)	cept Soils (C6) (LRR A) Wetla	<u>Secondan</u> Water 4A ↓ Draina Dry-Sa Satura ss (C3) ↓ Geom Shallo FAC-N Raised Frost-I	Andicators (2 or more required) -Stained Leaves (B9) (MLRA 1, 2 , and 4B) age Patterns (B10) S Wa /C eason Water Table (C2) ation Visible on Aerial Imagery (C2 orphic Position (D2) S Wa /C w Aquitard (D3) Jeutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7)
PROLOG Vetland Hyd mmary Indic Surface N High Wal Saturatio Water Ma Sedimen Drift Dep Algal Mat Iron Depo Surface S Inundatio Sparsely Soft Observer frace Water Table P turation Pre cludes capil scribe Recco	GY frology Indicators: ators (minimum of or Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial Im Vegetated Concave : ations: r Present? Yes sent? Yes lary fringe) orded Data (stream g	nagery (B7 Surface (E s N s N s N auge, mor	d. check all that apply	ed Leave , 2, 4A, an B11) ertebrates ulfide Odd izcosphere Reduced Reduction itressed F ain in Rem es): es): es) otos, prev	rs (B9) (ex nd 4B) (B13) or (C1) es along Li l Iron (C4) n in Tilled Plants (D1) narks)	cept Soils (C6) (LRR A) Wetla	<u>Secondan</u> Water 4A Draina Dry-Sr Satura ss (C3) <u>X</u> Geom Shallo FAC-N Raiser Frost-I	Andicators (2 or more required) -Stained Leaves (B9) (MLRA 1, 2 , and 4B) age Patterns (B10) $5 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $
PROLOC retland Hyc surface M Surface M High Wal Saturatio Water Ma Sedimen Drift Dep Algal Mal Iron Depc Surface S Inundatio Sparsely Sold Observer rface Water ater Table P turation Pre- cludes capil scribe Reco	GY frology Indicators: ators (minimum of or Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial Im Vegetated Concave ations: r Present? Yes esent? Yes lary fringe) orded Data (stream g	ne required nagery (B7 Surface (E s N s N auge, mor		ed Leave , 2, 4A, an 311) ertebrates ulfide Odd izosphere Reduced Reduction itressed F ain in Rem es): es): otos, prev	rs (B9) (ex. nd 4B) (B13) or (C1) es along Li l Iron (C4) n in Tilled Plants (D1) narks)	cept Soils (C6) (LRR A) Wetla	Secondan Water 4A ↓ Draina Dry-Sa Satura satura Shallo FAC-N Raised Frost-I nd Hydrology Pre	Andicators (2 or more required) -Stained Leaves (B9) (MLRA 1, 2 , and 4B) age Patterns (B10) 5 Wa /C eason Water Table (C2) ation Visible on Aerial Imagery (C2 orphic Position (D2) 5 Wa /C w Aquitard (D3) Heutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7)
DROLO etland Hyc imary Indic Surface V High Wal Saturatio Water Ma Sedimen Drift Dep Algal Mal Iron Depo Surface S Inundatio Sparsely Id Observer rface Water iter Table P uration Pre scribe Reco	GY frology Indicators: ators (minimum of or Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial Im Vegetated Concave for atlons: r Present? Yes esent? Yes lary fringe) orded Data (stream g	ne required nagery (B7 Surface (E s N s N auge, more	d. check all that apply — Water-Stain MLRA 1 — Salt Crust (I — Aquatic Inve — Hydrogen S — Oxidized Rh — Presence of — Recent Iron — Stunted or S 5) — Other (Explain 10	ed Leave , 2, 4A, an 311) ertebrates ulfide Odd izzosphere Reducedo Reducedo Reducedo Reducedo Reducedo Reducedo Reducedo Reducedo Reducedo Reducedo Reducedo Reducedo Reducedo resso es): es): otos, prev	rs (B9) (ex nd 4B) (B13) or (C1) es along Li l Iron (C4) n in Tilled Plants (D1) narks)	cept ving Root Soils (C6) (LRR A) Wetla ections), if	Secondary → Water 4A ↓ Draina → Dry-So → Satura Satura Satura → Shallo → FAC-N → Raised → Frost-I nd Hydrology Pre available	Andicators (2 or more required) -Stained Leaves (B9) (MLRA 1, 2 , and 4B) age Patterns (B10) S Wa /C eason Water Table (C2) ation Visible on Aerial Imagery (C9 orphic Position (D2) S Wa /C w Aquitard (D3) Jeutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7)
DROLO etland Hyc imary Indic Surface V High Wal Saturatio Water Ma Sedimen Drift Dep Algal Mal Iron Depo Surface S Inundatio Sparsely Id Observ face Water ter Table P uration Pre luces capil cribe Recc	GY frology Indicators: ators (minimum of or Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial Im Vegetated Concave atlons: r Present? Yes lary fringe) orded Data (stream g	nagery (B7 Surface (E s N s N auge, mor	d. check all that apply	ed Leave 2, 4A, an 311) ertebrates ulfide Odd izosphere Reduced Reduced Reduced Reduced Reduced itressed F ain in Rem es): es): otos, prev si + 1 ov	rs (B9) (ex nd 4B) (B13) or (C1) es along Li l Iron (C4) n in Tilled Plants (D1) narks)	cept ving Root Soils (C6) (LRR A) (LRR A) ections), if	Secondary Water 4A ↓ Draina Dry-So Satura is (C3) ↓ Geom Shallo FAC-N Raiseo Frost-I Raiseo Frost-I	A Indicators (2 or more required) -Stained Leaves (B9) (MLRA 1, 2 , and 4B) age Patterns (B10) 5 Gale eason Water Table (C2) ation Visible on Aerial Imagery (C2 orphic Position (D2) 5 Gale w Aquitard (D3) Heutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7) (Sent? Yes X No
DROLO etland Hyd imary Indic Surface N High Wal Saturatio Water Ma Sedimen Drift Dep Algal Mal Iron Depo Surface S Inundatio Sparsely Id Observe face Water ter Table P uration Pre fudes capil scribe Reccon	GY frology Indicators: ators (minimum of or Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial Im Vegetated Concave : atlons: r Present? Yes lary fringe) orded Data (stream g	nagery (B7 Surface (E s N s N auge, mor	d. check all that apply Water-Stain MLRA 1 Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain No $\underline{\vee}$ Depth (inch No $\underline{\vee}$ Depth (inch	ed Leave , 2, 4A, an B11) ertebrates ulfide Odd izosphere Reduced Reduced Reduced Reduced Reduced itressed F ain in Rem es): es): otos, prev S i +1000	is (B9) (ex ind 4B) is (B13) or (C1) es along Li li Iron (C4) in in Tilled Plants (D1) narks) vious inspect is d 5	cept ving Root Soils (C6) (LRR A) Wetla ections), if	Secondan Water 4A X Draina Dry-St Satura Shallo FAC-N Raised Frost-I Raised Frost-I	Andicators (2 or more required) -Stained Leaves (B9) (MLRA 1, 2 , and 4B) age Patterns (B10) S Walc eason Water Table (C2) ation Visible on Aerial Imagery (C! orphic Position (D2) S Walc w Aquitard (D3) Heutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7) esent? Yes X No

Western Mountains, Valleys, and Coast - Version 2.0

WETLAN	D DETERMINATION [DATA FORM – Wester	n Mountains, Valleys, a	and Coast Region	
Project/Site Keev	10	City/County:	ne Kinleyville / Humbal.	1+ Sampling Date: 911	7121
Applicant/Owner 641) for Mary K.	echn Developmen	nt state CA	Sampling Point:	MI-U
Investigator(s) K. Mel	Donald, M.Schn	12172 Section, Town	ship, Range SS T6N,	RIE	
Landform (hillslope, terrace,	etc) Aone	Local relief (c	oncave, convex, none)	Slope (%	3
Subregion (LRR)	n	Lat: 40, 932 710	241 Long -124. 00	986924 Datum _	Uh584
Soil Map Unit Name: Are	2+2 and Canlyn	10412 in 2-9%	Slopes NWI class	ification Aone	
Are climatic / hydrologic con	ditions on the site typical for	this time of year? Yes	No (If no, explain ir	n Remarks)	
Are Vegetation Soil	or Hydrology	_ significantly disturbed?	Are "Normal Circumstances	s" present? Yes	10
Are Vegetation, Soil	or Hydrology	_ naturally problematic?	(If needed, explain any ans	wers in Remarks)	
SUMMARY OF FINDI	NGS – Attach site ma	p showing sampling	point locations, transec	ts, important feature	es, etc.
Hydrophytic Vegetation Pro	esenl? Yes	No		1	

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	Is the Sampled Area within a Wetland?	Yes	No
Remarks:		1		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:
1,			That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3.		-	Species Across All Strata:(B)
4.			Percent of Dominant Species
Sanling/Shruh Stratum (Plot size		= Total Cover	That Are OBL, FACW, or FAC: (A/B)
			Prevalence Index worksheet:
2		· · · · · · · · · · · · · · · · · · ·	Total % Cover of Multiply by
3			OBL species x 1 =
4			FACW species $x^2 = 186$
5.			FAC species $63 \times 3 = 101$
		= Total Cover	FACU species $\underline{C-1}$ x 4 = 11 b
Herb Stratum (Plot size)	10	IN FAC	Column Totals 97 (A) 305 (D)
1 Holcus lanatus	-10-	N FAC	Column Totals. $\underline{12}$ (A) $\underline{323}$ (B)
2 Horostisotolonitera	- 20	- FAC	Prevalence Index = $B/A = 3, 32$
3 Anthox 20 thum addidt	un for	EAL H	Hydrophytic Vegetation Indicators:
A Hypothatis inducated		FALL	1 - Rapid Test for Hydrophytic Vegetation
5 Davcos cardo	18	N FAI	2 - Dominance Test is >50%
6 Festora portrais	-49-	12 110	12 3 - Prevalence Index is ≤3.0'
1			 4 - Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)
8		and a second	5 - Wetland Non-Vascular Plants
10		and the second s	Problematic Hydrophytic Vegetation ¹ (Explain)
10	Contraction of Contraction		¹ Indicators of hydric soil and wetland hydrology must
	97.	= Total Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)			
1			Hydrophytic
2			Vegetation
% Bare Ground in Herb Stratum8	-	= Total Cover	Presentr TesNO
Remarks	and an owned the second second		And a management of the second secon second second sec

US Army Corps of Engineers

C	2	É	£.
э	U	L	
	_	-	_

35	Keehn	9/12/21	Sampling Point:	WITI	-	U
-		11110		and the second s	-	

MI	85 Reeling Fluter Sampling Point WIT
Profile Description: (Describe to the depth needed to document the indicator	or confirm the absence of indicators)
Depth Matrix Redox Features	a stand the describe of indicators.)
(inches) Color (moist) % Color (moist) % Type	Loc ² Texture Remarks
<u>5-6 10412/2 100</u>	- 10am
-14 104RZ/Z 100 -	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coate	d Sand Grains. ² Location PI = Pore Lining M=Matrix
yuric Soli indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
Histosol (A1) Sandy Redox (S5)	2 cm Muck (A10)
Stripped Matrix (S6)	Red Parent Material (TF2)
_ Loamy Mucky Mineral (F1) (except	MLRA 1) Very Shallow Dark Surface (TF12)
Depleted Balow Date Surface (Add) Loamy Gleyed Matrix (F2)	Other (Explain in Remarks)
Thick Dark Surface (A12) Depleted Matrix (F3)	
Sandy Mucky Mineral (S1) Kedox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and
Sandy Gleved Matrix (S4) Depleted Dark Surface (F7)	wetland hydrology must be present,
estrictive Laver (if present):	unless disturbed or problematic.
Туре	
Denth (inches)	
	Hydric Soil Present? Yes No X
/DROLOGY	
/DROLOGY /etland Hydrology Indicators:	*
DROLOGY fetland Hydrology Indicators: timary Indicators (minimum of one required, check all that apply) Surface Where (A1)	Secondary Indicators (2 or more required)
'DROLOGY 'etland Hydrology Indicators: timary Indicators (minimum of one required, check all that apply)	Secondary Indicators (2 or more required) Cept Water-Stained Leaves (B9) (MI BA 1 2
'DROLOGY 'etland Hydrology Indicators: immary Indicators (minimum of one required, check all that apply)	Cept Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
DROLOGY ietland Hydrology Indicators: immary Indicators (minimum of one required, check all that apply)	Secondary Indicators (2 or more required) cept Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required, check all that apply) _ Surface Water (A1) Water-Stained Leaves (B9) (exc _ High Water Table (A2) MLRA 1, 2, 4A, and 4B) _ Saturation (A3) Salt Crust (B11) _ Water Marks (B1) Aquatic Invertebrates (B13)	Secondary Indicators (2 or more required) Cept Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required, check all that apply) _ Surface Water (A1) Water-Stained Leaves (B9) (exc _ High Water Table (A2) MLRA 1, 2, 4A, and 4B) _ Saturation (A3) Salt Crust (B11) _ Water Marks (B1) Aquatic Invertebrates (B13) _ Sediment Deposits (B2) Hydrogen Sulfide Odor (C1)	Cept Vater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagent (C00)
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required, check all that apply) _ Surface Water (A1) Water-Stained Leaves (B9) (exits) _ High Water Table (A2) MLRA 1, 2, 4A, and 4B) _ Saturation (A3) Salt Crust (B11) _ Water Marks (B1) Aquatic Invertebrates (B13) _ Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) _ Drift Deposits (B3) Oxidized Rhizospheres along Li	Secondary Indicators (2 or more required) Cept
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required, check all that apply) _ Surface Water (A1) Water-Stained Leaves (B9) (exit _ High Water Table (A2) MLRA 1, 2, 4A, and 4B) _ Saturation (A3) Salt Crust (B11) _ Water Marks (B1) Aquatic Invertebrates (B13) _ Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) _ Drift Deposits (B3) Oxidized Rhizospheres along Li _ Algal Mat or Crust (B4) Presence of Reduced Iron (C4)	Secondary Indicators (2 or more required) cept
ZDROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required, check all that apply) _ Surface Water (A1) Water-Stained Leaves (B9) (exc _ High Water Table (A2) MLRA 1, 2, 4A, and 4B) _ Saturation (A3) Salt Crust (B11) _ Water Marks (B1) Aquatic Invertebrates (B13) _ Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) _ Drift Deposits (B3) Oxidized Rhizospheres along Li _ Algal Mat or Crust (B4) Presence of Reduced Iron (C4) _ Iron Deposits (B5) Recent Iron Reduction in Tilled	Secondary Indicators (2 or more required) Cept
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required, check all that apply) _ Surface Water (A1)	Secondary Indicators (2 or more required) Cept Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required, check all that apply) _ Surface Water (A1)	Secondary Indicators (2 or more required) Cept Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required, check all that apply) _ Surface Water (A1) Water-Stained Leaves (B9) (exited that apply) _ High Water Table (A2) MLRA 1, 2, 4A, and 4B) _ Saturation (A3) Salt Crust (B11) Water Marks (B1) Aquatic Invertebrates (B13) _ Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Oxidized Rhizospheres along Li _ Algal Mat or Crust (B4) Recent Iron Reducted Iron (C4) _ Iron Deposits (B5) Recent Iron Reduction in Tilled 3 _ Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) _ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Secondary Indicators (2 or more required) Cept Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required, check all that apply) Surface Water (A1) Water-Stained Leaves (B9) (exc High Water Table (A2) MLRA 1, 2, 4A, and 4B) Saturation (A3) Salt Crust (B11) Water Marks (B1) Aquatic Invertebrates (B13) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Oxidized Rhizospheres along Li Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Iron Deposits (B5) Recent Iron Reduction in Tilled 3 Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) Mater Stressed Plants (D1)	Secondary Indicators (2 or more required) Cept Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Image: Indicators in the image: Indicator in the image: Indimage: Indicator in the image: Indicator in th	Secondary Indicators (2 or more required)
YDROLOGY retland Hydrology Indicators: immary Indicators (minimum of one required, check all that apply) _ Surface Water (A1)	Secondary Indicators (2 or more required)
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required, check all that apply) _ Surface Water (A1)	Secondary Indicators (2 or more required) Cept
DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required, check all that apply) Surface Water (A1)	Secondary Indicators (2 or more required) cept
ZDROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required, check all that apply)	Secondary Indicators (2 or more required) Cept
ZDROLOGY International Systems Argent Systems String Systring Systems	Secondary Indicators (2 or more required) Cept
Zetland Hydrology Indicators: rimary Indicators (minimum of one required, check all that apply)	Secondary Indicators (2 or more required) cept
//DROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one required, check all that apply)	Secondary Indicators (2 or more required) cept
YDROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one required, check all that apply)	Secondary Indicators (2 or more required) cept
WETLAND DETERMINATION DATA FORM	I – Western Mountains, Valleys, and Coast Region
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Project/Site: Keehn	City/County McKing ville /Hundboldt Sampling Date 9/17/21
Applicant/Owner 6HD for Mary Kech- Den	1. State CA Sampling Point ()172-W
Investigator(s) 12 Mc Poneld M. Schwerze	Section Township, Range: 55 TGN R1C
Landform (hillslope, terrace, etc.) Su solo	Local relief (concave, convex, none) _ aneave_ Slope (%) _
Subregion (LRR): A Lat: 46	93213461 Long -124.698625 Datum 2584
Soil Map Unit Name Archt2 2nd Candymant 7-6	19% Slup 15 NWI classification PEM
Are climatic / hydrologic conditions on the site typical for this time of year	ar? Yes V No (If no. explain in Remarks.)
Are Vegetation Soil or Hydrology significantly	disturbed? Are "Normal Circumstances" present? Yes
Are Vegetation X Soll or Hydrology naturally pro	blematic? (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	
Hydric Soil Present? Yes V/_ No	Is the Sampled Area
Wetland Hydrology Present? Yes J No	
Does not p255 PI, but h25 by	drology and soils.
VEGETATION – Use scientific names of plants.	
	Demissrat Indicator Demissrare Test workshoot:

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant Species Across All Strata (B)
Sapling/Shrub Stratum (Plot size:)		= Total Cov	er	Percent of Dominant Species That Are OBL, FACW, or FAC (A/B) Prevalence Index worksheet:
1				Total % Cover of Multiply by
2				OBL species O x1= O
3				FACW species O x 2 = O
4				FAC species $88 \times 3 = 264$
5	-	-		FACU species 10 x4= 40
1 2		= Total Cov	er	UPL species O x 5 = O
1 Arrahlis stalonitera	60	Y	FAC	Column Totals: 98 (A) 304 (B)
2 Fostura perennis	10	Y	TAC	Prevalence Index = $B/A = 3.10$
3 Lotus corriction is	8		AC	Hydrophytic Vegetation Indicators:
Helevisianatis	10		GAC	1 - Rapid Test for Hydrophytic Vegetation
E Brown & Locad aceus	5	4	(J)A=	√2 - Dominance Test is ≥50%
6 Humchaerisradicata	5	6	AQ)	\overline{N}_3 - Prevalence Index is $\leq 3.0^4$
7				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
8				5 - Wetland Non-Vascular Plants ¹
9	-			Problematic Hydrophytic Vegetation' (Explain)
10	_			Indicators of hydric soil and wetland hydrology must
11	- 90			be present, unless disturbed or problematic
Mandel Vice Stratum (Plot eize	10	= 1 otal Cove	er -	
woody whe Stratum (Fibraze				Hudrophytic
				Vegetation
% Bare Ground in Herb Stratum		= Total Cove	ir	Present? Yes No V
Remarks C	1 0			
Does not passFAC-no	what	-		

MBS	4	echn	91	15/51	Sampling Point:	W	W-571
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miches)	Calast		Redo	x Feature	s	and the local data		
M-L	Lou Dala	%	Color (moist)	_%	Type	Loc ²	Texture	Remarks
0-0	109KC/2	90	1.54K 4/4	10	<u> </u>	M	Loam	
2-14	<u>109 R312</u>		754R 4/6	20		m	Loam	
					=			
Type C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, CS	=Covered	or Coate	d Sand G		
lydric Soil I	ndicators: (Applic	able to all	LRRs, unless other	wise note	ed.)	u dunu o	Indicators for	Problematic Hydric Soils ¹
Histosol	(A1)		Sandy Redox (S	5)			2 cm Muc	(A10)
HISTIC Ep	ipedon (A2)		Stripped Matrix (S6)			Red Parer	t Material (TF2)
Hydroger	1 Sulfide (A4)		Loamy Mucky Mi	neral (F1) (except	MLRA 1)	Very Shall	ow Dark Surface (TF12)
_ Depleted	Below Dark Surface	e (A11)	Loamy Gleyed M	atrix (F2)			Other (Exp	lain in Remarks)
Thick Dat	rk Surface (A12)	- ()	X Redox Dark Surf	ace (F6)			31-11-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	
Sandy Mi	ucky Mineral (S1)		_ Depleted Dark Si	urface (F7	7)		indicators of h	vorophytic vegetation and
_ Sandy GI	eyed Matrix (S4)		Redox Depressio	ons (F8)	č		unless distu	rbed or problematic
estrictive L	ayer (if present):							ies of provenatio
Type							14. The State	9.5
Depth (inch	nes):	and the second second second					Hydric Soil Prese	nt? Yes No X
'DROLOG	Υ							
/DROLOG	Y ology Indicators:	P required	obeau all that and a					ž
/DROLOG /etland Hydr fimary Indica Surface W	iY ology Indicators: tors (minimum of on /ater (A1)	e required	, check all (hat apply)				Secondary In	dicators (2 or more required)
PROLOG Vetland Hydr timary Indica _ Surface W _ High Wate	ology Indicators: tors (minimum of on fater (A1) or Table (A2)	e required	<u>, check all that apply)</u> Water-Staine	d Leaves	s (B9) (exc	cept	<u>Secondary In</u> Water-St	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2,
/DROLOG /etland Hydr rimary Indica Surface W High Wate Saturation	iY ology Indicators: tors (minimum of on /ater (A1) rr Table (A2) (A3)	e réquired	<u>, check all that apply)</u> Water-Staine MLRA 1, Sall Crust (B	ed Leaves 2, 4A, an	s (B9) (exc d 4B)	cept	<u>Secondary In</u> Water-St 4 A, a	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2, nd 4B)
/DROLOG /etland Hydr mary Indica _ Surface W _ High Wate _ Saturation _ Water Mar	iY ology Indicators: tors (minimum of on /ater (A1) r Table (A2) (A3) ks (B1)	e required	, check all that apply) Water-Staine MLRA 1, Salt Crust (B Aquatic Inver	ed Leaves 2, 4A, an 11)	6 (B9) (exc d 4B) (B13)	cept	Secondary In Water-St 4A, a Drainage	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2, nd 4B) Patterns (B10) 5 wale
PROLOG (etland Hydr imary Indica) Surface W High Wate Saturation Water Mar Sediment I	ology Indicators: tors (minimum of on /ater (A1) rr Table (A2) (A3) ks (B1) Deposits (B2)	e required	<u>, check all that apply)</u> Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su	ed Leaves 2, 4A, an 11) tebrates (Ifide Odo	; (B9) (exc d 4B) (B13) r (C1)	cept	Secondary In Water-St 4A, and Drainage Dry-Sease Sedection	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2 nd 4B) Patterns (B10) 5 acte ion Water Table (C2)
(DROLOG Vetland Hydr <u>imary Indica</u> Surface W High Wate Saturation Water Mar Sediment I Drift Depose	eY tors (minimum of on vater (A1) or Table (A2) (A3) ks (B1) Deposits (B2) sits (B3)	e required	<u>check all (hat apply)</u> <u>Water-Staine</u> MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz	ed Leaves 2, 4A, an 11) tebrates (lífide Odo zosphere:	s (B9) (exc d 4B) (B13) r (C1) s along Li	cept	<u>Secondary In</u> Water-St Water-St Drainage Dry-Seas Saturatio	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2 ad 4B) Patterns (B10) 5 cole on Water Table (C2) n Visible on Aerial Imagery (C9
PROLOG Petland Hydr Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat c	iY ology Indicators: tors (minimum of on /ater (A1) ir Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4)	e required	<u>check all that apply)</u> <u>Water-Staine</u> MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi; Presence of F	ed Leaves 2, 4A, an 11) tebrates (Ifide Odo zosphere: Reduced	s (B9) (exc d 4B) (B13) r (C1) s along Lin Iron (C4)	cept ving Root	<u>Secondary In</u> Water-St ¥Drainage Dry-Seas Saturatio s (C3) ★ Geomorp Shallow	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2, nd 4B) Patterns (B10) Swale on Water Table (C2) n Visible on Aerial Imagery (C9 hic Position (D2) Swale
PROLOG Vetland Hydr timary Indica Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat o Iron Depos	iY ology Indicators: tors (minimum of on /ater (A1) rr Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5)	e required	<u>, check all that apply)</u> Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F	ed Leaves 2, 4A, an 11) tebrates (lfide Odo zosphere: Reduced Reduction	(B9) (exc d 4B) (B13) r (C1) s along Li Iron (C4) in Tilled S	cept ving Root: Soils (C6)	Secondary In Water-St 4A, al Drainage Dry-Seas Saturatio s (C3) X Geomorp Shallow / FAC-Neu	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2, nd 4B) Patterns (B10) 5 wale on Water Table (C2) n Visible on Aerial Imagery (C9 hic Position (D2) 5 wale Aquitard (D3) tral Test (D5)
PROLOG Petland Hydr mary Indical Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat c Iron Depos Surface So	iY ology Indicators: tors (minimum of on /ater (A1) ir Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) ill Cracks (B6)	e required	<u>, check all that apply)</u> Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi; Presence of F Recent Iron F Stunted or Stu	ed Leaves 2, 4A, an 11) tebrates (lfide Odo zosphere: Reduced Reduced Reduction ressed Pl	(B9) (exc d 4B) (B13) r (C1) s along Lin Iron (C4) in Tilled S ants (D1)	ving Root: Soils (C6) (LRR A)	Secondary In Water-St 4A, an Drainage Dry-Seas Saturatio s (C3) X Geomorp Shallow / FAC-Neu Raised A	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2, and 4B) Patterns (B10) 5 wale ron Water Table (C2) In Visible on Aerial Imagery (C9 hic Position (D2) 5 wale Aquitard (D3) tral Test (D5) Int Mounds (D6) (LBB A)
DROLOG Vetland Hydr immary Indical Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat c Iron Depos Surface So Inundation Snaredu V	V tors (minimum of on Vater (A1) or Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Im-	e required	<u>check all that apply</u> <u>Water-Staine</u> MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron R Other (Explain	ed Leaves 2, 4A, an 11) tebrates (lifide Odo zosphere: Reduced Reduction ressed Pi n in Rema	(B9) (exc d 4B) (B13) r (C1) s along Lin lron (C4) in Tilled S lants (D1) arks)	ving Root: Soils (C6) (LRR A)	Secondary Im Water-St 4A, a Drainage Dry-Seas Saturatio s (C3) X Geomorp Shallow / FAC-Neu Raised A Frost-Hea	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2 and 4B) Patterns (B10) 5 wale non Water Table (C2) n Visible on Aerial Imagery (C9 hic Position (D2) 5 wale Aquitard (D3) tral Test (D5) nt Mounds (D6) (LRR A) ave Hummocks (D7)
PROLOG Vetland Hydr imary Indica Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat c Iron Depos Surface So Inundation Sparsely W Id Observat	iY ology Indicators: tors (minimum of on /ater (A1) ir Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Im egetated Concave S	e required agery (B7) Surface (B8	<u>check all that apply</u> Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Stunted or Sta Other (Explain 3)	ed Leaves 2, 4A, an 11) tebrates (lfide Odo zosphere: Reduced Reduction ressed Pl n in Rema	s (B9) (exc d 4B) (B13) r (C1) s along Lin Iron (C4) in Tilled S ants (D1) arks)	ving Roots Soils (C6) (LRR A)	Secondary In Water-St 4A, a Dry-Seas Saturatio s (C3) X Geomorp Shallow / FAC-Neu Raised A Frost-Hea	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2, nd 4B) Patterns (B10) 5 well on Water Table (C2) In Visible on Aerial Imagery (C9 hic Position (D2) 5 well Aquitard (D3) tral Test (D5) Int Mounds (D6) (LRR A) ave Hummocks (D7)
PROLOG Vetland Hydr imary Indica Surface W High Wate Saturation Water Mar Sediment I Orift Depos Algal Mat c Iron Depos Surface So Inundation Sparsely W Id Observat	iY ology Indicators: tors (minimum of on /ater (A1) ir Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Im- egetated Concave S ions: Present?	agery (B7) Surface (B8	check all that apply) Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Stunted or Stu Other (Explain 3)	ed Leaves 2, 4A, an 11) tebrates (lfide Odo zosphere: Reduced Reduction ressed PI n in Rema	(B9) (exc d 4B) (B13) r (C1) s along Liv Iron (C4) in Tilled S ants (D1) arks)	ving Root: Soils (C6) (LRR A)	Secondary In Water-St 4A, al Drainage Dry-Seas Saturatio s (C3) X Geomorp Shallow / FAC-Neu Raised A Frost-Hea	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2 nd 4B) Patterns (B10) 5 wale on Water Table (C2) In Visible on Aerial Imagery (C9 hic Position (D2) 5 wale Aquitard (D3) tral Test (D5) Int Mounds (D6) (LRR A) ave Hummocks (D7)
PROLOG Vetland Hydr immary Indical Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat c Iron Depos Surface So Inundation Sparsely W Id Observat face Water F	iY ology Indicators: tors (minimum of on /ater (A1) ir Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Im egetated Concave S ions: Present? Yes	agery (B7) Surface (B8	 <u>check all that apply</u> Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Stunted or Str Other (Explain 	ed Leaves 2, 4A, an 11) tebrates (lfide Odo zosphere: Reduced Reduction ressed Pi n in Rema s):	(B9) (exc d 4B) (B13) r (C1) s along Lin Iron (C4) in Tilled S ants (D1) arks)	ving Root: Soils (C6) (LRR A)	Secondary In Water-St 4A, a Drainage Dry-Seas Saturatio Saturatio Saturatio Saturatio Shallow / FAC-Neu Raised A Frost-Hea	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2, and 4B) Patterns (B10) 5 wale on Water Table (C2) In Visible on Aerial Imagery (C9 hic Position (D2) 5 wale Aquitard (D3) tral Test (D5) Int Mounds (D6) (LRR A) ave Hummocks (D7)
PROLOG Addition Sparsely Value Adition Sparsely Adition Adition	iY tors (minimum of on Vater (A1) or Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) ill Cracks (B6) Visible on Aerial Im- egetated Concave S ions: Present? Yes esent? Yes	agery (B7) Surface (B8 No	 <u>check all that apply</u> Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Stunted or Str Other (Explain 	ed Leaves 2, 4A, an 11) tebrates (lifide Odo zosphere: Reduced Reduced Reduction ressed Pi n in Rema s): s):	(B9) (exc d 4B) (B13) r (C1) s along Liv lron (C4) in Tilled S lants (D1) arks)	ving Root: Soils (C6) (LRR A)	Secondary Im Water-St 4A, ar Drainage Dry-Seas Saturatio s (C3) X Geomorp Shallow / FAC-Neu Raised A Frost-Hea	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2, nd 4B) Patterns (B10) 5 wale on Water Table (C2) n Visible on Aerial Imagery (C9 hic Position (D2) 5 wale Aquitard (D3) tral Test (D5) nt Mounds (D6) (LRR A) ave Hummocks (D7)
	iY ology Indicators: tors (minimum of on /ater (A1) or Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Im- egetated Concave S ions: Present? Yes esent? Yes ent? Yes or Yes	agery (B7) Surface (B8 No	 <u>check all that apply</u> Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Stunted or Sti Other (Explain 	ed Leaves 2, 4A, an 11) tebrates (lifide Odo zosphere: Reduction ressed PI n in Rema s): s): s):	s (B9) (exc d 4B) (B13) r (C1) s along Lin lron (C4) in Tilled S ants (D1) arks)	ving Root: Soils (C6) (LRR A) Wetlar	Secondary In Water-St 4A, a ↓ Drainage Dry-Seas Saturatio s (C3) ★ Geomorp Shallow / FAC-Neu Raised A Frost-Hea State of the second Raised A Frost-Hea State of the second Raised A Frost-Hea State of the second State of the second 	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2, and 4B) Patterns (B10) Swale on Water Table (C2) In Visible on Aerial Imagery (C9 hic Position (D2) Swale Aquitard (D3) tral Test (D5) Int Mounds (D6) (LRR A) ave Hummocks (D7)
PROLOG Vetland Hydr immary Indical Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat co Iron Depos Surface So Inundation Sparsely W Vetlater Face Water Face	iY ology Indicators: tors (minimum of on /ater (A1) ir Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Im egetated Concave S ions: Present? Yes esent? Yes esent? Yes ent? Yes of Data (stream ga	agery (B7) Surface (B8 No No auge, moni	 <u>check all that apply</u> Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Stunted or Str Other (Explain 	ed Leaves 2, 4A, an 11) tebrates (lfide Odo zospheres Reduced Reduced Reduction ressed Pl n in Rema s): s): s): tos, previ	(B9) (exc d 4B) (B13) r (C1) s along Lin Iron (C4) in Tilled S ants (D1) arks)	ving Root: Soils (C6) (LRR A) Wetlar	Secondary Im Water-St 4A, a Dry-Seas Dry-Seas Saturatio Saturatio Saturatio Saturatio Shallow A FAC-Neu Raised A Frost-Hea Mathematical Mathematical Shallow A Shallow A S	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2 ained Leaves (B9) (MLRA 1, 2 and 4B) Patterns (B10) 5 wale non Water Table (C2) n Visible on Aerial Imagery (C9 hic Position (D2) 5 wale Aquitard (D3) tral Test (D5) nt Mounds (D6) (LRR A) ave Hummocks (D7)
	iY ology Indicators: tors (minimum of on /ater (A1) or Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Im. egetated Concave S ions: Present? Yes esent? Yes esent	agery (B7) Surface (B8 No No auge, moni	 <u>check all that apply</u> Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Stunted or Sti Other (Explain 	ed Leaves 2, 4A, an 11) tebrates (lifide Odo zosphere: Reduction ressed PI n in Rema s): s): tos, previo	s (B9) (exc d 4B) (B13) r (C1) s along Lin lron (C4) in Tilled S lants (D1) arks)	ving Root: Soils (C6) (LRR A) Wetlar	Secondary In Water-St 4A, a ↓ Drainage Dry-Seas Saturatio s (C3) ★ Geomorp Shallow / FAC-Neu Raised A Frost-Hea available:	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2 and 4B) Patterns (B10) 5 wale on Water Table (C2) In Visible on Aerial Imagery (C9 hic Position (D2) 5 wale Aquitard (D3) tral Test (D5) Int Mounds (D6) (LRR A) ave Hummocks (D7)
PROLOG Additional statement of the second sta	iY ology Indicators: tors (minimum of on /ater (A1) or Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Im- egetated Concave S ions: Present? Yes sent? Yes ent? Yes or Y fringe) ted Data (stream ga	agery (B7) Surface (B8 No No No auge, moni	 <u>check all that apply</u>) Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Stunted or Sti Other (Explain 	ed Leaves 2, 4A, an 11) tebrates (lifide Odo zosphere: Reduced Reduction ressed PI n in Rema s): s): s): tos, previ	(B13) (B13) r (C1) s along Liv Iron (C4) in Tilled S ants (D1) arks)	ving Root: Soils (C6) (LRR A) Wetlar Ctions), if	Secondary In Water-St 4A, a Dry-Seas Saturatio S (C3) X Geomorp Shallow / Raised A FAC-Neu Raised A Frost-Heat Not Hydrology Presen available:	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2, nd 4B) Patterns (B10) 5 ws (e on Water Table (C2) n Visible on Aerial Imagery (C9 hic Position (D2) 5 ws (e Aquitard (D3) tral Test (D5) nt Mounds (D6) (LRR A) ave Hummocks (D7)
PROLOG Vetland Hydr fimary Indica Surface W High Wate Saturation Water Mar Sediment II Orift Depos Algal Mat c Iron Depos Surface So Inundation Sparsely W Vold Observat face Water F ter Table Pre- uration Press Judes capilla scribe Record marks:	iY ology Indicators: tors (minimum of on /ater (A1) ir Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Im egetated Concave S ions: Present? Yes esent? Yes ent? Yes iny fringe) ded Data (stream ga	agery (B7) Surface (B8 No No No No No No No No No No No	 <u>check all that apply</u>) Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Stunted or Sti Other (Explain 	ed Leaves 2, 4A, an 11) tebrates (lifide Odo zosphere: Reduced Reduction ressed Pl n in Rema s): s): s): tos, previa	(B9) (exc d 4B) (B13) r (C1) s along Lin Iron (C4) in Tilled S ants (D1) arks)	ving Root: Soils (C6) (LRR A) Wetlar	Secondary In Water-St 4A, a Drainage Dry-Seas Saturatio Saturatio Saturatio Saturatio Saturatio Saturatio Saturatio FAC-Neu Raised A Frost-Hea available	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2, nd 4B) Patterns (B10) 5 w≤le son Water Table (C2) In Visible on Aerial Imagery (C9 hic Position (D2) 5 w≤le Aquitard (D3) tral Test (D5) Int Mounds (D6) (LRR A) ave Hummocks (D7)

WETLAND DETERM	INATION DATA FORM -	Western Mountains,	Valleys, and	d Coast Region
Project/Site Hern	City	County Mickipley ville	Hurboldt	Sampling Date 9117/2
Applicant/Owner GHD for M	ary Keehn Dens	lopment s	tate: CA	Sampling Point: WITAU
Investigator(s) K Mc Donzld,	M. Schwart Sec	tion, Township, Range:	55, TGN.	RIE
Landform (hillslope, terrace, etc.) 5 (22)	le Lor	al relief (concave, convex, r	none): CONV	× Slope (%) 5
Subregion (LRR)	Lat: 40.4	13273461 Long	-124.098	625 Datum: W6584
Soil Map Unit Name: Arcz+2 200	1 candymountain,	2-90% slopes	NWI classific	cation: None
Are climatic / hydrologic conditions on the s	ite typical for this time of year?	Yes No ()	f no, explain in R	(emarks.)
Are Vegetation, Soil, or Hyd	rology significantly dist	urbed? Are "Normal (Circumstances" (present? Yes <u>~</u> No
Are Vegetation Soil, or Hyp	Irology naturally probler	natic? (If needed, ex	plain any answe	ers in Remarks)
SUMMARY OF FINDINGS - Atta	ch site map showjng sa	mpling point location	ns, transects	, important features, etc.
Hydrophytic Vegetation Present?	Yes No	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.		/
Hydric Soil Present?	Yes No	Is the Sampled Area	Ver	No
Wetland Hydrology Present?	Yes No	within a wetland r	Tes	NS
Remarks				
2				

Tree Stratum (Plot size:) 1 2	Absolute <u>% Cover</u>	Dominant Indica Species? Statu	tor Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant
3			Species Across All Strata: (B)
4		= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
1			Prevalence Index worksheet:
9		Summer of the second se	Total % Cover ofMultiply by:
3			OBL species x1 =
			FACW species x 2 =
			FAC species x 3 =
		- Tetal Course	FACU species x 4 =
Herb Stratum (Plot size: + M ²)	, turnistiss	= Total Cover	UPL species x 5 =
1 Aarostis stolonitera	50	Y FA	Column Totals: (A) (B)
2 Anthoxanthumodoptin	25	Y EAD	Prevalence Index = B/A =
3 Festura annoinacez	5	<u> </u>	Hydrophytic Vegetation Indicators:
4. Holcus 1202tus	6	EA	1 - Rapid Test for Hydrophytic Vegetation
5 Daucus carota	4	-FA	D 2 - Dominance Test is >50%
6 Plantago lanciolata	2	EAU	U 3 - Prevalence Index is ≤3.01
7 Lotus Earniculatus	-2	FA	4 - Morphological Adaptations ¹ (Provide supporting
8	(Gata in Remarks of on a separate sneet)
9			5 - Wetland Non-Vascular Plants
10			Problematic Hydrophytic Vegetation' (Explain)
11	au		 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size)	-1-1	_= Total Cover	
1.	-		Hydrophytic
2			Vegetation
% Bare Ground in Herb Stratum		_= Total Cover	Present? Yes No V
Remarks			

-	-	
-	~	
-		•
	•	
-	-	

no no	1/ - 1	
101	NPP	a /1917.

TONIO Dee	and all and im							oumphing runn.
Denth	cription: (Describe	to the dep	th needed to docur	nent the i	ndicator	or confirm	m the absence	of indicators)
(inches)	Color (moist)	02	Redo	x Features	5			
0-9	164R 312	100	Color (moist)	_%	Type	Loc2	Texture	Remarks
9.11	104 8 212	100	1 10 11		-	-	Loam	
1-14	101 1015	90	1.59 K 4/6	10	C	m	Sille	m
								and the spin of the second
					1000		And a second	
-								
			Transmission and the second			<u></u>		
								,
Type C=C	oncentration D=Dep	lation DM-	Deducation					
lydric Soil	Indicators: (Applic	able to all I	Reduced Matrix, CS	=Covered	or Coate	d Sand G	rains ² Loc	ation: PL=Pore Lining, M=Matrix.
Histosol	I (A1)		Sandy Reday (C	wise note	u.)		Indicato	rs for Problematic Hydric Soils ³ :
Histic E	pipedon (A2)		Stripped Matrix	(S6)			2 cm	Muck (A10)
_ Black H	istic (A3)		Loamy Mucky M	lineral (F1)	(excent	MIRA	Red	Parent Material (TF2)
Hydroge	en Sulfide (A4)		Loamy Gleyed M	Matrix (F2)	(enoph		very	r Shallow Dark Surface (TF12)
Deplete	d Below Dark Surface	e (A11)	Depleted Matrix	(F3)				(Lespian in rienalKS)
_ INICK D	Aucky Mineral (A12)		Redox Dark Sur	face (F6)			³ Indicato	rs of hydrophytic vegetation and
Sandy C	Sleved Matrix (S1)		_ Depleted Dark S	Surface (F7	7)		wetlar	nd hydrology must be present.
Restrictive	Layer (if present)		Redox Depressi	ons (F8)	The company and		unles	s disturbed or problematic.
Type:	P. seenig							
Depth (in	ches)		_				1.0.00	
Remarks:		10					Hydric Soil	Present? Yes No K
Permarks:	GY trology Indicators						Hydric Soil	Present? Yes No K
Pemarks POROLO Vetland Hydrimary Indic	GY drology Indicators:	DP required	chack all that apply				Hydric Soil	Present? Yes No
YDROLO Vetland Hyd Surface	GY drology Indicators: ators (minimum of or Water (A1)	ne required;	check all that apply				Hydric Soil	Present? Yes No K
YDROLO Vetland Hyd rimary Indic Surface High Wa	GY drology Indicators: ators (minimum of or Water (A1) ter Table (A2)	ne required.	check all that apply Water-Stain MI BA 1	ed Leaves	s (B9) (ex	ccept	Hydric Soil	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2
YDROLO Yetland Hyd rimary Indic Surface ' High Wa Saturatio	GY drology Indicators: cators (minimum of or Water (A1) ter Table (A2) on (A3)	ne required;	check all that apply Water-Stain MLRA 1, Salt Coust (ed Leaves	s (B9) (ex d 4B)	cept	Hydric Soil	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
YDROLO Yetland Hyd 'rimary India Surface ' High Wa Saturatio Water Mi	GY drology Indicators: :ators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1)	ne required;	check all that apply Water-Stain MLRA 1, Salt Crust (t	ed Leaves , 2, 4A, an 311)	5 (B9) (ex d 4B)	cept	Hydric Soil <u>Secon</u> <u>V</u>	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) ainage Patterns (B10)
YDROLO Yetland Hyo rimary Indic Surface High Wa Saturatio Water M Sedimen	GY drology Indicators: cators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2)	ne required;	check all that apply Water-Stain MLRA 1 Salt Crust (I Aquatic Inve Hydrogen S	ed Leaves , 2, 4A, an 311) ertebrates (s (B9) (ex d 4B) (B13)	cept	Hydric Soil	Adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2)
YDROLO Yetland Hyo rimary Indic Surface High Wa Saturatio Water Mi Sedimen Drift Dep	GY drology Indicators: ators (minimum of or Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3)	ne required.	check all that apply) Water-Stain MLRA 1, Salt Crust (f Aquatic Inve Hydrogen S Oxidized Rh	ed Leaves , 2, 4A, an 311) ertebrates (ulfide Odo	s (B9) (ex d 4B) (B13) r (C1) s along l	ccept	Hydric Soil Secon Wi Dr Dr Sa	Adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C
YDROLO Yetland Hyd rimary Indic Surface ' High Wa Saturatio Water Ma Sedimen Drift Dep Algal Mai	GY drology Indicators: cators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4)	ne required;	check all that apply) Water-Stain MLRA 1, Salt Crust (f Aquatic Inve Hydrogen S Oxidized Rh Presence of	ed Leaves , 2, 4A, an 311) ertebrates ulfide Odo izosphere: Reduced	s (B9) (ex d 4B) (B13) rr (C1) s along L Iron (C4)	ccept	Hydric Soil 	Adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C comorphic Position (D2)
YDROLO Yetland Hyd rimary Indic Surface ' High Wa Saturatio Water M Saturatio Drift Dep Algal Mai Iron Depo	GY drology Indicators: cators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5)	ne required;	check all that apply) Water-Stain MLRA 1, Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron	ed Leaves , 2, 4A, an 311) ertebrates (ulfide Odo izosphere: Reduced Reduced	s (B9) (ex d 4B) (B13) r (C1) s along L Iron (C4) i n Tilled	iving Root	Hydric Soil Secon	Anter Stained Leaves (B9) (MLRA 1, 2 44, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C comorphic Position (D2) allow Aquitard (D3) C-Neutral Tool (D5)
YDROLO Yetland Hyd Yetland Hyd Saturatio Saturatio Water Mi Sedimen Drift Dep Algal Mat Iron Depo Surface S	GY drology Indicators: cators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6)	ne required;	check all that apply Water-Stain MLRA 1, Salt Crust (t Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S	ed Leaves , 2, 4A, an 311) entebrates i ulfide Odo izosphere: Reduced Reduced Reduction Stressed Pl	s (B9) (ex d 4B) (B13) or (C1) s along L Iron (C4) t in Tilled lants (D1	iving Root Soils (C6)	Hydric Soil 	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounde (D5) (LBB A)
YDROLO Yetland Hyd 'rimary Indic Surface High Wa Saturatio Water M Sedimen Drift Dep Algal Mai Iron Depo Surface S Inundatio	GY drology Indicators: cators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial Im	ne required;	check all that apply Water-Stain MLRA 1 Salt Crust (i Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla	ed Leaves , 2, 4A, an 311) ertebrates i ulfide Odo izosphere: Reduced Reduction itressed Pl in in Rem	s (B9) (ex d 4B) (B13) r (C1) s along L Iron (C4) i in Tilled lants (D1 arks)	iving Root Solls (C6)) (LRR A)	Hydric Soil 	Adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) ised Ant Mounds (D6) (LRR A) pst-Heave Hummocks (D7)
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Permarks: YDROLO Yetland Hyd 'rimary Indic Surface ' High Wa Saturatio Water Ma Sedirmen Drift Dep Algal Mal Iron Depo Surface S Inundatio Sparsely ald Observ rface Water ater Table F	GY drology Indicators: cators (minimum of or Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial Im Vegetated Concave so ations: r Present? Yes	ne required; nagery (B7) Surface (B8 s No	check all that apply Water-Stain MLRA 1, Salt Crust (f Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain) Depth (inch	ed Leaves , 2, 4A , an 311) ertebrates i ulfide Odo izosphere: Reduced Reduction itressed Pl ain in Remain tressed Pl ain in Remain tressed Pl ain in Remain tressed Pl	s (B9) (ex d 4B) (B13) rr (C1) s along L Iron (C4) i in Tilled lants (D1 arks)	iving Root Soils (C6)) (LRR A)	Hydric Soil 	Aresent? Yes No Analysis No Analysis An
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WETLAND DETERM	INATION DATA FORM - Weste	ern Mountains, Valleys, and Coast Region
Project/site: Keehn	City/County:	McKinley wille (Hunbold+ sampling Date: 9/17/2)
Applicant/Owner 61-10 for M	nany Keeha	State: A Sampling Point: WIT3W
Investigator(s): 1. Mc Coald.	M. Schwarz Section, Tow	unship, Range: 55, THN, RIE
Landform (hillslope, terrace, etc.):	Local relief ((concave, convex, none): <u>Concave</u> Slope (%): <u>10</u>
Subregion (LRR):	Lat: 40.32 7645	2 Long: -124.0974969 Datum: Wh3 BY
Soil Map Unit Name: Arezta and	Candy Mat 2-9% slop-	NWI classification: PEM
Are climatic / hydrologic conditions on the s	ite typical for this time of year? Yes	No (If no. explain In Remarks.)
Are Vegetation, Soil, or Hyd	rology significantly disturbed?	Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hyd	rology naturally problematic?	(If needed, explain any answers in Remarks.)
일상 양이 있는 것이 아이지 않는 것이 같아요.		

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes V Yes V Yes	No No No	is the Sampled Area within a Wetland?	Yes	
Remarks:	and an and a second		*	3	

	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species? Status	Number of Dominant Species That are OBL FACW or FAC: (A)
2			
3			Species Across All Strata:
4		= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size:)			Prevalence Index worksheet:
1.	-		Total % Cover ofMultiply by:
2			OBL species x 1 =
3			FACW species x 2 =
4			FAC species x 3 =
5			FACU species x 4 =
2002	and an and a second	= Total Cover	UPL species x 5 =
Herb Stratum (Plot size: 117)	20	V CRI	Column Totals: (A) (B)
1 Carex aprupta	-40	V OC	
2 Festoca annaigace	- 70	FAL	Prevalence Index = B/A =
3 Agrestis staloniter a	- 5,5	-x EAC	Hydrophytic Vegetation Indicators:
4 Banunculusrepens	5-		1 - Rapid Test for Hydrophytic Vegetation
5 Lotis corniculatos			✓ 2 - Dominance Test is >50%
6 Holcus lanatus			3 - Prevalence Index is ≤3.0 ¹
7			4 - Morphological Adaptations ¹ (Provide supporting
8.			data in Remarks or on a separate sheet)
9			5 - Wetland Non-Vascular Plants
10			Problematic Hydrophytic Vegetation ¹ (Explain)
11		and an other states and a second states and a	¹ Indicators of hydric soil and wetland hydrology must
111	100	= Total Cover	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)	100	- Total Cover	
1/			Hydrophytic
2			Vegetation
% Bare Ground in Herb Stratum		= Total Cover	Present? Yes V No
Remarks Q - Cho			
tasses FAC-neutra	1		

SOIL

135	Kechn	9/12/21	Sampling Point:	WIT3-W
110)	DICCUM	9/17/21	Sampling Point:	w.

Depth	Matrix		Rede	x Feature	s			
mares)	10100 (moist)	- %	Color (moist)	%	Type	Loc ²	Texture	Remarks
CIA.	1071312	10	1.5YK 46	10	C	m	Loam	
5-14	104 K 5/2	85	7512 1/4	15	<u> </u>	n	SiltLoam	and a second
			and a second					an a
							· · · · · · · · · · · · · · · · · · ·	
								nango da sugar na na ang una sa sa Ang kabana ang
	Contration D-D							
lydric Soil In	dicators: (Applicat	ble to all	EREduced Matrix, CS LRRs, unless other	S=Covered	or Coated	d Sand G	rains. ² Location	PL=Pore Lining, M=Matrix.
_ Histosol (A	A1)		Sandy Redox (S	5)	.u.)		indicators to	r Problematic Hydric Soils':
_ Histic Epip	edon (A2)		Stripped Matrix	(S6)			2 cm Muc	ck (A10)
_ Black Histi	ic (A3)		Loamy Mucky M	lineral (F1)	(except	MLRA 1)	Keu Fale	Nit Material (TF2)
_ Hydrogen	Sulfide (A4)		Loamy Gleyed M	Aatrix (F2)			Other (Ex	plain in Remarks)
Thick Dark	Surface (A12)	(A11)	Depleted Matrix	(F3)				
Sandy Mud	cky Mineral (S1)		Depleted Dark Sur	tace (F6)			Indicators of I	hydrophytic vegetation and
_ Sandy Gle	yed Matrix (S4)		Redox Depressi	ons (F8))		wetland hyd	drology must be present.
estrictive La	yer (if present):						uniess distu	urbed or problematic.
Туре:	and the second							
Type: Depth (inche emarks: DROLOGY	es)						Hydric Soil Prese	ont? Yes <u>X</u> No
Type: Depth (inche emarks: DROLOGY etland Hydro	es)(logy Indicators:						Hydric Soil Prese	ont? Yes <u>X</u> No
Type: Depth (inche emarks: DROLOGY etland Hydro imary Indicato Surface Wa	es) / logy Indicators: ors (minimum of one ter (A1)	required.	check all that apply)				Hydric Soil Prese	ont? Yes <u>X</u> No
Type: Depth (inche emarks: DROLOGY etland Hydro imary Indicato Surface Wa High Water	Page Indicators: In Instant I	required.	<u>check all that apply</u> Water-Staind	ed Leaves	(B9) (exc	ept	Hydric Soil Prese	ndicators (2 or more required) tained Leaves (B9) (MLRA 1, 2,
Type: Depth (inche emarks: DROLOGY etland Hydro imary Indicato Surface Wa High Water Saturation (Pes): logy Indicators: rrs (minimum of one ter (A1) Table (A2) A3)	required,	check all that apply) Water-Staino MLRA 1, Salf Coust /R	ed Leaves 2, 4A, and	(B9) (exc d 4B)	ept	Hydric Soil Prese	ndicators (2 or more required) tained Leaves (B9) (MLRA 1, 2, nd 4B)
Type: Depth (inche emarks: DROLOGY etland Hydro imary Indicato Surface Wa High Water Saturation (/ Water Marks	es) f logy Indicators: rs (minimum of one ter (A1) Table (A2) A3) s (B1)	required,	check all that apply) Water-Staine MLRA 1, Salt Crust (B Aquatic Inve	ed Leaves 2, 4A, and 11) reprotes ((B9) (exc d 4B)	ept	Hydric Soil Prese	ndicators (2 or more required) tained Leaves (B9) (MLRA 1, 2, nd 4B) Patterns (B10) 5 Gale
Type: Depth (inche emarks: DROLOGY etland Hydro imary Indicato Surface Wa High Water Saturation (/ Water Marks Sediment De	es) logy Indicators: <u>ors (minimum of one</u> ter (A1) Table (A2) A3) s (B1) eposits (B2)	required,	check all that apply) Water-Staino MLRA 1, Salt Crust (B Aquatic Inve Hvdrogen Su	ed Leaves 2, 4A, and 11) rtebrates (i	(B9) (exc d 4B) B13) (C1)	ept	Hydric Soil Prese	ndicators (2 or more required) tained Leaves (B9) (MLRA 1, 2, nd 4B) Patterns (B10) 5 coole son Water Table (C2)
Type: Depth (inche emarks: DROLOGY etland Hydro mary Indicato Surface Wa High Water Saturation (Water Marks Sediment De Drift Deposit	es) logy Indicators: ter (A1) Table (A2) A3) s (B1) eposits (B2) s (B3)	required.	check all that apply) Water-Staine MLRA 1, Salt Crust (B Aquatic Inve Hydrogen Su Oxidized Rhi	ed Leaves 2, 4A, and 11) rtebrates (i ilfide Odor zospheres	(B9) (exc d 4B) B13) (C1) a long Liv	ept	Hydric Soil Prese	ndicators (2 or more required) tained Leaves (B9) (MLRA 1, 2, nd 4B) Patterns (B10) 5 Goole son Water Table (C2) in Visible on Aerial Imagery (C9
Type: Depth (inche emarks: DROLOGY etland Hydro imary Indicato Surface Wa High Water Saturation (/ Water Marks Sediment De Drift Deposit Algal Mat or	rs (minimum of one ter (A1) Table (A2) A3) s (B1) eposits (B2) s (B3) Crust (B4)	required.	check all that apply) Water-Staine MLRA 1, Salt Crust (B Aquatic Inve Hydrogen Su Oxidized Rhi Presence of	ed Leaves 2, 4A, and 111) rtebrates (ilfide Odor zospheres Reduced I	(B9) (exc d 4B) B13) (C1) along Liv ron (C4)	ept ing Roots	Hydric Soil Prese	ndicators (2 or more required) tained Leaves (B9) (MLRA 1, 2, nd 4B) e Patterns (B10) S (Jake son Water Table (C2) on Visible on Aerial Imagery (C9 obic Position (D2) S (Jake) (C9
Type: Depth (inche emarks: DROLOGY etland Hydro imary Indicato Surface Wa High Water Saturation (/ Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposits	Pes) logy Indicators: rrs (minimum of one ter (A1) Table (A2) A3) s (B1) eposits (B2) s (B3) Crust (B4) s (B5)	required.	check all that apply) Water-Staind MLRA 1, Salt Crust (B Aquatic Inve Hydrogen Su Oxidized Rhi Presence of Recent Iron F	ed Leaves 2, 4A, and 111) rtebrates (i ilfide Odor zospheres Reduced In Reduced In	(B9) (exc d 4B) B13) (C1) along Liv ron (C4) in Tilled S	ept ing Roots oils (C6)	Hydric Soil Prese	ant? Yes X No <u>Mained Leaves (B9) (MLRA 1, 2,</u> nd 4B) e Patterns (B10) S (Jake son Water Table (C2) on Visible on Aerial Imagery (C9) bhic Position (D2) S (Jake) Aquitard (D3) utral Test (D5)
Type: Depth (inche emarks: DROLOGY etland Hydro imary Indicato Surface Wa High Water Saturation (/ Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposit Surface Soil	es) logy Indicators: rrs (minimum of one ter (A1) Table (A2) A3) s (B1) eposits (B2) s (B3) Crust (B4) s (B5) Cracks (B6)	required,	check all that apply) Water-Staine MLRA 1, Salt Crust (B Aquatic Inve Hydrogen Su Oxidized Rhi Presence of Recent Iron F Stunted or St	ed Leaves 2, 4A, and 11) rtebrates (i lifide Odor zospheres Reduced in Reduced in Reduced Pla	(B9) (exc d 4B) B13) (C1) along Liv ron (C4) in Tilled S ants (D1) (ept oils (C6) (LRR A)	Hydric Soil Prese Secondary Ir Water-St 4A, a X Drainage Dry-Seas Saturatio (C3) X Geomorp Shallow / K FAC-Neu Raised A	ant? Yes X No hdicators (2 or more required) tained Leaves (B9) (MLRA 1, 2, nd 4B) Patterns (B10) S (20 (c) son Water Table (C2) on Visible on Aerial Imagery (C9 ohic Position (D2) S (20 (c) Aquitard (D3) utral Test (D5) on thounds (D6) (LRE A)
Type: Depth (inche emarks: DROLOGY etland Hydro imary Indicato Surface Wa High Water Saturation (/ Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposits Surface Soil Inundation V	es) logy Indicators: trs (minimum of one ter (A1) Table (A2) A3) s (B1) eposits (B2) s (B3) Crust (B4) s (B5) Cracks (B6) isible on Aerial Imag	required.	check all that apply) Water-Staine MLRA 1, Salt Crust (B Aquatic Inve Hydrogen Su Oxidized Rhi Presence of Recent Iron F Stunted or St Other (Explai	ed Leaves 2, 4A, and 11) rtebrates (i lifide Odor zospheres Reduced II Reduction ressed Pla n in Rema	(B9) (exc d 4B) B13) (C1) : along Liv ron (C4) in Tilled S ants (D1) (rks)	ept ing Roots iolis (C6) (LRR A)	Hydric Soil Prese	ndicators (2 or more required) tained Leaves (B9) (MLRA 1, 2, nd 4B) e Patterns (B10) S toole son Water Table (C2) on Visible on Aerial Imagery (C9 oblic Position (D2) S toole Aquitard (D3) utral Test (D5) int Mounds (D6) (LRR A) ave Hummocks (D7)
Type: Depth (inche emarks: DROLOGY etland Hydro imary Indicato Surface Wa High Water Saturation (<i>J</i> Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposits Surface Soil Inundation V Sparsely Veg	es) logy Indicators: rs (minimum of one ter (A1) Table (A2) A3) s (B1) eposits (B2) s (B3) Crust (B4) s (B5) Cracks (B6) isible on Aerial Imag petated Concave Sur	required, ery (B7) face (B8)	check all that apply) Water-Staine MLRA 1, Salt Crust (B Aquatic Inve Hydrogen Su Oxidized Rhi Presence of Recent Iron F Stunted or St Other (Explain)	ed Leaves 2, 4A, and 11) rtebrates (i lifide Odor zospheres Reduced II Reduction ressed Pla n in Rema	(B9) (exc d 4B) B13) (C1) along Liv ron (C4) in Tilled S ants (D1) (rrks)	ept oils (C6) (LRR A)	Hydric Soil Prese	ndicators (2 or more required) tained Leaves (B9) (MLRA 1, 2, nd 4B) e Patterns (B10) S (cole son Water Table (C2) on Visible on Aerial Imagery (C9 obtic Position (D2) S cole Aquitard (D3) utral Test (D5) int Mounds (D6) (LRR A) ave Hummocks (D7)
Type: Depth (inche emarks: DROLOGY etland Hydro imary Indicato Surface Wa High Water Saturation (/ Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposits Surface Soil Inundation V Sparsely Veg d Observatio	All and a constraint of the second se	required, ery (B7) face (B8	check all that apply) Water-Staind MLRA 1, Salt Crust (B Aquatic Inve Hydrogen Su Oxidized Rhi Presence of Recent Iron F Stunted or St Other (Explain)	ed Leaves 2, 4A, and 11) rtebrates (i ilfide Odor zospheres Reduced In Reduced In Reduction ressed Pla n in Rema	(B9) (exc d 4B) B13) (C1) along Liv ron (C4) in Tilled S ants (D1) (rrks)	ept oils (C6) (LRR A)	Hydric Soil Prese Secondary Ir Water-Si 4A, a X Drainage Dry-Seas Saturatio (C3) X Geomorp Shallow / X FAC-Neu Raised A Frost-Hea	ndicators (2 or more required) tained Leaves (B9) (MLRA 1, 2, nd 4B) e Patterns (B10) $5 c_{0} c_{0}$ son Water Table (C2) on Visible on Aerial Imagery (C9 oblic Position (D2) $5 c_{0} c_{0} c_{0}$ Aquitard (D3) utral Test (D5) int Mounds (D6) (LRR A) ave Hummocks (D7)
Type: Depth (inche emarks: DROLOGY etland Hydro imary Indicato Surface Wa High Water Saturation (/ Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposits Surface Soil Inundation V/ Sparsely Veg d Observatio face Water Pres	es)	ery (B7) face (B8)	check all that apply) Water-Staine MLRA 1, Salt Crust (B Aquatic Inve Hydrogen Su Oxidized Rhi Presence of Recent Iron F Stunted or St Other (Explained)	ed Leaves 2, 4A, and 11) rtebrates (i lifide Odor zospheres Reduced in Reduced in Reduction ressed Pla n in Rema	(B9) (exc d 4B) B13) (C1) along Liv ron (C4) in Tilled S ants (D1) (rks)	ept ing Roots olls (C6) (LRR A)	Hydric Soil Prese	ndicators (2 or more required) tained Leaves (B9) (MLRA 1, 2, nd 4B) e Patterns (B10) S coole son Water Table (C2) on Visible on Aerial Imagery (C9 obic Position (D2) S coole Aquitard (D3) utral Test (D5) int Mounds (D6) (LRR A) ave Hummocks (D7)
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Type: Depth (inche emarks: DROLOGY etland Hydro imary Indicato Surface Wa High Water Saturation (/ Water Marks Sediment De Drift Deposits Surface Soil Inundation V/ Sparsely Veg d Observatio ace Water Pres irration Presen udes capillary cribe Recorde	Pes)	ery (B7) face (B8) No No No No No	check all that apply)	ed Leaves 2, 4A, and 11) rtebrates (i lifide Odor zospheres Reduced li Reduction ressed Pla n in Rema s): s): s): tos, previo	(B9) (exc d 4B) B13) (C1) in Tilled S ants (D1) (in t	ept ing Roots oils (C6) (LRR A) Wetland	Hydric Soil Prese	ndicators (2 or more required) tained Leaves (B9) (MLRA 1, 2, nd 4B) e Patterns (B10) S coole son Water Table (C2) on Visible on Aerial Imagery (C9 oblic Position (D2) S coole Aquitard (D3) utral Test (D5) int Mounds (D6) (LRR A) ave Hummocks (D7)
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Map Unit Name: Arc 2 + 2 C 2 + A/2 C 2 + A/2 C 2 + A/2 C 2 + A/2 climatic / hydrology ord Hydrology isignificantly disturbed? No (if no. explain in Remarks.) Vegetation _ Soil or Hydrology naturally problematic? (if no. explain any answers in Remarks.) MMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, el drophytic Vegetation Present? Yes No Man Unit Newsent? Yes No	dform (hillstope, terrace, etc.);	Loc Loc	al relief (concave, 3276452	convex, none): <u>none</u> Slope (%): <u>3</u> Long: <u>-124.0974969</u> Datum: <u>W65</u>
dimatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.) No (If no, explain in Remarks.) Vegetation Soil or Hydrology naturally problematic? Are "Normal Circumstances" present? Yes No Vegetation Present? Yes No Is the Sampling point locations, transects, important features, effort of the sample Area within a Wetland? Yes No dirds of Present? Yes No Is the Sampled Area within a Wetland? Yes No GETATION - Use scientific names of plants. Is the Sampled Area within a Wetland? Yes No No GETATION - Use scientific names of plants. Dominance Test worksheet: That Are OBL: FACW, or FAC (A) Total Number of Dominant Species Total 2	Map Unit Name: Arc2+2 2nd Car	dy mounter	h, 2-9010	Slopes NW classification: None
vegetation Soll or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) MMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, el is the Sampled Area drophytic Vegetation Present? Yes No	climatic / hydrologic conditions on the site typical fo	r this time of year?	Yes KNO_	(If no, explain in Remarks.)
Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) MMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, el drophytic Vegetation Present? Yes No	Vegetation Soil or Hydrology	significantly distu	urbed? Are "	Normal Circumstances" present? Yes No
MMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, el drophytic Vegetation Present? Yes No dric Soli Present? Yes No Is the Sampled Area within a Wetland? Yes No dric Soli Present? Yes No Is the Sampled Area within a Wetland? Yes No GETATION - Use scientific names of plants. Absolute Dominant Indicator % Cover Species? Status No (A) gettant (Plot size: % Cover Species? Status No (A) gettant (Plot size: % Cover Species? Status (A) gettant (Plot size: = Total Cover Percent of Dominant Species (A) gettang/Shrub Stratum (Plot size: = Total Cover Prevalence Index worksheet: (A) GETACOVER = Total Cover FACU species x1 = FACU species x2 = FACU species x3 = FACU species x5 = (C) (A) Gettant 25 CACU Yes (A) Multiply by 25 Cover Prevalence Index is 30° (A) Provalence Index is 30° (A) (A) <td< th=""><th>Vegetation Soil or Hydrology</th><th>naturally problem</th><th>natic? /if ne</th><th>eded explain any answers in Remarks)</th></td<>	Vegetation Soil or Hydrology	naturally problem	natic? /if ne	eded explain any answers in Remarks)
MMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, et drophytic Vegetation Present? Yes	vegetation, oon, or rivelology	naturally problem	induce (in the	
drophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No GETATION - Use scientific names of plants. gestratum (Plot size: Absolute Dominant Indicator No (A) marks: Absolute Dominance Test worksheet: No (A) marks: Absolute Dominant Indicator Dominance Test worksheet: (A) That Are OBL, FACW, or FAC (A) (B) (B) gestratum (Plot size: = Total Number of Dominant Species (B) percent of Domnant Species Tata Are OBL, FACW, or FAC (A) (B) percent of Domnant Species Tata Are OBL, FACW, or FAC (A) (A) spling/Shrub Stratum (Plot size: = Total Cover FacW species x2 = FACW species x3 = FACW species x3 = FACW species x3 = FACW species x3 = FACW species x3 = FACW species x3 = FACW species x3 = FACW species x3 = FACW species x3 = FACW species x3 = FACW species x3 = FACW species x	MMARY OF FINDINGS – Attach site m	ap showing sa	mpling point le	ocations, transects, important features, et
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Within a Wetland? Yes	dric Soil Present? Yes	No V	Is the Sampled	Area
arraks: GETATION - Use scientific names of plants. association of the scientific names of plants. association of the science of	etland Hydrology Present? Yes	No	within a Wetlar	nd? Yes No
GETATION - Use scientific names of plants. Absolute Dominant Indicator Stratum (Plot size:	emarks		and an	
GETATION – Use scientific names of plants. Absolute Dominant Indicator % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC Mumber of Dominant Species That Are OBL, FACW, or FAC Total Cover Percent of Dominant Species That Are OBL, FACW, or FAC Colspan="2">Mumber of Dominant Species Across All Strata: Percent of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC Colspan="2">Multiply by: OBL species Stratum (Plot size: Providence Index worksheet: Total Cover FAC species Advector field Multiply by: OBL species OBL Species Advector field Advector field Advector field Advector field Providence Index is 30 0 Providence Index is 30 0 Advector field Advector field Advector field Advector field Advector field Adve				
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Absolute Dominant Indicator % Cover Species7_Status % Cover Species7_Status Mumber of Dominant Species (A) Total Arc OBL, FACW, or FAC (A) Total Number of Dominant Species (A) spling/Shrub Stratum (Plot size: = Total Cover Percent of Dominant Species (A) Spling/Shrub Stratum (Plot size: = Total Cover Prevalence Index worksheet: Total % Cover of. Total % Cover of. Multiply by OBL species x1 = FAC species x3 = FAC species x5 = Column Totals (A) MythopNytic Vegetation Indicators: HytopNytic Vegetation Indicators: Planctage IaanCedtata - Planctage IaanCedtata - Planctage IaanCedtata - Multiply totage	GETATION - Use scientific names of r	lants.		
ee Stratum (Plot size:		Absolute Do	minant Indicator	Dominance Test worksheet:
Imat Are OBL, FACW, or FAC: (A) That Are OBL, FACW, or FAC: (A) Total Number of Dominant Species Across All Strata: (B) Percent of Dominant Species That Are OBL, FACW, or FAC: (C) Imat Are OBL, FACW, or FAC: (A) Imat Are OBL, FACW,	ee Stratum (Plot size:)	% Cover Sp	ecies? Status	Number of Dominant Species
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appling/Shrub Stratum (Piot size:) = Total Cover = Total Cover Percent of Dominant Species Sol 1 (A/E Total % Cover of Multiply by OBL species x1 = FACW species x2 = FACW species x3 = FACW species x4 = UPL species x5 = Column Totals: (A) Daucus C			,	Species Across All Strata: 2 (B)
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Prevalence Index worksheet: Total % Cover of: OBL species ************************************	oling/Shub Stratum (Plot size:		otal Cover	That Are OBL, FACW, or FAC
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FAC species x3 = erb Stratum (Plot size: mail Accosts stalanufect SO V Accosts stalanufect Hydrophytic Vegetation Indicators:	annaite a chaine an abhlann ann feire an an ann an ann an ann an ann an ann an a			FACW species x 2 =
erb Stratum (Plot size:	and the second			FAC species x 3 =
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Latus coniculations 3 Daucus cacota 3 Plantage lancedata 3 Problematic Hydrophytic Vegetation' (Explain) 'Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Vegetation Present? <	Hypochaerisiadicata	_4		
Daucus carceta 3	Lows corniculatus			✓ 2 - Dominance Test is >50%
Plantage lancedata 3	Daucus carota			3 - Prevalence Index is ≤3.0'
data in Remarks or on a separate sheet)	Plantagiagcodata	_3		4 - Morphological Adaptations ¹ (Provide supportin
				data in Remarks or on a separate sheet)
				5 - Wetland Non-Vascular Plants'
Image: Stratum (Plot size:) Image: S		w		Problematic Hydrophytic Vegetation' (Explain)
Image: Stratum Plot size: /oody Vine Stratum Plot size:	,			Indicators of hydric soil and wetland hydrology must
/oody Vine Stratum (Plot size:)	h	99 =1	otal Cover	be present, unless disturbed or problematic.
Hydrophytic /Vegetation Present? Yes No	(pody Vine Stratum (Plot size:)			
	Would Allie Onotatin (Line and	4 ·		Hydrophytic
= Total Cover Present? Yes V No		and the second sec		Vegetation
Total Gover			otal Cover	Present? Yes V No
Hara (-round in Pero -analisi)	S			

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

SOIL

MBS	Keehn	9/17/21	Sampling Point:	WIT3-0
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Autour (most) % Color (most) % Turce Terrire Remarks 6-14 104 (R3)2 100	(inches) Calas (matrix	Redox F	eatures			
Surger 1/2/2 100	O-6 IAUDZI-	Color (moist)	% Type	Loc ²	Texture	Remarks
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Spe C=Concentration. D=Depletion, RM=Reduced Matrix: CS=Covered or Coaled Sand Grains *Location: PL=Pore Lining M=Matrix. Spe C=Concentration. D=Depletion, RM=Reduced Matrix: CS=Covered or Coaled Sand Grains *Location: PL=Pore Lining M=Matrix. Very Solid Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Solids': Histic Eppedon (A2) Simpped Matrix (SS)	2-14 104R3 3 100		-	-	Sulting	and the second se
Yre: C:Concentration. D=Depletion, RM=Reduced Matrix, CS=Covered of Coated Sand Grains *Location: PL=Pore Lining M=Matrix, GS=Covered of Coated Sand Grains *Location: PL=Pore Lining M=Matrix, GS=Covered of Coated Sand Grains *Location: PL=Pore Lining M=Matrix, GS=Covered of Coated Sand Grains *Location: PL=Pore Lining M=Matrix, GS=Covered of Coated Sand Grains *Location: PL=Pore Lining M=Matrix, GS=Covered of Coated Sand Grains *Location: PL=Pore Lining M=Matrix, GS=Covered of Coated Sand Grains *Indicators for Problematic Hydric Soils*: Histic Eppedion (A2) Sandy Redox (S5)						
ype C-Concentration D-Depletion, RM-Reduced Matrix: CS=Covered of Coated Sand Grains *Location: PL=Pore Lining, M=Matrix Histic Expection (A1) Sandy Redox (S5) Indicators for Problematic Hydric Solis*: Histic Expection (A2) Simped Matrix (S5) Peed Parent Material (TF2) Depleted Belox Dark Surface (A12) Loamy Oleyed Matrix (F2) Other (Explain in Remarks) Depleted Belox Dark Surface (T1) Depleted Dark Surface (T6) *indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Micky Mineral (S1) Depleted Dark Surface (T7) *unless disturbed or problematic. Type Hydrology Indicators: *unless disturbed or problematic. Type Hydrology Indicators: *unless disturbed or problematic. Type Hydrology Indicators: *unless disturbed or problematic. Surface Water (A1) Vater-Staned Leaves (B9) (except Water-Staned Leaves (B9) (MLRA 1, 2 A, and 4B) Surface Water (A1) Saturation (A3) Satif Crust (B11) Drainage Patterns (B10) Surface Water (A1) Aquatic Inverterates (B13) Drainage Patterns (B10) Drainage Patterns (B10) Surface Water (A3) Saturation (A3) Saturation (A3) Saturation (A3) Saturation			- 4 - 1 - 2"	and the second s		
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ype: C-Concentration. p=Depletion. RM=Reduced Matrix: CS=Covered of Coated Sand Grains *Location: PL=Pore Lining M=Matrix Histosol (A1)						any and the state of the state
type C=Concentration. D=Depletion, RM=Reduced Matrix CS=Covered or Coated Sand Grains ¹ Location: PL=Pore Lining, M=Matrix, Ydric Soil Indicators (Applicable to all LRRs, unless otherwise noted.) Indicators: (Applicable to all LRRs, unless otherwise noted.) Red Parent Material (TF2) 2 cm Muck (At1) Red Parent Material (TF2) Other (Explain in Remarks) Updeted Below Dark Surface (A11) Depleted Dark Surface (F6) ¹ Indicators of hydrophytic vegetation and wetland hydrology wite be present. Sandy Gleyed Matrix (S4) Redox Depressions (F8) Veland hydrology unue be present. Sandy Cleyed Matrix (S4) Redox Depressions (F8) Veland hydrology unue be present. No X Statictive Layer (f1 present): Water Stained Leaves (B9) (except Veland hydrology indicators (2 or more required). No X Statication (A3) Sall Cnust (B11) Water Stained Leaves (B9) (except Veland hydrology indicators (2 or more required). A, and 49) A, and 49) A, and 49. A, and 49. A, and 49. Drainage Paterns (B10)		-				
pdric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils : 	vpe: C=Concentration D=Depletion DA					www.
Histos (A1) Sandy Redox (S5)	ydric Soil Indicators: (Applicable to all	LRRs, unless otherwise	overed or Coa	ed Sand Gra	ains. ² Locatio	on: PL=Pore Lining, M=Matrix.
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Image Dark Surlace (R12) Red xx Dark Surlace (F0) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky (S4) Red xx Depressions (F8) unless disturbed or problematic. satiricitive Layer (if present): Type:	Thick Dark Surface (A11)	Depleted Matrix (F3	3)			-Apiain in Remarks)
Sany Gleyed Matrix (S1)	Sandy Mucky Mineral (S1)	Redox Dark Surface	e (F6)		³ Indicators o	f hydrophytic venetation and
strictive Layer (if present):	Sandy Gleved Matrix (S4)	Depleted Dark Surf	ace (F7)		wetland h	hydrology must be present
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Serie and Deposits (B2)	DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3)	1; check all that apply) Water-Stained MLRA 1, 2, Salt Crust (B11)	Leaves (B9) (e 4A, and 4B))	xcept	<u>Secondary</u> Water- 4A, Draina	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B)
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Iron Deposits (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)	DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	d; check all that apply) Water-Stained I MLRA 1, 2, Salt Crust (B11 Aquatic Invertet Hydrogen Sulfic	Leaves (B9) (e 4A, and 4B)) brates (B13) de Odor (C1)	xcept	<u>Secondary</u> Water- Draina Dry-Se Satura	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) eason Water Table (C2) tion Visible on Aerial Imagene (C0)
In the Deposits (D5)	DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	d: check all that apply) Water-Stained I MLRA 1, 2, Salt Crust (B11) Aquatic Invertet Hydrogen Sulfic Oxidized Rhizos	Leaves (B9) (e 4A, and 4B)) brales (B13) de Odor (C1) spheres along	xcept	<u>Secondary</u> <u>Water</u> <u>4A</u> , <u>Draina</u> <u>Dry-Se</u> <u>Satura</u> (C3) <u>Geom</u>	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) eason Water Table (C2) tion Visible on Aerial Imagery (C9 proble Position (C2)
Inundation Visible on Aerial Imagery (B7) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Sparsely Vegetated Concave Surface (B8) Tother (Explain in Remarks) Frost-Heave Hummocks (D7) Id Observations: Frost-Heave Hummocks (D7) face Water Present? Yes No Yes No Depth (inches): uration Present? Yes No No Depth (inches): Wetland Hydrology Present? Indes capillary fringe) No Depth (inches): cribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	d: check all that apply) Water-Stained I MLRA 1, 2, Salt Crust (B11) Aquatic Invertet Hydrogen Sulfic Oxidized Rhizos Presence of Res	Leaves (B9) (e 4A, and 4B)) brates (B13) de Odor (C1) spheres along duced Iron (C4	xcept _iving Roots	<u>Secondary</u> Water- Draina Dry-Se Satura (C3)Geomo	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) eason Water Table (C2) tion Visible on Aerial Imagery (C9) orphic Position (D2) w Aquitard (D3)
Sparsely Vegetated Concave Surface (B8)	DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required 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 Spil Cracks (B6)	d: check all that apply) Water-Stained I MLRA 1, 2, Salt Crust (B11 Aquatic Invertet Hydrogen Sulfic Oxidized Rhizos Presence of Re- Recent Iron Rec	Leaves (B9) (e 4A, and 4B)) brates (B13) de Odor (C1) spheres along i duced Iron (C4 duction in Tilleo	xcept _iving Roots) I Soils (C6)	<u>Secondary</u> Water- Draina Dry-Se Satura (C3) Geomo Shalloo FAC-N	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) eason Water Table (C2) tion Visible on Aerial Imagery (C9 orphic Position (D2) w Aquitard (D3) eutral Test (D5)
Id Observations:	DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required 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 Imageou (B7	1: check all that apply) — Water-Stained I MLRA 1, 2, — Salt Crust (B11) — Aquatic Invertet — Hydrogen Sulfic — Oxidized Rhizos — Presence of Re- — Recent Iron Rec — Stunted or Stres	Leaves (B9) (e 4A, and 4B)) brates (B13) de Odor (C1) spheres along duced Iron (C4 duction in Tillec ssed Plants (D1	xcept iving Roots) I Soils (C6))) (LRR A)	<u>Secondary</u> Water- Draina Dry-Se Satura (C3)Geomo Shalloo FAC-N Raised	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) eason Water Table (C2) tion Visible on Aerial Imagery (C9 orphic Position (D2) w Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A)
face Water Present? Yes No Depth (inches): ter Table Present? Yes No Depth (inches): uration Present? Yes No Depth (inches): uration Present? Yes No Depth (inches): udes capillary fringe) No Depth (inches): uches capillary fringe) No Depth (inches): uches capillary fringe) No uches Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: narks:	DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required 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 (B	1; check all that apply) — Water-Stained I MLRA 1, 2, — Salt Crust (B11) — Aquatic Invertet — Hydrogen Sulfic — Oxidized Rhizos — Presence of Re- — Recent Iron Rec — Stunted or Stres) — Other (Explain in	Leaves (B9) (e 4A, and 4B)) brates (B13) de Odor (C1) spheres along i duced Iron (C4 duction in Tilleo ssed Plants (D' n Remarks)	xcept _iving Roots) I Soils (C6) I) (LRR A)	<u>Secondary</u> Water 4A, Draina Dry-Se Satura (C3) <u>Geome</u> Shalloo FAC-N Raised Frost-F	Indicators (2 or more required) -Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) eason Water Table (C2) tion Visible on Aerial Imagery (C9) orphic Position (D2) w Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A) feave Hummocks (D7)
ter Table Present? Yes No Y Depth (inches): uration Present? Yes No Y Depth (inches): Wetland Hydrology Present? Yes No X ludes capillary fringe) No Depth (inches): Wetland Hydrology Present? Yes No X cribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: harks:	DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required 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 (B	1. check all that apply) — Water-Stained I MLRA 1, 2, — Salt Crust (B11) — Aquatic Invertet — Hydrogen Sulfic — Oxidized Rhizos — Presence of Rei — Recent Iron Rec — Stunted or Stress) — Other (Explain in 18)	Leaves (B9) (e 4A, and 4B)) brates (B13) de Odor (C1) spheres along duced Iron (C4 duction in Tilleo ssed Plants (D n Remarks)	Living Roots) Soils (C6)) (LRR A)	Secondary Water 4A, Draina Dry-Se Satura (C3) Geoma Shallou FAC-N Raised Frost-F	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) eason Water Table (C2) tion Visible on Aerial Imagery (C9 orphic Position (D2) w Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A) feave Hummocks (D7)
uration Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No K Iudes capillary fringe) Wetland Hydrology Present? Yes No K inche Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required 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 (B Id Observations: face Water Present?	d: check all that apply) — Water-Stained I MLRA 1, 2, — Salt Crust (B11) — Aquatic Invertet — Hydrogen Sulfic — Oxidized Rhizos — Presence of Rei — Recent Iron Rec — Stunted or Stres) — Other (Explain in 18)	Leaves (B9) (e 4A, and 4B)) brales (B13) de Odor (C1) spheres along duced Iron (C4 duction in Tillec ssed Plants (D' n Remarks)	Living Roots) I Soils (C6)) (LRR A)	<u>Secondary</u> <u>Water</u> <u>4A</u> , <u>Draina</u> Dry-Se <u>Satura</u> (C3) <u>Geome</u> Shallow <u>FAC-N</u> Raised <u>Frost-F</u>	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) eason Water Table (C2) tion Visible on Aerial Imagery (C9 orphic Position (D2) w Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A) feave Hummocks (D7)
Indes capillary fringe) Wetland Hydrology Present? Yes No Indes capillary fringe) No X Indes capillary fringe) Index (stream gauge, monitoring well, aerial photos, previous inspections), if available: narks: No X	DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required 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 (B Id Observations: face Water Present? Yes N ter Table Present? Yes N	d: check all that apply) — Water-Stained I MLRA 1, 2, — Salt Crust (B11) — Aquatic Inverted — Hydrogen Sulfici — Oxidized Rhizos — Presence of Re- — Recent Iron Rec — Stunted or Stress) — Other (Explain in 18)	Leaves (B9) (e 4A, and 4B)) brates (B13) de Odor (C1) spheres along duced Iron (C4 duction in Tilleo ssed Plants (D n Remarks)	xcept iving Roots) I Soils (C6) I) (LRR A)	<u>Secondary</u> Water- Draina Dry-Se Satura (C3) Geomo Shalloo FAC-N Raised Frost-H	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) eason Water Table (C2) tion Visible on Aerial Imagery (C9 orphic Position (D2) w Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A) deave Hummocks (D7)
cribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required 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 (B Id Observations: face Water Present? Yes N ter Table Present? Yes N	d: check all that apply) — Water-Stained I MLRA 1, 2, — Salt Crust (B11) — Aquatic Invertet — Hydrogen Sulfic — Oxidized Rhizos — Presence of Rei — Recent Iron Rec — Stunted or Stres) — Other (Explain in 18) Io <u>V</u> Depth (inches): — Depth (inches):	Leaves (B9) (e 4A, and 4B)) brates (B13) de Odor (C1) spheres along duced Iron (C4 duction in Tilleo ssed Plants (D n Remarks)	xcept Living Roots) Soils (C6))) (LRR A)	<u>Secondary</u> Water- Draina Dry-Se Satura (C3)Geomo Shalloo FAC-N Raised Frost-F	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) eason Water Table (C2) tion Visible on Aerial Imagery (C9 orphic Position (D2) w Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A) feave Hummocks (D7)
narks.	DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required 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 (B Id Observations: face Water Present? Yes N ter Table Present? Yes N uration Present? Yes N	1; check all that apply)	Leaves (B9) (e 4A, and 4B)) brates (B13) de Odor (C1) spheres along i duced Iron (C4 duction in Tilleo ssed Plants (D n Remarks)	xcept Living Roots) I Soils (C6) I) (LRR A)	Secondary Water- Draina Dry-Se Satura (C3) Geomo Shalloo FAC-N Raised Frost-H	Indicators (2 or more required) -Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) -ason Water Table (C2) tion Visible on Aerial Imagery (C9) orphic Position (D2) w Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A) feave Hummocks (D7)
narks.	DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one required 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 (B Id Observations: face Water Present? Yes N ter Table Present? Yes N uration Present? Yes N		Leaves (B9) (e 4A, and 4B)) brates (B13) de Odor (C1) spheres along duced Iron (C4 duction in Tillec ssed Plants (D n Remarks)	Living Roots) Soils (C6))) (LRR A) Wetland ections), if a	Secondary Water 4A, Draina Dry-Se Satura (C3) Geome Shallon FAC-N Raised Frost-F Frost-F	e Indicators (2 or more required) -Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) eason Water Table (C2) tion Visible on Aerial Imagery (C9 prphic Position (D2) w Aquitard (D3) eutral Test (D5) I Ant Mounds (D6) (LRR A) Heave Hummocks (D7) sent? Yes No
	Zetland Hydrology Indicators: timary Indicators (minimum of one required 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 (Beld Observations: rface Water Present? Yes N Nuter Table Present? Yes N Studies capillary fringe) Scribe Recorded Data (stream gauge, mone	d: check all that apply)	Leaves (B9) (e 4A, and 4B)) brates (B13) de Odor (C1) spheres along duced Iron (C4 duction in Tillec ssed Plants (D n Remarks) 	Living Roots) Soils (C6)) (LRR A) (LRR A) ections), if a	Secondary Water- 4A, Draina Dry-Se Satura (C3) Geome FAC-N Raised Frost-H Hydrology Pre- vallable	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) eason Water Table (C2) tion Visible on Aerial Imagery (C9 orphic Position (D2) w Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A) Heave Hummocks (D7) sent? Yes No
	Zetland Hydrology Indicators: timary Indicators (minimum of one required _ 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 (B Id Observations: rface Water Present? Yes N turation Present? Yes N uration Present? Yes	1; check all that apply)	Leaves (B9) (e 4A, and 4B)) brates (B13) de Odor (C1) spheres along i duced Iron (C4 duction in Tilleo ssed Plants (D n Remarks)	xcept iving Roots) I Soils (C6) 1) (LRR A) Wetland ections), if a	Secondary Water 4A, Draina Dry-Se Satura (C3) Geome Shallon FAC-N Raised Frost-H	Ant Mounds (D6) (LRR A) exert? Yes No
	ZDROLOGY etland Hydrology Indicators: timary Indicators (minimum of one required _ 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 (B Id Observations: rface Water Present? Yes N uration Present? Yes N uration Present? Yes N Judes capillary fringe) scribe Recorded Data (stream gauge, mon narks.		Leaves (B9) (e 4A, and 4B)) brates (B13) de Odor (C1) spheres along duced Iron (C4 duction in Tillec ssed Plants (D' n Remarks)	Living Roots) Soils (C6)) (LRR A) 	Secondary Water 4A, Draina Dry-Se Satura (C3) Geome Shallon FAC-N Raised Frost-F	Pindicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) ge Patterns (B10) eason Water Table (C2) tion Visible on Aerial Imagery (C9) prphic Position (D2) w Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A) feave Hummocks (D7) sent? Yes No

WEILAND DETERMINAT	ION DATA FORM – Western Mou	intains, Yalleys, and Coast Region
Project/Site Herm	City/County Mellint.	malle / Hunbolds Sampling Date 912212
Applicant/Owner GAD for Mary M	Cechn Revel.	State A Sampling Point W174
Investigator(s) K. McDoneld, M.	Schw212 Section, Township, Ra	ange. SS. TGN, RIE
Landform (hillslope, terrace, etc.) willslope	Local relief (concave,	convex, none) Convex Slope (%)
Subregion (LRR):	Lat: 46. 93306245	Long -124.099124 Datum WKS
Soil Map Unit Name: Arezta 3 (2rd	ment 2990 Slopes	NWI classification:
Are climatic / hydrologic conditions on the site typ	ical for this time of year? Yes No _	(If no, explain in Remarks)
Are Vegetation Soil, or Hydrology	significantly disturbed? Are	"Normal Circumstances" present? Yes <u></u> No
Are Vegetation Soil or Hydrology	naturally problematic? (If n	eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach si	te map showing sampling point i	locations, transects, important features, e
Hydrophytic Vegetation Present? Yes	/NO	/
Hydric Soil Present? Yes _	No Is the Sampled	d Area
Wetland Hydrology Present? Yes _		
Remarks:		

	Absolute	Dominant Indicato	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species? Status	Number of Dominant Species (A)
2			Total Number of Dominant Species Across All Strata (B)
4		= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC
Sapling/Shrub Stratum (Plot size:)			Prevalence Index worksheet:
1			Total % Cover of Multiply by:
2.			- OBI species x1=
3		-	
4			
			FAC species X 3 =
5	Martin Contraction (1997)	= Total Cover	FACU species x 4 =
Herb Stratum (Plot size 1 m2)			UPL species x 5 =
1 Holeus Lagatis	35	Y FAC	Column Totals (A) (B)
A selic shell of let 1.	45	Y CAC	Developed Index - P/A -
2 Agrosto stalanta	-10	CAC	Prevalence index - BiA
3 Anthoxanthumodaratur	11	CAC	Provid Table Vegetation Indicators.
+ Lotus corniculatus			- A - Rapid Test for Hydrophytic Vegetation
5 Festuca acundinacea		FAC	V 2 - Dominance Test is >50%
6			3 - Prevalence Index is ≤3 0'
7			 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
8			5 - Wetland Non-Vascular Plants
9			Problematic Hydrophytic Vegetation ¹ (Explain)
10,			Liedlestern of hydro soil and wetland hydrology must
11			be present, unless disturbed or problematic
	91	= Total Cover	
Woody Vine Stratum (Plot size:)			
	_	-	Hydrophytic /
3			- Vegetation Veg V
2 3		= Total Cover	Present r 163 100
76 Date Ground in Herb Graderi		And the second s	
Remains			
			an of the state weighted and the state of th

OIL		MARE	1 4 4 1		5 La. 1.		1110 - 1
Profile Description: (Describ	e to the den	th needed to dee	Virel	nn '	1/22/	21	Sampling Point: WIT4
Depth Matrix	and me deb	needed to docum	ient the i	ndicator	or confir	m the absence	of indicators.)
(inches) Color (moist)	%	Color (moist)	CFeatures %	Tuna	Loo2	+	
0-7 104RZ/2	100			Type	LOC	lexture	Remarks
7-13 104R212	70	7. expala				Loam	
<u>+12 101190</u>	- 70	4.511014	30	_C_	m	Loan	1
Type: C=Concentration, D=De lydric Soil Indicators: (Appli	pletion, RM=	Reduced Matrix, CS	=Covered	or Coate	d Sand G	rains ² Loca	tion: PL=Pore Lining, M=Matrix.
_ Histosol (A1)		Sandy Redox (S	5)			2 cm	Muck (A10)
Histic Epipedon (A2)		Stripped Matrix (S6)			2 cm Red F	Parent Material (TE2)
Black Histic (A3)		Loamy Mucky Mi	neral (F1)	(except	MLRA 1)	Very :	Shallow Dark Surface (TF12)
riyarogen Sulfide (A4) Depleted Below Dark Surfa		Loamy Gleyed M	atrix (F2)			Other	(Explain in Remarks)
Thick Dark Surface (A12)	ce (ATT)	X Reday Dark Surf	(F3)			5	
Sandy Mucky Mineral (S1)		Depleted Dark St	urface (F0)	ñ.		Indicators	of hydrophytic vegetation and
Sandy Gleyed Matrix (S4)		Redox Depressio	ins (F8)	<i>`</i>		unless	disturbed or problematic
lestrictive Layer (if present):	The second s					1	
-						1	
Type							
Type Depth (inches) Remarks						Hydric Soil P	resent? Yes <u>K</u> No
Type Depth (inches)' Remarks:				100		Hydric Soil P	resent? Yes <u>K</u> No
						Hydric Soil Pi	resent? Yes <u>K</u> No
		check all that apply)				Hydric Soil P	resent? Yes <u>K</u> No
Type Depth (inches) Remarks YDROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of c Surface Water (A1)	: me_required;	check all that apply) Water-Stane	ed Leaves	(89) (84	rent	Hydric Soil Pr	resent? Yes <u>K</u> No
Type Depth (inches) Remarks YDROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of c Surface Water (A1) High Water Table (A2)	: one required.	<u>check all that apply)</u> Water-Staine MLRA 1,	d Leaves 2, 4A, and	(B9) (exc	cept	Hydric Soil Pr	resent? Yes <u>K</u> No <u>No</u> ny Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A and 4B)
Type Depth (inches) Remarks: YDROLOGY Vetland Hydrology Indicators: 'rimary Indicators (minimum of c Surface Water (A1) High Water Table (A2) Saturation (A3)	: Sne.required.	<u>check all that apply)</u> Water-Staine MLRA 1, Salt Crust (B	d Leaves 2, 4A, and 11)	(B9) (exc d 4B)	cept	Hydric Soil Pi	resent? Yes <u>K</u> No <u>No</u> ry Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10)
Type Depth (inches) Remarks: YDROLOGY Yetland Hydrology Indicators: rimary Indicators (minimum of c Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	: Sne required;	<u>check all that apply)</u> Water-Staine MLRA 1, Salt Crust (B Aquatic Inver	ed Leaves 2, 4A, and 11) tebrates ((89) (exc d 48) B13)	zept	Hydric Soil Pr <u>Seconda</u> Wate 4 Drain Dry-1	resent? Yes <u>K</u> No <u>No</u> <u>Inv Indicators (2 or more required)</u> er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) hage Patterns (B10) Season Water Table (C2)
Type Depth (inches) Remarks: YDROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of c Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	: me required.	<u>check all that apply)</u> Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su	ed Leaves 2, 4A, and 11) tebrates (Ifide Odor	(B9) (exc d 4B) B13) - (C1)	cept	Hydric Soil Pr Seconda Wate Drain Dry-1 Satu	resent? Yes <u>K</u> No <u>No</u> ry Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) hage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9)
Type Depth (inches) Remarks YDROLOGY Yetland Hydrology Indicators: rimary Indicators (minimum of c Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	: one required.	<u>check all that apply)</u> <u> Water-Staine</u> <u>MLRA 1,</u> <u> Salt Crust (B</u> <u> Aquatic Inver</u> <u> Hydrogen Su</u> <u> Oxidized Rhiz</u>	ed Leaves 2, 4A, and 11) tebrates (lifide Odor zospheres	(B9) (exc d 4B) B13) - (C1) s along Lic	cept ving Roots	Hydric Soil Pr Seconda Wate 4 Drain Dry- 5 Satu 5 (C3) X Geor	resent? Yes <u>K</u> No <u>No</u> ry Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) morphic Position (D2) <u>L</u> 6 w Sac
Type Depth (inches) Remarks YDROLOGY Yetland Hydrology Indicators: 'rimary Indicators (minimum of comparison)	: <u>>ne required</u>	check all that apply) — Water-Staine MLRA 1, — Salt Crust (B — Aquatic Inver — Hydrogen Su — Oxidized Rhiz — Presence of F	ed Leaves 2, 4A, and 11) tebrates (lifide Odor zospheres Reduced I	(B9) (exc d 4B) B13) C(C1) s along Lin ron (C4)	cept ving Roots	Hydric Soil Pr Seconda Wate A Drait Drait Satu S (C3) <u>X</u> Geor Shall	resent? Yes <u>K</u> No <u>No</u> ry Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) hage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) morphic Position (D2) <u>Low Sace</u> ow Aquitard (D3)
Type Depth (inches) Remarks: YDROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of c 	: one required;	<u>check all that apply)</u> Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F	ed Leaves 2, 4A, and 11) tebrates (lifide Odor zospheres Reduced I Reduction	(B9) (exc d 4B) B13) c (C1) c along Liv ron (C4) in Tilled S	cept ving Roots Soils (C6)	Hydric Soil Pr Seconda Wate 4 Drain Dry-i Satu 5 (C3) X Geor Shall — FAC-	resent? Yes <u>K</u> No <u>No</u> ry Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) hage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) morphic Position (D2) <u>Low Sacc</u> ow Aquitard (D3) Neutral Test (D5)
Type Depth (inches) Remarks YDROLOGY Yetland Hydrology Indicators: Trimary Indicators (minimum of c 	; one required.	<u>check all that apply)</u> Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Stunted or Stu	ed Leaves 2, 4A, and 11) tebrates (lifide Odor zospheres Reduced I Reduced I Reduction ressed Plia	(B9) (exc d 4B) B13) C(C1) s along Liv ron (C4) in Tilled 5 ants (D1) cita)	ving Roots Soils (C6) (LRR A)	Hydric Soil Pr Seconda Wate Drain Dry Satu s (C3) X Geor Shall FAC- Raise	resent? Yes <u>K</u> No <u>No</u> ry Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) hage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) morphic Position (D2) <u>Low Swelc</u> ow Aquitard (D3) Neutral Test (D5) ed Ant Mounds (D6) (LRR A)
Type Depth (inches) Remarks YDROLOGY Yetland Hydrology Indicators: 'rimary Indicators (minimum of c	magery (B7)	<u>check all that apply)</u> Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Stunted or Stu Other (Explain	ed Leaves 2, 4A, and 11) tebrates (lfide Odor zospheres Reduced I Reduced I Reduction ressed Pla n in Rema	(B9) (exc d 4B) B13) - (C1) ; along Lin ron (C4) in Tilled S ants (D1) rrks)	ving Roots Soils (C6) (LRR A)	Hydric Soil Pr Seconda Wate A Drain Dry-i Satu S (C3) Satu S (C3) Satu FAC- Raise Frost	resent? Yes <u>K</u> No <u>No</u> ry Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) hage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) morphic Position (D2) <u>Low Sace</u> ow Aquitard (D3) Neutral Test (D5) ed Ant Mounds (D6) (LRR A) -Heave Hummocks (D7)
Type Depth (inches) Remarks YDROLOGY Yetland Hydrology Indicators: rimary Indicators (minimum of c 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 III Sparsely Vegetated Concave ald Observations:	magery (B7)	<u>check all that apply)</u> Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Stunted or Stu Other (Explain)	ed Leaves 2, 4A, and 11) tebrates (lifide Odor zospheres Reduced I Reduced I Reduction ressed Plia n in Rema	(B9) (exc d 4B) B13) (C1) s along Lin ron (C4) in Tilled S ants (D1) irks)	ving Roots Soils (C6) (LRR A)	Hydric Soil Pr Seconda Wate 4 Drain Dry-1 Satu s (C3) X Geor Shall FAC- Raise Frost	resent? Yes <u>K</u> No <u>No</u> ry Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) hage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) morphic Position (D2) <u>Low Sacc</u> ow Aquitard (D3) Neutral Test (D5) ed Ant Mounds (D6) (LRR A) -Heave Hummocks (D7)
Pepth (inches) Depth (inches) Remarks YDROLOGY Yetland Hydrology Indicators: rimary Indicators (minimum of c 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 In Sparsely Vegetated Concave ald Observations: Irface Water Present?	magery (B7) Surface (B8)	check all that apply) Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Stunted or Stu Other (Explain) Y Depth (incher	ed Leaves 2, 4A, and 11) tebrates (lifide Odor zospheres Reduced I Reduced I Reduction ressed Pla n in Rema	(B9) (exc d 4B) B13) C(C1) c along Liu ron (C4) in Tilled S ants (D1) rrks)	sept ving Roots Soils (C6) (LRR A)	Hydric Soil Pi Seconda Wate A Drain Dry-i Satu Statu Statu Statu Frost	resent? Yes <u>K</u> No <u>No</u> ry Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) hage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) morphic Position (D2) <u>Low Sacc</u> ow Aquitard (D3) Neutral Test (D5) ed Ant Mounds (D6) (LRR A) -Heave Hummocks (D7)
Type Depth (inches) Remarks YDROLOGY YUROLOGY Yetland Hydrology Indicators: Trimary Indicators (minimum of c 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 In Sparsely Vegetated Concave eld Observations: Inface Water Present? Yet	magery (B7) Surface (B8) Ss No	check all that apply) Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Stunted or Stu Other (Explain) Depth (inche Depth (inche	ed Leaves 2, 4A, and 11) tebrates (lifide Odor zospheres Reduced I Reduced I Reduction ressed Pla n in Rema s):	(B9) (exc d 4B) B13) c (C1) s along Li ron (C4) in Tilled S ants (D1) irks)	cept Soils (C6) (LRR A)	Hydric Soil Pi Seconda Wate 4 Drain Dry-i Satu s (C3) X Geor Shall FAC- Raise Frost	resent? Yes <u>K</u> No <u>No</u> <u>ry Indicators (2 or more required)</u> er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) hage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) morphic Position (D2) <u>Low Sacc</u> w Aquitard (D3) Neutral Test (D5) ed Ant Mounds (D6) (LRR A) -Heave Hummocks (D7)
Type Depth (inches) Remarks YDROLOGY Yetland Hydrology Indicators: 'rimary Indicators (minimum of c	magery (B7) Surface (B8) Surface (B8) S No S No	check all that apply) Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Stunted or Stain Other (Explain) Depth (inche Depth (inche	ed Leaves 2, 4A, and 11) tebrates (lifide Odor zospheres Reduced I Reduction ressed Plia n in Rema s): s): s):	(B9) (exc d 4B) B13) C(C1) s along Lir ron (C4) in Tilled S ants (D1) trks)	cept Soils (C6) (LRR A)	Hydric Soil Pr Seconda Wate A Drain Dry Satu Stall Geor FAC- Raise Frost	resent? Yes <u>K</u> No ry Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) hage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) morphic Position (D2) <u>Low Sacc</u> w Aquitard (D3) Neutral Test (D5) ed Ant Mounds (D6) (LRR A) -Heave Hummocks (D7) esent? Yes <u>No</u>
Type Depth (inches) Remarks YDROLOGY Yetland Hydrology Indicators: 'rimary Indicators (minimum of c	magery (B7) Surface (B8) Surface (B8) Surface (B8) No Surface (D8) No Surface (D8) No Surface (D8) Surface (D8) Surfa	check all that apply)	ed Leaves 2, 4A, and 11) tebrates (lifide Odor zospheres Reduced I Reduction ressed Pla n in Rema s): s): s): s): s): s):	(B9) (exc d 4B) B13) C(1) s along Liu ron (C4) in Tilled S ants (D1) inks) Dus inspen	ving Roots Soils (C6) (LRR A) Wetlan	Hydric Soil Pr Seconda Wate Drain Dry Satu Solution Solution Hydrology Pr available	resent? Yes <u>K</u> No ry Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) hage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) morphic Position (D2) <u>Low Sacc</u> ow Aquitard (D3) Neutral Test (D5) ed Ant Mounds (D6) (LRR A) -Heave Hummocks (D7) esent? Yes <u>No</u>
Type Depth (inches) Remarks YDROLOGY Yetland Hydrology Indicators: 'rimary Indicators (minimum of c 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 In Sparsely Vegetated Concave eld Observations: urface Water Present? Ye ituration Present? Ye ituration Present? Ye ituration Present? Ye ituration Recorded Data (stream in	magery (B7) Surface (B8) Surface (B8) No No No s No gauge, monit	check all that apply) Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhiz Presence of F Recent Iron F Stunted or Stu Other (Explain) Depth (inche	ed Leaves 2, 4A, and 11) tebrates (lfide Odor zospheres Reduced I Reduction ressed Plia n in Rema s): s): s): tos, previo	(B9) (exc d 4B) B13) (C1) along Liu ron (C4) in Tilled S ants (D1) irks)	cept Soils (C6) (LRR A) Wetlar	Hydric Soil Pr Seconda Wate 4 Drain Dry- Satu Satu Stall Frost ad Hydrology Pr available	resent? Yes <u>K</u> No <u>No</u> ry Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) hage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) morphic Position (D2) <u>L</u> Gw Sacce ow Aquitard (D3) Neutral Test (D5) ed Ant Mounds (D6) (LRR A) -Heave Hummocks (D7) essent? Yes <u>No</u> <u>No</u>
Type Depth (inches) Remarks YDROLOGY Yetland Hydrology Indicators: 'rimary Indicators (minimum of c 	magery (B7) : Surface (B8) : Surface (B8) : Surface No : No : No : No : No : No : No	check all that apply) — Water-Staine MLRA 1, — Salt Crust (B — Aquatic Inver — Hydrogen Su — Oxidized Rhiz — Presence of F — Recent Iron F — Stunted or Stu — Other (Explain) Depth (inche Depth (inche Depth (inche Depth (inche Depth (inche	ed Leaves 2, 4A, and 11) tebrates (lifide Odor zospheres Reduced I Reduction ressed Pla n in Rema s): s): s): tos, previo	(B9) (exc d 4B) B13) - (C1) s along Liu ron (C4) in Tilled S ants (D1) irks)	ving Roots Soils (C6) (LRR A) Wetlan	Hydric Soil Pr Seconda Wate 4 Drain Dry Satu s (C3) X Geor Shall FAC- Raise Frost ad Hydrology Pr available	resent? Yes K No ry Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2) ration Visible on Aerial Imagery (C9) morphic Position (D2) Low Sacce ow Aquitard (D3) Neutral Test (D5) ed Ant Mounds (D6) (LRR A) -Heave Hummocks (D7) essent? Yes No

M – Western Mountains, Valleys, and Coast Region
city/county: Mekinley ville / Humboldt sampling Date 9/22/21
State CA Sampling Point 1174-U
Section, Township, Range. 55, T6N, R1E
Local relief (concave, convex, none) <u>none</u> Slope (%):10
0.93306245 Long -124.0994124 Datum 68594
in 2-940 slopes NWI classification NONR
ear? Yes No (If no, explain in Remarks.)
disturbed? Are "Normal Circumstances" present? YesNo
oblematic? (If needed, explain any answers in Remarks.)
g sampling point locations, transects, important features, etc.
1
Is the Sampled Area within a Wetland? Yes No

No_

Yes

VEGETATION - Use scientific names of plants.

Wetland Hydrology Present?

uni – mes usere – – anner einen eine institutionen institutionen einen einen einen einen einen einen einen eine	Absolute	Dominant Indicator	Dominance Test worksheet	a)
<u>Tree Stratum</u> (Plot size:) 1	% Cover	Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC	5: (A)
2			Total Number of Dominant Species Across All Strata	(B)
4		= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC	50 (A/B)
Sapling/Shrub Stratum (Plot size:)			Prevalence Index workshee	it:
1			Total % Cover of:	Multiply by
2.	-		OBL species	x1=
.3/			FACW species	x 2 =
4.	-		FAC species	x 3 =
5			FACIL species	×4=
1.2		= Total Cover		x 5 =
Herb Stratum (Plot size: IVI)	45	Y FAC	Column Totals	(A) (B)
2 Holews Japater	15	FAC	Dravalance Index - D/	A -
3 Aguar atturn about	212	Y CACU	Hudrophytic Vacatation Inc	
· Huge Charles calicated	2	- A(I)	1 Decid Test for Hudse	nutions,
+ Aype materio radicata	3		1 - Rapid Test for Hydroj	Shylic vegetation
5 Leanteron salatilis	-8	CACU	≥ 2 - Dominance Test is >:	50%
6 Flantage lance of arc	5	FAC	3 - Prevalence Index is s	13.0
7 fors caniculates	2		4 - Morphological Adapta	ations' (Provide supporting
8 Daucus carola		CACU	E Matland Nan Vacad	na Separate Sheety
9 Rumer acetosella		FACU	5 - Wetland Non-Vascula	a Fidnits
10			Problematic Hydrophytic	vegetation (Explain)
11	ai	- Talal Cause	be present, unless disturbed	or problematic
Woody Vine Stratum (Plot size)	-	_= Total Cover		
1	_		Hydrophytic	
2			Vegetation	1
% Bare Ground in Herb Stratum 9		= Total Cover	Present? Yes	No
Remarks		2		eres and the second sec

SOIL

Sampling Point: WI T4-U

Depth Matrix	Dada	U Lastura						
(inches) Color (moist) %	Color (moist)	%	Type	Loc ²	Texture		Rema	arks
0-9 104R312 10	16 ~	-			Loam	11		
9-11 1048 313 A	0 1.54R9/A	71		Ma	LAAM	15:1	1100.	~
1-14 101K2/1 00		20			CUam	1310	r wood b	<u>~1</u>
1425								
<u> </u>								041/1000000-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-
						-		
			-				Ales and	and the second
and the second						3percently and		The sum to provide the second second
and a second and a s								
Type: C=Concentration, D=Depletion,	RM=Reduced Matrix CS	=Covered	d or Coate	d Sand G	rains. "Lo	cation: F	L=Pore Linir	M=Matrix
yoric Soli Indicators: (Applicable to	o all LRRS, unless other	wise not	ea.)		indicat	ors for P	roblematic F	lydric Solls :
Histosol (A1)	Sandy Redox (S	55) (SE)			2 c	m Muck (A10)	
Black Histic (A3)	Supped Matrix	(50) lineral (E1	1) (avcent	MIRA 1	Kee	y Shallow	Dark Surfa	(TE12)
Hydrogen Sulfide (A4)	Loamy Gleved M	Aatrix (F2) (except	MERA ()	Oth	er (Exola	in in Remark	s)
_ Depleted Below Dark Surface (A11) Depleted Matrix	(F3)	,			an (anypid		
_ Thick Dark Surface (A12)	Redox Dark Sur	face (F6)			³ Indicate	ors of hyd	rophytic veg	etation and
Sandy Mucky Mineral (S1)	Depleted Dark S	urface (F	7)		wetla	nd hydro	logy must be	present.
Sandy Gleyed Matrix (S4)	Redox Depressi	ons (F8)			unles	s disturb	ed or probler	natic.
estrictive Layer (if present):	13	5	100					
Туре:					and the second second			
Depth (inches):	· · · · · ·				Hydric Soil	Present	7 Yes	Nox
DROLOGY					2			
emarks 'DROLOGY 'etland Hydrology Indicators:								
emarks 'DROLOGY 'etland Hydrology Indicators: rimary Indicators (minimum of one requ	uired, check all that apply.				Seco	ndary Ind	cators (2 or	more required)
emarks: DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one requ _ Surface Water (A1)	uired, check all that apply Water-Stain) Jed Leave	es (B9) (e)	cept	<u>Seco</u> l	ndary Ind	cators (2 or ned Leaves	more required) (B9) (MLRA 1, 2,
emarks: DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one requ _ Surface Water (A1) _ High Water Table (A2)	uired, check all that apply Water-Stain MLRA 1) led Leave , 2, 4A, a	es (B9) (e) nd 4B)	cept	<u>Seco</u> l	ndary Ind /ater-Stai 4A, and	cators (2 or ned Leaves 1 4B)	more required) (B9) (MLRA 1, 2,
emarks: 'DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one requ _ Surface Water (A1) _ High Water Table (A2) _ Saturation (A3)	uired, check all that apply Water-Stain MLRA 1 Sait Crust (I) ed Leave , 2, 4A, a 311)	es (B9) (e) nd 4B)	cept	<u>Seco</u> V D	ndary Ind /ater-Stat 4A, and rainage F	icators (2 or ned Leaves d 4B) Patterns (B10	more required) (B9) (MLRA 1, 2,))
emarks: 'DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one requ _ Surface Water (A1) _ High Water Table (A2) _ Saturation (A3) _ Water Marks (B1)	uired, check all that apply Water-Stain MLRA 1 Sait Crust (I Aquatic Inve	ed Leave , 2, 4A, a 311) ertebrates	es (B9) (e) nd 4B) s (B13)	cept	<u>Seco</u> V D D	ndary Ind /ater-Stai 4A, and rainage F ry-Seaso	icators (2 or ned Leaves d 4B) Patterns (B10 n Water Tab	more required) (B9) (MLRA 1, 2,)) le (C2)
emarks: 'DROLOGY etland Hydrology Indicators: <u>imary Indicators (minimum of one requ</u> _ Surface Water (A1) _ High Water Table (A2) _ Saturation (A3) _ Water Marks (B1) _ Sediment Deposits (B2)	uired, check all that apply Water-Stain MLRA 1 Sait Crust (I Aquatic Inve Hydrogen S	ed Leave , 2, 4A, a 311) ertebrates ulfide Od	es (B9) (e) nd 4B) s (B13) or (C1)	cept	<u>Seco</u> V D D S	ndary Ind /ater-Stau 4A, and rainage F ry-Seaso aturation	cators (2 or ned Leaves 1 4B) Patterns (B10 n Water Tab Visible on A	more required) (B9) (MLRA 1, 2,)) le (C2) erial Imagery (C9
emarks: DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one requ _ Surface Water (A1) _ High Water Table (A2) _ Saturation (A3) Water Marks (B1) _ Sediment Deposits (B2) _ Drift Deposits (B3)	uired, check all that apply) Water-Stain MLRA 1 Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh	ed Leave , 2, 4A, and 311) entebrates ulfide Od nizosphere	es (B9) (e) nd 4B) s (B13) or (C1) es along L	ccept iving Rool	<u>Secon</u> V D S ts (C3) G	ndary Ind /ater-Star 4A, and rainage F ry-Seaso aturation eomorph	icators (2 or ned Leaves d 4B) Patterns (B10 n Water Tab Visible on A visible on A ic Position (I	more required) (B9) (MLRA 1, 2,)) le (C2) erial Imagery (C9)2)
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emarks: //DROLOGY /etland Hydrology Indicators: imary Indicators (minimum of one requests) 	<u>uired, check all that apply</u> Water-Stain MLRA 1, Salt Crust (i Aquatic Inve Hydrogen S Oxidized Rt Presence of Recent Iron Stunted or S (B7) Other (Explain e (B8) No Y Depth (inch No Y Depth (inch No Y Depth (inch Mo Y Depth (inch	ed Leave , 2, 4A, ai 311) ertebrates ulfide Od izosphere Reductio Stressed F ain in Ren es): es): otos, pre	es (B9) (e) nd 4B) s (B13) or (C1) es along L d Iron (C4) n in Tilled Plants (D1 narks)	iving Rool Soils (C6)) (LRR A) Wetla	Secon V D D S S F F F F	ndary Ind /ater-Star 4A, and rainage F ny-Seaso aturation eomorph hallow Ac AC-Neutr aised An rost-Heav	icators (2 or ned Leaves d 4B) Patterns (B10 n Water Tab Visible on Av ic Position (I quitard (D3) al Test (D5) t Mounds (D4) re Hummock	more required) (B9) (MLRA 1, 2, (B9) (MLRA 1, 2, (D2) erial Imagery (C9) (D2) 5) (LRR A) (D7) No
emarks: 'DROLOGY etland Hydrology Indicators: imary Indicators (minimum of one requ _ 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 _ Sparsely Vegetated Concave Surfac Id Observations: face Water Present? Yes ter Table Present? Yes uration Present? Yes iudes capillary fringe) scribe Recorded Data (stream gauge, marks:	uired, check all that apply Water-Stain MLRA 1 Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S (B7) Other (Explain e (B8) No X Depth (inch No X Depth (inch monitoring well, aerial ph	ed Leave , 2, 4A, al 311) ertebrates ulfide Od hizosphere Reducto Reducto Stressed F ain in Ren es): es): otos, pre	es (B9) (e) nd 4B) s (B13) or (C1) es along L d Iron (C4) n in Tilled Plants (D1 marks)	iving Rool Soils (C6)) (LRR A) Wetla	<u>Secon</u> V D D D S S S F R F	ndary Ind /ater-Star 4A, and rainage F ry-Seaso aturation eomorph hallow Ac AC-Neutr aised An rost-Heav	icators (2 or i ned Leaves d 4B) Patterns (B10 n Water Tab Visible on Av ic Position (D quitard (D3) al Test (D5) Mounds (D6) re Hummock	more required) (B9) (MLRA 1, 2, ()) le (C2) erial Imagery (C9 ()2) 5) (LRR A) 5 (D7)

licant/Owner GHD for Many 16	ech Revel.		State:	Sampling Point 10175
stigator(s) K. McDonald M. Sch	WHY Section	on, Township, Rang	10: 55, TON	RIE
down (hillstope terrace etc.) Loulistage	Loca	I relief (concave, co	nvex none) AGAR	Slope (%) 2
ration (I BB) A	1 at 40.9	3351877	Long -124 099	4632 Datum LUAS &
Acretz 3 Cardy	at 7-9 do	Shars	NIM/L classifi/	ration none
Map Unit Name	the providence of the second s	1 1 No		lemarke)
climatic / hydrologic conditions on the site typical f	or this time of year?			No
Vegetation, Soil or Hydrology	significantly distui	Are N	ded evalue and approximation	versio Romarke)
Vegetation, Soil or Hydrology	naturally problem	aucz (in need	jed, explain any answe	IS III Remarks.)
IMMARY OF FINDINGS - Attach site r	nap showing san	npling point loo	cations, transects	, important features, etc
ydrophytic Vegetation Present? Yes	No			
ydric Soil Present? Yes	No	is the Sampled A within a Wetland	Yes V	No
etland Hydrology Present? Yes	No	within a wording	· ····	
emarks To SWofbarn				
	nlante			
GETATION - Ose scientific flames of	Absolute Dor	minant Indicator	Dominance Test work	sheet:
ee Stratum (Plot size:)	% Cover Spe	ecies? Status	Number of Dominant S	pecles 2
	<u> </u>		That Are OBL, FACW,	or FAC: (A)
			Total Number of Domin	iant o
			Species Across All Stra	ita (B)
And in the second se			Percent of Dominant S	pecies
anling/Shaib Stratum (Plot size)	= Te	otal Cover	That Are OBL, FACW,	or FAC: (A/B)
	· · · · · · · · · · · · · · · · · · ·		Prevalence Index wor	ksheet:
			Total % Cover of	
			OBL species	X1=
			FAC species	x 3 =
			FACU species	x 4 =
in min	= T(otal Cover	UPL species	x 5 =
Hala (Lagak)	28 1	/ FAC	Column Totals:	(A) (B)
1 ctus corriculations	20	FAC	Provalence Index	- B/A -
Festura recennis	15	Y FAC	Hydrophytic Vegetati	on Indicators:
Agrostis staloniter	225	Y FAC	1 - Rapid Test for	Hydrophytic Vegetation
+-G.			2 - Dominance Tes	st is >50%
			3 - Prevalence Ind	ex is ≤3 0'
			4 - Morphological /	Adaptations ¹ (Provide supporting
			data in Remark	s or on a separate sheet)
And a second	and the second sec		5 - vvetland Non-V	ascular Plants
0			Indicators of hydric so	il and welland hydrology must
1		tal Cover	be present, unless dist	urbed or problematic.
loody Vine Stratum (Plot size	= 10	Hal Cover		an the second second
·····			Hydrophytic	
			Vegetation	1
And any management of the second se	<u>98 = To</u>	tal Cover	Present? Ye	IS No
~				
Bare Ground in Herb Stratum				

US Army Corps of Engineers

1.0

SOIL

MBS	Ucch	9/22/21
Contract of the local division of the local		and the second se

Sampling Point: _______

(inches)	Color (moint)	0/	Redo	x Feature	S T		4.4.5	and and and an
n.L	1114 97/2	100	Color (moist)	%	Type	Loc	Texture	Remarks
0-0	TOTAJE	100	-	-			Loam	u Waananga Ugaa ahaa ahaa ahaa ahaa ahaa ahaa ah
2-13	109K3/2	80	754R4/6	20		<u>m</u>	Loam	
		·	······				· · · · · · · · · · · · · · · · · · ·	
		<u></u>						
		lation DM						
ydric Soil	Indicators: (Applic	able to all	LRRs. unless other	wise note	d.)	ed Sand Gri	Indicators	tion: PL=Pore Lining, M=Matrix.
Histosol	(A1)		Sandy Redox (S	S5)			2 cm 1	Muck (A10)
Histic Ep	pipedon (A2)		Stripped Matrix	(S6)			Red P	Parent Material (TF2)
Black Hi	stic (A3)		Loamy Mucky N	lineral (F1) (excep	MLRA 1)	Very S	Shallow Dark Surface (TF12)
Hydroge	n Sulfide (A4)		Loamy Gleyed M	Matrix (F2)			Other	(Explain in Remarks)
_ Depleted	d Below Dark Surface	e (A11)	Depleted Matrix	(F3)				
_ Thick Da	ark Surface (A12)		X Redox Dark Sur	face (F6)			³ Indicators	of hydrophytic vegetation and
_ Sandy M	lucky Mineral (S1)		Depleted Dark S	Surface (F	7)		wetland	I hydrology must be present,
_ Sandy G	leyed Matrix (S4)		Redox Depressi	ons (F8)			unless	disturbed or problematic.
estrictive L	_ayer (if present):							
Type:	-						Hudda Ball B	
Depth (inc	cnes):			and Assessment and a second			Hydric Soil Pr	resent? Yes / No
DROLOG	GY			- summer				
DROLO(etland Hyd	GY Irology Indicators:			-				
DROLOO etland Hyd imary Indica	GY Irology Indicators: ators (minimum of or Nater (A1)	e required	; check all that apply Water-Stain) ed Leave	s (B9) (e)	rcent	<u>Seconda</u>	ary Indicators (2 or more required) er-Stained Leaves (B0) (MLPA 1, 2
DROLO(etland Hyd imary Indica _ Surface V High Wat	GY Irology Indicators: ators (minimum of or Vater (A1) er Table (A2)	e required	; check all that apply Water-Stain MLRA 1) ned Leaves	s (B9) (e)	ccept	<u>Seconda</u>	ary Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2,
DROLOG etland Hyd imary Indica Surface V High Wat Saturation	GY Irology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3)	e required	; check all that apply Water-Stain MLRA 1 Sait Crust (f) ned Leaves , 2, 4A, an B11)	s (B9) (e) nd 4B)	ccept	<u>Seconda</u> Wate Praj	ary Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, IA, and 4B) nage Patterns (B10)
DROLOO etland Hyd imary Indica _ Surface V _ High Wat _ Saturation Water Ma	GY Irology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) urks (B1)	ne required	; check all that apply Water-Stain MLRA 1 Salt Crust (I Aquatic Inve) eed Leaves , 2, 4A, an B11) ertebrates	s (B9) (ex nd 4B) (B13)	ccept	<u>Seconda</u> Wate Draii Draii	ary Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2)
DROLOG etland Hyd imary Indica Surface V High Wat Saturation Water Ma Sediment	GY Irology Indicators: ators (minimum of or Water (A1) er Table (A2) n (A3) arks (B1) Denosits (B2)	ne required	; check all that apply Water-Stain MLRA 1 Salt Crust (I Aquatic Inve Hydrogen S) ned Leaves , 2, 4A, ar B11) ertebrates ulfide Odd	s (B9) (e) nd 4B) (B13) or (C1)	ccept	<u>Seconda</u> Wate Draii Dry- Satu	ary Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, IA, and 4B) nage Patterns (B10) Season Water Table (C2) iration Visible on Aerial Imageny (C9
DROLOO Vetland Hyd rimary Indica Surface V High Wat Saturation Saturation Water Ma Sediment Drift Depo	GY Irology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) arks (B3)	e required	; check all that apply Water-Stain MLRA 1 Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rb) ned Leaves , 2, 4A, ar B11) ertebrates sulfide Odd	s (B9) (e) nd 4B) (B13) or (C1)	ccept	<u>Seconda</u> Wate Drain Dry- Satu	ary Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, IA, and 4B) nage Patterns (B10) Season Water Table (C2) gration Visible on Aerial Imagery (C9)
PROLOC Petland Hyd rimary Indica _ Surface V _ High Wat _ Saturation _ Water Ma _ Sediment _ Drift Depo Algal Mat	GY Irology Indicators: ators (minimum of or Nater (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) posits (B3) or Crust (B4)	e required	; check all that apply Water-Stain MLRA 1 Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of) ed Leaves , 2, 4A, an B11) ertebrates ulfide Oddo nizosphere Reduced	s (B9) (e) nd 4B) (B13) or (C1) is along L Iron (C4)	ccept	<u>Seconda</u> Wate Drain Dry- Satu s (C3) X Geor Shal	ary Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2) uration Visible on Aerial Imagery (C9 morphic Position (D2) Cruss (P)
DROLOC Tetland Hyd Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat	GY Irology Indicators: ators (minimum of or Nater (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) osits (B3) or Crust (B4) usits (B5)	e required	<u>; check all that apply</u> <u>Water-Stain</u> MLRA 1 <u>Salt Crust (I</u> <u>Aquatic Inve</u> <u>Hydrogen S</u> <u>Oxidized Rh</u> <u>Presence of</u> <u>Recent Iron</u>) ed Leaves , 2, 4A, an B11) ertebrates ulfide Odd nizosphere Reduced Reduction	s (B9) (e) nd 4B) (B13) or (C1) es along L Iron (C4) n in Tilled	ccept living Roots	<u>Seconda</u> Wate Draii Dry- Satu s (C3) ∑ Geoi Shal Shal Shal	ary Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2) iration Visible on Aerial Imagery (C9 morphic Position (D2) Crass (p Ilow Aquitard (D3)
DROLOO vetland Hyd imary Indica Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S	GY Irology Indicators: ators (minimum of or Nater (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) osits (B3) or Crust (B4) isits (B5) ioil Cracks (B6)	e required	<u>; check all that apply</u> <u>Water-Stain</u> MLRA 1 <u>Salt Crust (I Aquatic Inve</u> Hydrogen S <u>Oxidized Rh</u> Presence of <u>Recent Iron</u> Stunted or S) ed Leaves , 2, 4A, an B11) ertebrates ulfide Odd izosphere Reduced Reduction Stressed P	s (B9) (ex ad 4B) (B13) or (C1) s along L Iron (C4) h in Tilled lants (D1	iving Roots Soils (C6)	<u>Seconda</u> Wate Draii Dry- Satu 4 (C3)	ary Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2) iration Visible on Aerial Imagery (C9 morphic Position (D2) Cross (p Ilow Aquitard (D3) -Neutral Test (D5) ed Apt Mounds (D6) (LPP A)
DROLOC Vetland Hyd mary Indica Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation	GY Irology Indicators: ators (minimum of or Vater (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) foil Cracks (B6) n Visible on Aerial Im	e required	; check all that apply Water-Stain MLRA 1 Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla) erd Leaves , 2, 4A, an B11) ertebrates ulfide Odd hizosphere Reduced Reduced Reduction Stressed P ain in Rem	s (B9) (e) nd 4B) (B13) or (C1) is along L Iron (C4) n in Tilled lants (D1 arks)	ccept 	<u>Seconda</u> Wate Draii Dry- Satu s (C3)	ary Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, A, and 4B) nage Patterns (B10) Season Water Table (C2) iration Visible on Aerial Imagery (C9 morphic Position (D2) CIWS (P low Aquitard (D3) -Neutral Test (D5) ed Ant Mounds (D6) (LRR A)
DROLOC etland Hyd imary Indica Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Snarselv V	GY Irology Indicators: ators (minimum of or Nater (A1) er Table (A2) n (A3) urks (B1) Deposits (B2) osits (B3) or Crust (B4) usits (B5) toil Cracks (B6) n Visible on Aerial Im Venetated Concave	ne required	; check all that apply Water-Stain MLRA 1 Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain 8)) ertebrates ulfide Odd nizosphere Reduced Reduction Stressed P ain in Rem	s (B9) (e) nd 4B) (B13) or (C1) es along L Iron (C4) n in Tilled lants (D1 earks)	viring Roots Soils (C6)) (LRR A)	Seconda Watı 4 Draiı Dry- Satu 5 (C3) ¥ Geor Shal FAC Rais Fros	ary Indicators (2 or more required) er-Stained Leaves (B9) (MLRA 1, 2, IA, and 4B) nage Patterns (B10) Season Water Table (C2) iration Visible on Aerial Imagery (C9 morphic Position (D2) Crws/p low Aquitard (D3) -Neutral Test (D5) red Ant Mounds (D6) (LRR A) t-Heave Hummocks (D7)
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Dicant/Owner GAP for Mary 1	Lech, Den	1	State CA Sampling Date UPD 101
estigator(s) K. McDaneld, M.S.	hujar2 .	notion Tourship De	State: Sampling Point: Sampling Point:
Idform (hillslope, terrace, etc.): hillslope	Street St	ection, Township, Rai	nge: (GN, KIE
brealon (LBB) A		022 CIA 22	convex, none) CONVEX Slope (%) 5
Man Linit Name Acciana 2 / Ca	Lat. <u>40.</u>	1-91/	Long -129.0997632 Datum: 4638
climatia (hidrataria and CArr	14 MOUNTZ	m 2110	Sopers_ NWI classification
Vegetation	r this time of year	7 Yes No	(If no, explain in Remarks.)
Vegetation, Soli, or Hydrology	significantly di	sturbed? Are "	"Normal Circumstances" present? Yes No
or Hydrology	naturally probl	lematic? (If ne	eeded, explain any answers in Remarks.)
JMMARY OF FINDINGS – Attach site m	ap showing s	sampling point l	ocations, transects, important features, etc
lydrophytic Vegetation Present? Yes	No VI		
tydric Soll Present? Yes	No_V	Is the Sampled	Area
Vetland Hydrology Present? Yes	No_V_	within a wetlar	nd/ Yes No
(emarks:			
EGETATION - Use scientific names of n	lante	NE (4 N N N N N N N N N N N N N N N N N N	Service office and the service of th
-octation - ose scientific names of p	Absolute	Dominant Indicator	Dominance Test worksheet
ree Stratum (Plot size)	% Cover	Species? Status	Number of Dominant Species
an and the state of the state o			That Are OBL, FACW, or FAC: (A)
e en			Total Number of Dominant
			Species Across All Strata (B)
an contract of the contract of the deconstructed data and other second data.		- Total Causer	Percent of Dominant Species
Sapling/Shrub Stratum (Plot size:)		- Total Cover	That Are OBL, FACW, or FAC: (A/B)
l.			Total % Cover of Multiply by
2,			OBL species x1 =
3			FACW species x 2 =
			FAC species $\underline{90}$ x3 = $\underline{270}$
		= Total Cover	FACU species \underline{B} x4 = $\underline{32}$
Herb Stratum (Plot size: 1m2)			UPL species $x5 = -2$
(ctus corniculatus -	- 25	Y FAC	Column Totals: \underline{OID} (A) \underline{OGD} (B)
Agrostis stalonitera	_32	TEAC	Prevalence index = $B/A = 3.67$
Holeus lanatus	-15	EAC	Hydrophytic Vegetation Indicators:
Restura perioria	- 2	EACU	- I - Rapid Test for Hydrophytic Vegetation
To folim appens	5	FAC	N_3 - Prevalence Index is $\leq 3.0^{1}$
finance apa			4 - Morphological Adaptations' (Provide supporting
			data in Remarks or on a separate sheet)
)			5 - Wetland Non-Vascular Plants
			Problematic Hydrophytic Vegetation' (Explain)
10			be present, unless disturbed or problematic.
10	98	= Total Cover	
10			1. 4
10			HV0rophVIIC
10			Vegetation
10 11 Woody Vine Stratum (Plot size:) 1 2		= Total Cover	Vegetation Present? Yes No

Depth Materia	to the dep	th needed to docu	ment the	indicator	of confirm	the absence of indicators)
(inches) Color (moist)	%	Red	ox Feature	s		· · · · · · · · · · · · · · · · · · ·
0-6 104R312	In		%	Type'	Loc2	Texture Remarks
6-14 1148 \$12	- 100				-	Loam/Sandy Loam
						Gradely Sand Loam (fill
Tunn Call			<u></u>			
Hydric Soil Indicators (A. 1)	pletion. RM=	Reduced Matrix, C	S=Covered	or Coate	d Sand Grai	
History (Applie	able to all I	RRs, unless othe	rwise note	d.)		Indicators for Problematic Hydric Soile ¹
Histic Epipedon (A2)		Sandy Redox (S5)			2 cm Muck (A10)
Black Histic (A3)		Stripped Matrix	(S6)			Red Parent Material (TF2)
Hydrogen Sulfide (A4)		Loamy Mucky I	Mineral (F1) (except	MLRA 1)	Very Shallow Dark Surface (TF12)
Depleted Below Dark Surface	e (A11)	Loamy Gleyed	Matrix (F2)			Other (Explain in Remarks)
Thick Dark Surface (A12)		Depieted Matrix	(F3)			
Sandy Mucky Mineral (S1)	5	Depleted Dark	Surface (F6)	~		Indicators of hydrophytic vegetation and
Sandy Gleyed Matrix (S4)		Redox Depress	ions (FR)	7		wetland hydrology must be present,
Restrictive Layer (if present):					1	unless disturbed or problematic.
· · · · · · · · · · · · · · · · · · ·						
Туре						
Depth (inches)						Hydric Soil Present? Yes No 🗡
YDROLOGY						Hydric Soil Present? Yes No 🗡
YDROLOGY Vetland Hydrology Indicators:						Hydric Soil Present? Yes No X
YDROLOGY YDROLOGY Vetland Hydrology Indicators:	ne required;	check all that apply)			Hydric Soil Present? Yes No X
Type: Depth (inches) Remarks: YDROLOGY Vetland Hydrology Indicators: Crimary Indicators (minimum of oildig) Surface Water (A1)	ne required;	check all that apply) ned Leaves	(B9) (exc		Hydric Soil Present? Yes No X
Type:	ne required;	check all that apply Water-Stair MLRA 1) ned Leaves , 2, 4A, an	; (B9) (exc d 4B)	cept	Hydric Soil Present? Yes No X
Type: Depth (inches) Remarks: YDROLOGY Yutland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3)	ne required,	check all that apply Water-Stair MLRA 1 Sait Crust () ned Leaves , 2, 4A, an B11)	(B9) (exc d 4B)	Cept	Hydric Soil Present? Yes No X
Type:	ne required,	check all that apply Water-Stair MLRA 1 Salt Crust (Aquatic Invi) ned Leaves , 2, 4A, an B11) ertebrates (; (B9) (exc d 4B) (B13)	Gept	Hydric Soil Present? Yes No X Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10) Dry Season Water Table (00)
Type: Depth (inches) Remarks: YDROLOGY Yetland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	ne required;	check all that apply Water-Stair MLRA 1 Salt Crust (Aquatic Invo Hydrogen S) ned Leaves , 2, 4A, an B11) ertebrates (Sulfide Odo	(B9) (exc d 4B) (B13) r (C1)	cept.	Hydric Soil Present? Yes No 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 an Analytic
Type: Depth (inches) Remarks: YDROLOGY Yetland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	ne required;	check all that apply Water-Stair MLRA 1 Salt Crust (Aquatic Invi Hydrogen S Oxidized Rf) ned Leaves I, 2, 4A, an B11) ertebrates (Sulfide Odo nizosphere:	(B9) (exc d 4B) (B13) r (C1) s along Lin	cept.	Hydric Soil Present? Yes No
Type: Depth (inches) Remarks: YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of or	ne required;	check all that apply Water-Stair MLRA 1 Salt Crust (Aquatic Invi Hydrogen S Oxidized Rt Presence of) ned Leaves , 2, 4A, an B11) ertebrates (Sulfide Odo nizosphere: f Reduced	(B9) (exc d 4B) (B13) r (C1) s along Lin Iron (C4)	cept.	Hydric Soil Present? Yes No X
Type: Depth (inches) Remarks: YDROLOGY Yetland Hydrology Indicators: Primary Indicators (minimum of or 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)	ne required,	check all that apply Water-Stair MLRA 1 Salt Crust (Aquatic Invi Hydrogen S Oxidized Rt Presence o Recent Iron) ned Leaves , 2 , 4A , an B11) ertebrates (Sulfide Odo nizosphere: f Reduced Reduction	(B9) (exc d 4B) (B13) r (C1) s along Li Iron (C4) in Tilled S	cept ving Roots (Soils (C6)	Hydric Soil Present? Yes No X
Type: Depth (inches) Remarks: YDROLOGY Yetland Hydrology Indicators: Primary Indicators (minimum of or 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)	ne required,	check all that apply Water-Stair MLRA 1 Salt Crust (Aquatic Invo Hydrogen S Oxidized Rt Presence of Recent Iron Stunted or S) hed Leaves , 2, 4A, an B11) ertebrates (Sulfide Odo nizosphere: f Reduced Reduction Stressed Pl	(B9) (exc d 4B) (B13) r (C1) s along Liu Iron (C4) in Tilled S ants (D1)	cept Soils (C6) (LRR A)	Hydric Soil Present? Yes No Secondary Indicators (2 or more required)
Type: Depth (inches) Remarks: YDROLOGY Yetland Hydrology Indicators: mimary Indicators (minimum of or	ne required; nagery (B7)	check all that apply Water-Stair MLRA 1 Salt Crust (Aquatic Invo Hydrogen S Oxidized Ri Presence of Recent Iron Stunted or S Other (Expla) ned Leaves , 2 , 4A , an B11) ertebrates (Sulfide Odo nizospheres f Reduced Reduced Pl ain in Rema	(B9) (exc d 4B) (B13) r (C1) s along Lin Iron (C4) in Tilled S ants (D1) arks)	cept Soils (C6) (LRR A)	Hydric Soil Present? Yes No Secondary Indicators (2 or more required)
YDROLOGY YDROLOGY YUROLOGY Yetland Hydrology Indicators: trimary Indicators (minimum of or 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 In Sparsely Vegetated Concave	ne required, nagery (B7) Surface (B8)	check all that apply Water-Stair MLRA 1 Salt Crust (Aquatic Invo Hydrogen S Oxidized Rt Presence of Recent Iron Stunted or S Other (Explain) ned Leaves , 2, 4A, an B11) ertebrates (Sulfide Odo nizosphere: f Reduced Reduction Stressed Pl ain in Rema	(B9) (exc d 4B) (B13) r (C1) s along Lin Iron (C4) in Tilled S ants (D1) arks)	cept Soils (C6) (LRR A)	Hydric Soil Present? Yes No
Type Depth (inches) Remarks YDROLOGY Vetland Hydrology Indicators: trimary Indicators (minimum of or 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 In Sparsely Vegetated Concave Bid Observations:	ne required; nagery (B7) Surface (B8)	check all that apply Water-Stair MLRA 1 Salt Crust (Aquatic Invo Hydrogen S Oxidized Rt Presence of Recent Iron Stunted or S Other (Explain V) ned Leaves , 2, 4A, an B11) ertebrates (Sulfide Odo nizosphere: f Reduced Reduction Stressed Pl ain in Rema	(B9) (exc d 4B) (B13) r (C1) s along Lin Iron (C4) in Tilled S ants (D1) arks)	cept ving Roots (Soils (C6) (LRR A)	Hydric Soil Present? Yes No
Type: Depth (inches) Remarks: YDROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of or 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 In Sparsely Vegetated Concave eld Observations: inface Water Present?	ne required; nagery (B7) Surface (B8; s No	check all that apply Water-Stair MLRA 1 Salt Crust (Aquatic Invi Hydrogen S Oxidized Rt Presence of Recent Iron Stunted or S Other (Expla Y Depth (inch) ned Leaves I, 2, 4A, an B11) ertebrates (Sulfide Odo nizosphere: f Reduced I Reduction Stressed Pi ain in Remainent nes):	(B9) (exc d 4B) (B13) r (C1) s along Lin Iron (C4) in Tilled S ants (D1) arks)	cept Soils (C6) (LRR A)	Hydric Soil Present? Yes No 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) C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Type: Depth (inches) Remarks: YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of our	ne required, nagery (B7) Surface (B8) s No s No	check all that apply Water-Stair MLRA 1 Salt Crust (Aquatic Invi Hydrogen S Oxidized Rt Presence of Recent Iron Stunted or S Other (Explain Depth (inch Depth (inch) hed Leaves , 2, 4A, an B11) ertebrates (Sulfide Odo nizosphere: f Reduced I Reduction Stressed Pl ain in Remaindent hes):	(B9) (exc d 4B) (B13) r (C1) s along Liu Iron (C4) in Tilled S ants (D1) arks)	cept Soils (C6) (LRR A)	Hydric Soil Present? Yes No X
Type: Depth (inches) Remarks: YDROLOGY Yetland Hydrology Indicators: Primary Indicators (minimum of or 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 In Sparsely Vegetated Concave eld Observations: urface Water Present? Ye ater Table Present? Ye uturation Present? Ye	ne required; nagery (B7) Surface (B8) s No s No s No	<u>check all that apply</u> Water-Stair MLRA 1Salt Crust (Aquatic Invi Aquatic Invi Aquatic Invi Hydrogen S Oxidized Rt Presence of Recent Iron Stunted or S Other (Explain Depth (inch Depth (inch Depth (inch) hed Leaves , 2, 4A, an B11) ertebrates (Sulfide Odo hizospheres f Reduced Reduction Stressed Pl ain in Remain hes): hes):	(B9) (exc d 4B) (B13) r (C1) s along Lin Iron (C4) in Tilled S ants (D1) arks)	cept Soils (C6) (LRR A)	Hydric Soil Present? Yes No 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) C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Type: Depth (inches) Remarks: YDROLOGY Vetland Hydrology Indicators: primary Indicators (minimum of or 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 In Sparsely Vegetated Concave eld Observations: inface Water Present? veater Table Present? veater Table Present? Yeater Table Present? ituration Present? Yeater Table Present? Sturface Copillary fringe) Storbe Recorded Data (stream of the corded Data (stream o	ne required, nagery (B7) Surface (B8) S No S No S No auge_monit) ned Leaves , 2, 4A, an B11) ertebrates (Sulfide Odo nizosphere: f Reduced Reduction Stressed Pl ain in Remain hes): hes)	(B9) (exc d 4B) (B13) r (C1) s along Lin Iron (C4) in Tilled S ants (D1) arks)	cept Soils (C6) (LRR A)	Hydric Soil Present? Yes No 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) C3) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Type: Depth (inches) Remarks: YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of or 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 In Sparsely Vegetated Concave eld Observations: urface Water Present? Ye ater Table Present? Ye uturation Present? Ye ituration Present? Ye Scribe Recorded Data (stream g	ne required; nagery (B7) Surface (B8) s No s No s No auge, monit	check all that apply Water-Stair MLRA 1) hed Leaves , 2, 4A, an B11) ertebrates (Sulfide Odo nizosphere: f Reduced Reduction Stressed Pl ain in Remain hes): hes)	(B9) (exc d 4B) (B13) r (C1) s along Lin Iron (C4) in Tilled S ants (D1) arks)	cept Ving Roots (Soils (C6) (LRR A) Wetland ctions). if av	Hydric Soil Present? Yes No
Type: Depth (inches) Remarks: YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of oil) 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 In Sparsely Vegetated Concave eld Observations: urface Water Present? veater Table Present? veater Table Present? Sturface apillary fringe) scribe Recorded Data (stream g	ne required; nagery (B7) Surface (B8) s No s No s No auge, monit	check all that apply Water-Stair MLRA 1) hed Leaves , 2, 4A, an B11) ertebrates (Sulfide Odo nizosphere: f Reduced Reduction Stressed Pi ain in Remaines): hes): heshes hesheshes heshes hesheshes heshes heshes hesheshes heshes heshesheshes heshesheshes	(B9) (exc d 4B) (B13) r (C1) s along Lin Iron (C4) in Tilled S ants (D1) arks)	cept ving Roots (Soils (C6) (LRR A) Wetland ctions), if av	Hydric Soil Present? Yes No

WETLAND DETERMINATION	DATA FORM - City/ Cit	Western Mou County: <u>McKinle</u> Lion, Township, Ra al relief (concave, <u>3421449</u> <u>510pr5</u> Yes <u>No</u> urbed? Are natic? (If ne	ntains, Valleys, and Coast Region <u>guile / Hunbild</u> Sampling Date 11/9/2/ State: <u>A</u> Sampling Point <u>State</u> ronvex, none): <u>sticket</u> Slope (%): <u>S</u> Long <u>-124,0980432</u> Datum: <u>WAS84</u> NWI classification: <u>Nove</u> (If no, explain in Remarks.) Normal Circumstances" present? Yes <u>No</u> eeded, explain any answers in Remarks.) ocations, transects, important features, etc.
ydrophytic Vegetation Present? Yes ydric Soil Present? Yes /etland Hydrology Present? Yes emarks	No No No	Is the Sampled within a Wetlan	Area nd? Yes No
SCEP EGETATION – Use scientific names of p	lants.		
ree Stratum (Plot size)	Absolute Do % Cover Sp	ominant Indicator pecies? Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:(A)
			Total Number of Dominant Species Across All Strata:(B)
Plat size	= 1	Fotal Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
			Prevalence Index worksheet:
Scrpus microcarpu	<u>550</u>	Total Cover Y CSL FAC	UPL species x 5 = Column Totals (A) (B)
Eestuca aundinaced Juncus hespectus		Y ENC	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0' 4 - Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants' Problematic Hydrophytic Vegetation' (Explain)
0	<u>160</u> =1	Fotal Cover	- Hydrophytic - Hydrophytic - Hydrophytic - Hydrophytic - Hydrophytic - Vegetation - Present? - Yes I - No
6 Bare Ground in Herb Stratum		Total Cover	

SOIL

Keehn	n.	1191	121	Sampling Point	WITE-	W
C Pressed			6.1			

Depth	Matrix		Redo	x Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc	Texture	Remarks
0-6	10483/2	90	75984/4	10	C	m	Loam	
6-14	104NJ2	80	2.548 416	20	(M		
		in addition	- + zicifiz					and a second
			allow the state of the second second					Canada and a construction and
		-	2					
			-			-		
		1.5		-	-		-	
and disservation of the second	And the second	_						anterský Wenter (1997) – Constant (1998) – Christian (1998) – Christian (1998)
		alation Di	-Deduced Materia CC		- Coole	d Cand Cr	21.00	ation _ PL-Pore Lining M=Matrix
vdric Soil I	ndicators: (Appli	cable to al	I LRRs, unless other	wise not	ed.)	u Sanu Gi	Indicato	rs for Problematic Hydric Soils ³ :
Historol	(A1)		Sandy Redox (S	5)			2 cm	Muck (A10)
Histic En	pedon (A2)		Stripped Matrix ((S6)			Red	Parent Material (TF2)
Black His	stic (A3)		Loamy Mucky M	ineral (F1) (except	MLRA 1)	Very	Shallow Dark Surface (TF12)
Hydrogen	n Sulfide (A4)		Loamy Gleyed N	Aatrix (F2	(· · · · ·		Othe	er (Explain in Remarks)
_ Depleted	Below Dark Surfa	ce (A11)	Depleted Matrix	(F3)				
_ Thick Da	rk Surface (A12)		X Redox Dark Sur	face (F6)	2.1		Indicato	rs of hydrophytic vegetation and
_ Sandy M	ucky Mineral (S1)		Depleted Dark S	urface (F	7)		wetlar	nd hydrology must be present.
_ Sandy G	leyed Matrix (S4)		Redox Depressio	ons (F8)			unies	a disturbed or problematic.
estrictive L	ayer (if present):							
Type	6.04.0						Undela Call	You Y No
Depth (inc	nes)	-0					Hydric Soll	Present ries No
DROLOG	3Y							
DROLO(etland Hyd	GY rology Indicators							
DROLOC etland Hyd	SY rology Indicators ators (minimum of o	one require	d, check all that apply)				Secon	dary Indicators (2 or more required)
DROLOC etland Hyd imary Indica Surface V	GY rology Indicators ators (minimum of a Vater (A1)	one require	d, check all that apply) Water-Stain	ed Leave	s (B9) (e)	scept	Secon	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2,
DROLOC etland Hyd mary Indica Surface V High Wate	GY rology Indicators ators (minimum of e Vater (A1) er Table (A2)	ne require	d, check all that apply) Water-Stain MLRA 1,	ed Leave	s (B9) (e) nd 4B)	cept	<u>Secon</u>	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
DROLOC etland Hyd surface V High Wate Saturation	GY rology Indicators ators (minimum of o Vater (A1) er Table (A2) n (A3)	one require	d, check all that apply) Water-Stain MLRA 1, Sait Crust (E	ed Leave 2, 4A, a 311)	s (B9) (ex nd 4B)	cept	<u>Secon</u> W	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10)
DROLOC etland Hyd mary Indica Surface V High Wate Saturation Water Ma	GY rology Indicators ators (minimum of o Vater (A1) er Table (A2) 1 (A3) rks (B1)	one require	d, check all that apply) Water-Stain MLRA 1, Sait Crust (E Aquatic Inve	ed Leave 2, 4A, a 311) ertebrates	s (B9) (e) nd 4B) (B13)	cept	<u>Secon</u> W: Dr Dr	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2)
DROLOC etland Hyd mary Indica Surface V High Wate Saturation Water Ma Sediment	Content of the second state of the second stat	one require	d, check all that apply) Water-Stain MLRA 1, Sait Crust (E Aquatic Inve Hydrogen Si	ed Leave 2, 4A, au 311) Intebrates ulfide Od	s (B9) (e) nd 4B) (B13) or (C1)	cept	<u>Secon</u> Wi Dr Dr Sa	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9
DROLOC etland Hyd surface V Surface V High Wate Saturation Water Ma Sediment Drift Depo	GY rology Indicators ators (minimum of o Vater (A1) er Table (A2) n (A3) rks (B1) Deposits (B2) isits (B3)	one require	d, check all that apply) Water-Stain MLRA 1, Sait Crust (E Aquatic Inve Hydrogen Si Oxidized Rh	ed Leave 2, 4A, al 311) rtebrates ulfide Od- izosphere	s (B9) (e) nd 4B) (B13) or (C1) es along L	ccept	<u>Second</u> Wa Dr Dr Sa s (C3) Ge	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9 iomorphic Position (D2)
DROLOC etland Hyd mary Indica Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat	GY rology Indicators ators (minimum of o Vater (A1) ar Table (A2) in (A3) rks (B1) Deposits (B2) isits (B3) or Crust (B4)	ine require	d. check all that apply) — Water-Stain MLRA 1, — Sait Crust (E — Aquatic Inve — Hydrogen Si — Oxidized Rh — Presence of	ed Leave 2, 4A, al 311) rtebrates ulfide Odi izosphere Reduced	s (B9) (ex nd 4B) (B13) or (C1) es along L Iron (C4)	iving Root	Second Wi Dr Dr Sa s (C3) Ge Sh	dary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Imagery (C9 iomorphic Position (D2) allow Aquitard (D3)
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10.000

WEILAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region	
Project/Site: Heenn City/County McKinle ville /Humbdlt sampling Date 11	19/21
Applicant/Owner GAD for Mary Keepen Develop. State CA Sampling Point ()	1.760
Investigator(s): K. Mc Donald, M. SCHWARZ Section, Township, Range: S.S. TGN, RIE	
Landform (hillslope, terrace, etc.) Millslope Local relief (concave, convex, none): Convex Slope (S	10 20
Subregion (LRR) A Lat: 40.93421499 Long 124.0980432 Datum:	WAS BY
Soil Map Unit Name Arcata and Cardy Monntzin, 291/ 5/0pcs NWI classification: none	distantice of the
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 feature	res, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes		Is the Sampled Area within a Wetland?	Yes	NO
Remarks: Top of slop	pe	- Mariana			

VEGETATION - Use scientific names of plants.

2.2

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1		·		That Are OBL, FACW, or FAC:(A)
3				Total Number of Dominant 2
4				Species Across All Strata: (B)
Sapling/Shrub Stratum (Plot size:)		= Total Co	ver	That Are OBL. FACW, or FAC: (A/B)
1		_	-	Prevalence Index worksheet:
2				OBI species v1=
3				FACW species x 2 =
4				FAC species $99 \times 3 = 297$
. 7		= Total Co	ver	FACU species x 4 =
Herb Stratum (Plot size:	-0		01	UPL species $x_5 = 3$
1 Agrostis stalenitere	-50-		FAC	Column Totals: 100 (A) 502 (B)
2 Holes lanaros	-15	. <u> </u>	CAC	Prevalence Index = B/A =
Alotus com citatus	- 2		EAC	Hydrophytic Vegetation Indicators:
5 Leucarthemum Vulgare	1		UPL	2 - Dominance Test is >50%
63		-		N_3 - Prevalence Index is $\leq 3.0^{\circ}$
7				4 - Morphological Adaptations' (Provide supporting
9				5 - Wetland Non-Vascular Plants ¹
10				Problematic Hydrophytic Vegetation' (Explain)
11				¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size)	100	_= Total Cov	rer	be present, unless disturbed of problematic,
1.		-		Hydrophytic
2		-		Vegetation Present? Yes No
% Bare Ground in Herb Stratum		_= Total Cov	/er	
Remarks:	Mar and the state of the state			

US Army Corps of Engineers

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heehn	11/16/21	

Sampling Point: WIT6-U

(inches)	Matrix	and the second se	Rede	x Feature	S			
	Color (moist)	_%	Color (moist)	_%	Type	Loc2	Texture	Remarks
2-8	10YR314	100	-	-			Loam	and the second state of th
3-14 1	104R314	100					5.1700	
			- Andrew - A				Janay Cua	m
			ann a she ann an a she					specific and second
-	and the second	-				414		and the second se
							<u></u>	
								-
								w gardinaallana shua
	and the second s		al and a constant of the	-				nindi.
Type: C=Con	centration D-Doni	ation DM-F	adverd Matrix CC					
lydric Soil In	dicators: (Applica	ble to all I	RRs unless other	=Covered	or Coated	d Sand Gr	ains Location	PL=Pore Lining, M=Matrix
Histosol (A	A1)	and to the L	Sandy Redox (S	S	.u.)		Indicators for	Problematic Hydric Soils":
Histic Epip	bedon (A2)		Stripped Matrix	(S6)			2 cm Mucl	(A10) Matorial (TE2)
Black Histi	ic (A3)	1.1	Loamy Mucky M	ineral (F1	(except)	MLRA 1)	Very Shail	ow Dark Surface (TE12)
Hydrogen	Sulfide (A4)		Loamy Gleyed M	Aatrix (F2)	, terresht.		Other (Exr	lain in Remarks)
_ Depleted B	Below Dark Surface	(A11)	_ Depleted Matrix	(F3)				
_ Thick Dark	Surface (A12)	-	_ Redox Dark Sur	face (F6)			³ Indicators of h	ydrophytic vegetation and
_ Sandy Muc	cky Mineral (S1)	-	_ Depleted Dark S	urface (F7	0		wetland hyd	rology must be present,
_ Sandy Gle	yed Matrix (S4)		_ Redox Depression	ons (F8)			unless distu	rbed or problematic.
estrictive Lay	yer (if present):							
Type			-					1
	est						Hydric Soil Prese	nt? Yes No X
Depth (inche emarks:	(
Depth (inche emarks: DROLOGY etland Hydro	f logy Indicators:							
Depth (inche emarks: DROLOGY etland Hydro imary Indicato	f logy Indicators: ors (minimum of one	required, c	heck all that apply)				Secondary In	dicators (2 or more required)
DEpth (inche emarks: DROLOGY etland Hydro mary Indicato Surface Wa	f logy Indicators: ors (minimum of one ter (A1)	required; c	heck all that apply) Water-Staine	ed Leaves	(B9) (exc	ept	Secondary In Water-St	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2,
DROLOGY etland Hydro mary Indicato Surface Wa High Water	f logy Indicators: brs (minimum of one ter (A1) Table (A2)	required; c	heck all that apply) Water-Staine MLRA 1,	ed Leaves 2, 4A, and	(B9) (exc d 4B)	ept	<u>Secondary In</u> Water-St 4A, al	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2, nd 4B)
Depth (inche emarks: DROLOGY etland Hydro mary Indicato Surface Wa High Water Saturation (/	f logy Indicators: ors (minimum of one ter (A1) Table (A2) A3)	required; c	heck all that apply) Water-Staine MLRA 1, Salt Crust (B	ed Leaves 2, 4A, and 11)	(B9) (exc d 4B)	ept	<u>Secondary In</u> Water-St Drainage	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2, nd 4B) Patterns (B10)
DROLOGY atland Hydro mary Indicato Surface Wa High Water Saturation (/ Water Marks	f logy Indicators: ors (minimum of one ter (A1) Table (A2) A3) s (B1)	required, c	heck all that apply) Water-Staine MLRA 1, Salt Crust (B Aquatic Inver	ed Leaves 2, 4A, and 111) rtebrates ((B9) (exc d 4B) B13)	ept	<u>Secondary In</u> Water-St 4A, a Drainage Dry-Seas	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2 , nd 4 B) Patterns (B10) on Water Table (C2)
Depth (inche emarks: DROLOGY etland Hydro mary Indicato Surface Wa High Water Saturation (/ Water Marks Sediment De	f logy Indicators: ors (minimum of one ter (A1) Table (A2) A3) s (B1) eposits (B2)	required; c	heck all that apply) Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su	ed Leaves 2, 4A, and 111) rtebrates (ilfide Odor	(B9) (exc d 4B) B13) (C1)	ept	<u>Secondary In</u> Water-St 4A , a Drainage Dry-Seas Saturatio	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2, nd 4B) Patterns (B10) on Water Table (C2) n Visible on Aerial Imagery (C9
DEPTH (Inche emarks: DROLOGY etland Hydro mary Indicato Surface Wa High Water Saturation (/ Water Marks Sediment De Drift Deposit	f logy Indicators: brs (minimum of one ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3)	required; c	heck all that apply) Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi	ed Leaves 2, 4A, and 111) rtebrates (ilfide Odor zospheres	(B9) (exc d 4B) B13) - (C1) s along Liv	ept ring Roots	<u>Secondary In</u> Water-St 4A , ai Drainage Dry-Seas Saturatio (C3) Geomorp	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2, nd 4B) Patterns (B10) on Water Table (C2) n Visible on Aerial Imagery (C9 hic Position (D2)
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Depth (inche emarks: DROLOGY etland Hydro mary Indicato Surface Wa High Water Saturation (/ Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposit	f logy Indicators: brs (minimum of one ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) Crust (B4) s (B5)	required; c	heck all that apply) Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi Presence of I Recent Iron F	ed Leaves 2, 4A, and 111) rtebrates (ilfide Odor zospheres Reduced I Reduced I	(B9) (exc d 4B) B13) (C1) s along Liv ron (C4) in Tilled S	ring Roots	<u>Secondary In</u> <u>Water-St</u> 4A, ar <u>Drainage</u> Dry-Seas Saturatio (C3) <u>Geomorp</u> Shallow A <u>FAC-Neu</u>	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2, nd 4B) Patterns (B10) on Water Table (C2) n Visible on Aerial Imagery (C9 hic Position (D2) Aquitard (D3) tral Test (D5)
Depth (inche emarks: DROLOGY etland Hydro mary Indicato Surface Wa High Water Saturation (/ Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposits Surface Soil	f logy Indicators: brs (minimum of one ter (A1) Table (A2) A3) s (B1) eposits (B2) is (B3) Crust (B4) s (B5) Cracks (B6)	required; c	heck all that apply) Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi Presence of I Recent Iron F Stunted or St	ed Leaves 2, 4A, and 11) rtebrates (ilfide Odor zospheres Reduced I Reduced I Reduction ressed Pla	(89) (exc d 48) B13) (C1) s along Liv ron (C4) in Tilled S ants (D1) (ring Roots coils (C6) (LRR A)	Secondary In Water-St 4A, ar Drainage Dry-Seas Saturatio (C3) Geomorp Shallow A FAC-Neu Raised A	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2, nd 4B) Patterns (B10) on Water Table (C2) n Visible on Aerial Imagery (C9 hic Position (D2) Nquitard (D3) tral Test (D5) nt Mounds (D6) (LRR A)
Depth (inche emarks: DROLOGY etland Hydro imary Indicato Surface Wa High Water Saturation (/ Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposits Surface Soil Inundation V	f logy Indicators: brs (minimum of one ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) Crust (B4) s (B5) Cracks (B6) fisible on Aerial Imag	required; c	heck all that apply) Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi Presence of Recent Iron F Stunted or St Other (Explai	ed Leaves 2, 4A, and 111) rtebrates (ilfide Odor zospheres Reduced I Reduction ressed Pla n in Rema	(B9) (exc d 4B) B13) (C1) s along Liv ron (C4) in Tilled S ants (D1) (irks)	ept ing Roots ioils (C6) (LRR A)	<u>Secondary In</u> Water-St 4A , a Drainage Dry-Seas Saturatio (C3) Geomorp Shallow A FAC-Neu Raised A Frost-Hea	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2, nd 4B) Patterns (B10) on Water Table (C2) In Visible on Aerial Imagery (C9 hic Position (D2) Aquitard (D3) tral Test (D5) Int Mounds (D6) (LRR A) ave Hummocks (D7)
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Depth (inche emarks: DROLOGY etland Hydro imary Indicato Surface Wa High Water Saturation (/ Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposits Surface Soil Inundation V Sparsely Veg d Observation face Water Prise uration Preser udes capillary cribe Recorde	f logy Indicators: ors (minimum of one ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) Crust (B4) s (B5) Cracks (B6) isible on Aerial Imag getated Concave Su ons: esent? Yes esent? Yes ons: esent? Yes ons: esent? Yes ons: esent? Yes ons: esent? Yes ons:	gery (B7) Inface (B8) No No Ige, monitor	heck all that apply) Water-Staine MLRA 1, Salt Crust (B Aquatic Invei Hydrogen Su Oxidized Rhi Presence of I Recent Iron F Stunted or St Other (Explai Depth (inche) Depth (inche) Depth (inche) MLRA 1, Common State Stat	ed Leaves 2, 4A, and 111) rtebrates (ilfide Odor zospheres Reduced I Reduction ressed Pla n in Rema es): s): s): tos, previo	(B9) (exc d 4B) B13) (C1) s along Liv ron (C4) in Tilled S ants (D1) (irks)	ept ing Roots ioils (C6) (LRR A) Wetland	Secondary In Water-St 4A, an Drainage Dry-Seas Saturatio (C3) Geomorp Shallow A FAC-Neu Raised A Frost-Hea Frost-Hea Staturatio Raised A Frost-Hea Staturatio Shallow A Shallow A Shal	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2, nd 4B) Patterns (B10) on Water Table (C2) n Visible on Aerial Imagery (C9 hic Position (D2) Aquitard (D3) tral Test (D5) nt Mounds (D6) (LRR A) nve Hummocks (D7)
Depth (inche emarks: DROLOGY etland Hydro imary Indicato Surface Wa High Water Saturation (/ Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposit Surface Soil Inundation V Sparsely Veg d Observation face Water Pres uration Preser udes capillary cribe Recorde	f logy Indicators: brs (minimum of one ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) Crust (B4) s (B5) Cracks (B6) isible on Aerial Imag getated Concave Su ons: esent? Yes_ tringe) ed Data (stream gau	gery (B7) Inface (B8) NoNo NoNo No	heck all that apply) Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi Presence of I Recent Iron F Stunted or St Other (Explain Cher (Explain Depth (inche Depth (inche Depth (inche Cher (aerial pho	ed Leaves 2, 4A, and 111) rtebrates (illide Odor zospheres Reduced I Reduction ressed Pla n in Rema es) s) s) tos, previo	(B9) (exc d 4B) B13) (C1) s along Liv ron (C4) in Tilled S ants (D1) (irks)	ept ing Roots coils (C6) (LRR A) Wetland	Secondary In Water-St 4A, ar Drainage Dry-Seas Saturatio (C3) Geomorp Shallow A FAC-Neu Raised A Frost-Heat Frost-Heat Staturatio Shallow A Frost-Heat Staturatio Shallow A Shallow A 	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2, nd 4B) Patterns (B10) on Water Table (C2) n Visible on Aerial Imagery (C9 hic Position (D2) Aquitard (D3) tral Test (D5) nt Mounds (D6) (LRR A) ave Hummocks (D7)
Depth (inche emarks: DROLOGY etland Hydro imary Indicato Surface Wa High Water Saturation (/ Water Marks Sediment De Drift Deposit Algal Mat or Iron Deposits Surface Soil Inundation V Sparsely Veg d Observatio face Water Prise iration Preser udes capillary cribe Recorde	f logy Indicators: brs (minimum of one ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) Crust (B4) s (B5) Cracks (B6) fisible on Aerial Imag getated Concave St ons: esent? Yes_ int? Yes_ fringe) ed Data (stream gau	required; c gery (B7) Inface (B8) No No No No	heck all that apply) Water-Staine	ed Leaves 2, 4A, and 11) rtebrates (ilfide Odor zospheres Reduced I Reduction ressed Pla n in Rema es) s) s) tos, previo	(B9) (exc d 4B) B13) (C1) s along Liv ron (C4) in Tilled S ants (D1) (irks)	ept ing Roots coils (C6) (LRR A) Wetland	Secondary In Water-St 4A, ar Drainage Dry-Seas Saturatio (C3) Geomorp Shallow A FAC-Neu Raised A Frost-Heat Frost-Heat State and a State and a Sta	dicators (2 or more required) ained Leaves (B9) (MLRA 1, 2, nd 4B) Patterns (B10) on Water Table (C2) n Visible on Aerial Imagery (C9 hic Position (D2) Novitard (D3) tral Test (D5) nt Mounds (D6) (LRR A) ave Hummocks (D7)

WETLAND DETERMINATIO	N DATA FORM – V	Vestern Mountains, Valleys, and Coast Region
oject/Site: Keehn	CINIC	Mokile 11/1/1/1/4/14 and 11/19/
oplicant/Owner GAD for Marin	Keeps Devel	Sale CA Sampling Date 111
restigatoris): K. McDenuld, M	SIDNART SALLART	State $\underline{\bigcirc}$ State $\underline{\bigcirc}$ Sampling Point $\underline{\bigcirc}$ 11 1-
adform (hillslope terrace atc) h. OKLOOS	Section Section	I, rownship, Range Tero, Fic
pregion (LBR)		$\frac{1}{372737} = \frac{174}{100776} = \frac{174}$
Man Line Name Acres & (a. /.	Lat J	-1
allestic the delta delta	MAT 1 -1 10	NWI classification:
Vessetations on the site typica	I for this time of year? Ye	s No (If no, explain in Remarks.)
vegetation, Soil or Hydrology _	significantly disturb	ed? Are "Normal Circumstances" present? Yes V No
or Hydrology	naturally problemat	ic? (If needed, explain any answers in Remarks.)
JMMARY OF FINDINGS – Attach site	map showing sam	pling point locations, transects, important features, et
tydrophytic Vegetation Present? Yes	1_ No	
lydric Soil Present? Yes	1 No	within a Wetland? Yes No
remarks		
Marth Side eas	st of sar	pus swale
GETATION – Use scientific names o	f plants.	
	Absolute Domi	nant Indicator Dominance Test worksheet:
ee Stratum (Plot size)	<u>% Cover</u> Spec	es? Status Number of Dominant Species
anna a three a summand an an call the sector to any sector of the state of the sector		Total Number of Dominant Species Across All Strata (B)
	= Tota	al Cover That Are OBL, FACW, or FAC: 100 (A/B)
apling/Shrub Stratum (Plot size	2	Prevalence Index worksheet:
Canada - C		Total % Cover of Multiply by
		OBL species x 1 =
		FACW species x 2 =
		FAC species x 3 =
1.02	= Tota	I Cover
erb Stratum (Plot size 1771-)	16	EACLA Column Totals (A) (B)
Juncus nesperios	$\frac{1}{15}$	
Carey a guata		Prevalence Index = B/A =
Featura actionicare	+ 18 V	FAC 1 - Band Test for Hydrophylic Venetalian
Huppochaeris radieat	2 12	EACU 2 - Dominance Test is >50%
Thifdumarepers		$AC = 3 - Prevalence Index is \le 30^{1}$
Aurostisstolalitera	Y	A - Morphological Adaptations' (Provide supporting
Plantage lancolati		data in Remarks or on a separate sheet)
		5 - Wetland Non-Vascular Plants'
)		Problematic Hydrophytic Vegetation (Explain)
	as .	be present, unless disturbed or problematic
body Vine Stratum (Plot size:	= Iola	
W		Hydrophytic /
		Vegetation
	and the second s	the second second bla
	= Tota	Cover Present res V_ No
Bare Ground in Herb Stratum 5	= Tota	Cover Presentr res V No

SOIL

1/ 1		
Weehn	15/19/21	Sampling Point:

WITZ-W

(inches)	Matrix	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	Redov	Feature	e	or comm	in the ausence of	indicators.)
	Color (moist)	%	Color (moist)	%	Type'	Loc2	Texture	Remarks
2-4	10443/2	100		-	-	_	Loam	CONTRACTOR
1-14	1043/2	90	7.548.9/6	10	<u> </u>	m	Loam	
		_						
Type: C=Conc ydric Soil Indi Histosol (A1 Histic Epipe Black Histic Hydrogen S Depleted Be	entration, D=Dep icators: (Applic 1) edon (A2) : (A3) Sulfide (A4) elow Dark Surface	e (A11)	Reduced Matrix, CS= LRRs, unless otherw Sandy Redox (S5 Stripped Matrix (S Loamy Mucky Mir Loamy Mucky Mir Depleted Matrix (f	Covered rise note 56) heral (F1 atrix (F2) F3)) (except	d Sand Gr MLRA 1)	ains ² Location Indicators I 2 cm M Red Pa Very Sh Other (B	on PL=Pore Lining, M=Matrix or Problematic Hydric Soils ³ : uck (A10) rent Material (TF2) allow Dark Surface (TF12) Explain in Remarks)
_ Thick Dark S _ Sandy Muck Sandy Glevi	Surface (A12) ky Mineral (S1) ed Matrix (S4)		Redox Dark Surfa	rface (F6)	7)		³ Indicators o wetland h	f hydrophytic vegetation and iydrology must be present.
estrictive Lay	er (if present):		Neutra Depression	15 (18)			unless di	sturbed or problematic.
Туре								
Depth (inches	5)		_				Hydric Soil Pre	sent? Yes Y No
UROLOGY								
Vetland Hydrolo	ogy Indicators: s (minimum of on	e required;	check all that apply)				Secondan	(Indicators /2 or more environment
Vetland Hydroli rimary Indicator Surface Wate High Water T Saturation (A Water Marks Sediment Dej Drift Deposits Algal Mat or O Iron Deposits Surface Soil O Inundation Vis Sparsely Vege	ogy Indicators: <u>s (minimum of on</u> er (A1) Table (A2) (B1) posits (B2) s (B3) Crust (B4) (B5) Cracks (B6) sible on Aerial Im etated Concave §	e required; agery (B7) Surface (B8	check all that apply) Water-Stainer MLRA 1, 2 Salt Crust (B1 Aquatic Invert Hydrogen Sul Oxidized Rhiz Presence of R Recent Iron R Stunted or Str Other (Explain)	d Leaves 2, 4A, an 11) hebrates fide Odo cosphere Reduced eduction essed P a in Rem	s (B9) (exe ad 4B) (B13) or (C1) s along Li Iron (C4) n in Tilled : lants (D1) arks)	ving Roots Soils (C6) (LRR A)	<u>Secondan</u> Water 4A Drana Dry-Si Satura s (C3) Geom ∑ FAC-N Raisec Frost-I	(Indicators (2 or more required) -Stained Leaves (B9) (MLRA 1, 2, , and 4B) Ige Patterns (B10) eason Water Table (C2) otion Visible on Aerial Imagery (C9 orphic Position (D2) w Aquitard (D3) leutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7)
Vetland Hydroli rimary Indicator Surface Water High Water T Saturation (A Water Marks Sediment De, Drift Deposits Algal Mat or O Iron Deposits Surface Soil O Inundation Vis Sparsely Vege Id Observation face Water Pre	ogy Indicators: s (minimum of on er (A1) Table (A2) .3) (B1) posits (B2) s (B3) Crust (B4) . (B5) Cracks (B6) sible on Aerial Im etated Concave S ns: esent?	agery (B7) Surface (B8	check all that apply) Water-Stainer MLRA 1, 2 Salt Crust (B1 Aquatic Invert Hydrogen Sul Oxidized Rhiz Presence of R Recent Iron R Stunted or Str Other (Explain)	d Leaves 2, 4A, an 11) lebrates fide Odo rosphere Reduced reduction ressed P to in Rem	s (B9) (exa d 4B) (B13) or (C1) s along Li Iron (C4) n In Tilled : lants (D1) arks)	cept ving Roots Soils (C6) (LRR A)	Secondan Water 4A Draina Dry-Si Satura 5 (C3) Geom Shallo Z FAC-N Raised Frost-	<u>/ Indicators (2 or more required)</u> -Stained Leaves (B9) (MLRA 1, 2, , and 4B) ige Pattems (B10) eason Water Table (C2) ation Visible on Aerial Imagery (C9 orphic Position (D2) w Aquitard (D3) leutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7)
Vetland Hydroli Primary Indicator Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (C Iron Deposits Surface Soil (C Sparsely Vege Inundation Vis Sparsely Vege Ind Observation urface Water Pre- ater Table Present cludes capillary	ogy Indicators: s (minimum of on er (A1) Table (A2) (B1) posits (B2) s (B3) Crust (B4) (B5) Cracks (B6) sible on Aerial Im etated Concave S ns: esent? Yes ent? Yes fringe)	agery (B7) Surface (B8	check all that apply) Water-Stainer MLRA 1, 2 Salt Crust (B1 Aquatic Invert Hydrogen Sul Oxidized Rhiz Presence of R Recent Iron R Stunted or Str Other (Explain) Depth (inches Depth (inches Depth (inches Depth (inches Depth (inches	d Leaves 2, 4A, an 11) lebrates fide Odo cosphere Reduced eduction essed P b in Rem (s):	s (B9) (exa d 4B) (B13) or (C1) s along Li Iron (C4) a in Tilled : lants (D1) arks)	cept ving Roots Soils (C6) (LRR A)	<u>Secondan</u> Water 4A Draina Dry-Si Satura 5 (C3) Geom Shallo ∑ FAC-N Raiser Frost-I	<u>/ Indicators (2 or more required)</u> -Stained Leaves (B9) (MLRA 1, 2, , and 4B) Ige Pattems (B10) eason Water Table (C2) Ition Visible on Aerial Imagery (C9 orphic Position (D2) w Aquitard (D3) leutral Test (D5) d Ant Mounds (D6) (LRR A) Heave Hummocks (D7) esent? Yes X No
Yetland Hydroli Primary Indicator Surface Water High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (C Iron Deposits Surface Soil C Inundation Vis Sparsely Vege eld Observation urface Water Pre- ater Table Present cludes capillary Iscribe Recorded	ogy Indicators: s (minimum of on er (A1) Table (A2) (B1) posits (B2) s (B3) Crust (B4) (B5) Cracks (B6) sible on Aerial Im etated Concave S ns: esent? Yes ent? Yes fringe) d Data (stream ga	agery (B7) Surface (B8 No No auge, monif	<u>check all that apply</u> <u>Water-Stainer</u> <u>MLRA 1, 2</u> <u>Salt Crust (B1</u> <u>Aquatic Invert</u> <u>Hydrogen Sult</u> <u>Oxidized Rhiz</u> <u>Presence of R</u> <u>Recent Iron R</u> <u>Stunted or Str</u> <u>Other (Explain</u>) <u>Y</u> <u>Depth (inchess</u> <u>Depth (inchess</u> <u>Depth (inchess</u> <u>Depth (inchess</u>)	d Leaves 2, 4A, an 11) lebrates fide Odo cosphere Reduced eduction essed P a in Rem (s):	s (B9) (exc id 4B) (B13) or (C1) s along Li fron (C4) in Tilled : lants (D1) arks)	ving Roots Soils (C6) (LRR A) Wetlar	<u>Secondan</u> Water 4A Drama Dry-Si Satura 5 (C3) Geom Shallo ∑ FAC-N Raised Frost-1	Ant Mounds (D6) (LRR A) Heave Hummocks (D7) Ant Pasent? Yes X No
Y DROLOGY Wetland Hydroli Primary Indicator Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (C Iron Deposits Surface Soil C Inundation Vis Sparsely Vege eld Observatior urface Water Pre ater Table Present cludes capillary iscribe Recorded marks:	ogy Indicators: s (minimum of on er (A1) Table (A2) (B1) posits (B2) s (B3) Crust (B4) (B5) Cracks (B6) sible on Aerial Im etated Concave S ns: esent? Yes ent? Yes fringe) d Data (stream ga	agery (B7) Surface (B8 No No auge, monif	<u>check all that apply</u> <u>Water-Stainer</u> <u>MLRA 1, 2</u> <u>Salt Crust (B1</u> <u>Aquatic Invert</u> <u>Hydrogen Sult</u> <u>Oxidized Rhiz</u> <u>Presence of R</u> <u>Recent Iron R</u> <u>Stunted or Str</u> <u>Other (Explain</u>) <u>Y</u> <u>Depth (inchess</u> <u>Depth (inchess</u> <u>Loring well, aerial phot</u>	d Leaves 2, 4A, an 11) lebrates fide Odo cosphere Reduced eduction essed P a in Rem (s):	s (B9) (exc id 4B) (B13) or (C1) s along Li fron (C4) in Tilled : lants (D1) arks)	ving Roots Soils (C6) (LRR A) Wetlar	<u>Secondan</u> Water 4A Drama Dry-Si Satura 5 (C3) Geom Shallo ∑ FAC-N Raised Frost-1	<u>(Indicators (2 or more required)</u> -Stained Leaves (B9) (MLRA 1, 2, , and 4B) ige Patterns (B10) ≥ason Water Table (C2) ition Visible on Aerial Imagery (C9 orphic Position (D2) w Aquitard (D3) leutral Test (D5) J Ant Mounds (D6) (LRR A) Heave Hummocks (D7)

Projectifies Keelon ChyCounty Mickely_cille Flow 1/11 State A Sameing Date Might Another Millione terrace. Millione terrace. State State </th <th>WETLAND DETERMINATION I</th> <th>DATA FORM -</th> <th>Western Mou</th> <th>Intains, Valleys, and Coast Region</th>	WETLAND DETERMINATION I	DATA FORM -	Western Mou	Intains, Valleys, and Coast Region
Opposition UNMER GHD for Max Kedan State Section Township, Range S. TGN RET mestigations C. M.Q. Devald M.S. Ch. U.X.L. Section. Township, Range S. TGN RET andform (hillshop terrace etc) Lat 40.33.7223.0 Long -1244, 0.93.5451 Datum Long Soil May Unit Name Act 41.4 2.7.976.5 S. M.L. No (fno. explain in Remarks.) Soil May Unit Name Soil or Hydrology significantly disturbed? Are Kormal Circumstances' present? Yes No We Vegetation Soil or Hydrology significantly disturbed? Are Kormal Circumstances' present? No Hydrophylic Vegetation Present? Yes No	omiant/site Keehn	City	County McKal	ry ville / Humboldt Sampling Date 11/192
production F. M. Dowlin M. Schuzzz Section Township, Range S. T.K.M. CALL Side (%) [S andtom (hillsidge terrace etc.) List (40.3727230) Local relief (concave, convex, none) Convert Side (%) [S Subregion (LRR) List (40.3727230) Non [24.097.5751] Datum: U/S Subregion (LRR) List (40.3727230) Non [24.097.5751] Datum: U/S Vie Vegetation Soil (non erplan in Remarks) Non [24.097.5751] Datum: U/S Vie Vegetation Soil (non erplan in Remarks) Non [24.097.5751] Non [24.097.5751] SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, et Hydroby Present? No [24.097.5762] No [24.097.5762] SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, et Hydroby Present? No [24.097.5762] No [24.097.5762] Veland Hydrology Present? Yes [No [24.097.5762] No [24.097.5762] No [24.097.5762] Veland Hydrology Present? Yes [No [24.097.5762] No [24.097.5762] No [24.097.5762] Veland Hydrology Present? Yes [No [24.097.5762] No [24.097.5762] No [26.097.5762] Veland Hydrology Present? Yes [26.097.5762] Nonber of Dominant Speces	anticantiounar GHD for Mary k	Lecha		State _ CA_ Sampling Point LOTT -
Interformation Inter	E. M. Duneld M. Sel	WIR Sec	tion, Township, Ra	ange 55 TGN RIE
andorm (Inside)e Lat 40.33772230 Long - [244, 073.575] Datum: W432 Soil Map Unit Name Aresta 2x-0 Cardy mat , 2-996, 5x13 WM classification (Aare Soil Map Unit Name Aresta 2x-0 Cardy mat , 2-996, 5x13 WM classification (Aare Soil Map Unit Name Aresta 2x-0 Cardy mat , 2-996, 5x13 WM classification (Aare Vere Vegetation Soil or Hydrology isoficantly distube? No — (If no explain in Remarks) No	nvestigator(s) 00sloge	loc	al relief (concave	convex none) CONCX_ Slope (%): 15
June good (LR4)	andform (hillslope, terrace, etc.)	1 40.3	377730	long -124.0975751 Datum W638
Sel Map Unit Name	Subregion (LRR)	tat	1-90% Sal	Is NWI classification nare
Vie Charles / hydrologic conditions on the site hypical for this time of year? Yes	Soil Map Unit Name Hrozt And In	7 101 1	No. I No.	(if no explain in Remarks)
vieve Vegetation Soil or Hydrology sturbary problematic? Vier Vegetation Market Soil Vieve Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks) Station Soil or Hydrology Is the Sampled Area No Is the Sampled Area Hydrophytic Vegetation Present? Yes No Is the Sampled Area No Is the Sampled Area Wealtand Hydrology Present? Yes No Is the Sampled Area No Is the Sampled Area Vegetation Provide Present? Yes No Is the Sampled Area No Is the Sampled Area Vegetation Provide Present? Yes No Is the Sampled Area No Is the Sampled Area Vegetation Provide Present? Yes No Is the Sampled Area No Is the Sampled Area Vegetation Provide Present? Yes No Is the Sampled Area No Is the Sampled Area Vegetation Provide Present? No Is the Sampled Area Inductor Inductor Inductor Inductor Inductor Inductor Induct	Are climatic / hydrologic conditions on the site typical for	this time of year?	Yes NO	IN and Creation and Andrew Ves V No
tree Vegetationsol	Are Vegetation Soil, or Hydrology	_significantly dist	urbed? Are	Normal Circumstances present ros to
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, et Hydrophylic Vegetation Present? Yes No Hydrophylic Vegetation Present? Yes No Remarks: Tongue of upland along convex Sope Remarks: Trace Stratum Plot size 1 Absolute Dominance Test worksheet: Number of Dominant Indicator No (A) 2 Species2 Situs 3	ve Vegetation Soil or Hydrology	_ naturally probler	natic? (if ne	eeded, explain any answers in remarks (
Hydrophylic Vegetalion Present? Yes No	SUMMARY OF FINDINGS – Attach site ma	p showing sa	mpling point l	ocations, transects, important features, etc.
Wetland hydrology Present? Yes No Description Remarks Tongue of upland along convex slope //EGETATION - Use scientific names of plants. Tree Stratum (Plot size:	Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes	No J	Is the Sampled within a Wetlar	d Area nd? Yes No
Remains Tongue of upland along comex support // Come Absolute Dominant Indicator 1 Absolute Dominant Species 2 Absolute Dominant Species 3 Free Stratum (Plot size: 4	Wetland Hydrology Present? Yes	No_V		1
VEGETATION – Use scientific names of plants. Tree Stratum (Plot size:	Remarks Tonque of upland	along	COUNCY :	slope
EGETATION – Use scientific names of plants. Tree Stratum (Plot size:		0		
Absolute Dominant Indicator % Cover Species? 1 Species? 2 Species? 3 Species? 4 Species Across All Strata 2 Species Across All Strata 2 Species Across All Strata 3 Species Across All Strata 4 Species Across All Strata 5 Species Across All Strata 6 Stratum (Plot size 1 Species Across All Strata 2 Species Across All Strata 3 Species Across All Strata 4 Species Across All Strata 5 Species Across All Strata 6 Species Across All Strata 1 Across All Strata 2 OBL species 3 Stratum (Plot size 1M ² 1 Across Call Cover 1 Across Call Calls 2 Column Totals 3 Call Calls 4 Call Calls 5 Gaan Accolata 2Q 6 Sand Calls Across Sand Calls	ECETATION - Use scientific names of pl	ants.		Name and a state of the state o
Tree Stratum (Plot size:	EGETATION - Use scientine names of p	Absolute Do	minant Indicator	Dominance Test worksheet.
2	Tree Stratum (Plot size:)	% Cover Sp	ecies? Status	Number of Dominant Species (A)
3	2			Total Number of Dominant
4	3			Species Across All Strata (B)
Saping/Shrub Stratum (Plot size	4			Percent of Dominant Species
Saping/Shrub Stratum (Plot size:		= T	otal Cover	That Are OBL, FACW, or FAC: (A/B)
1	Sapling/Shrub Stratum (Plot size:)			Prevalence Index worksheet:
22	1			Total % Cover of Multiply by:
A	2			OBL species x1=
Free Stratum (Plot size 1 m²) = Total Cover Herb Stratum (Plot size 1 m²) = Total Cover Herb Stratum (Plot size 1 m²) = Total Cover Herb Stratum (Plot size 1 m²) (A) (B) Prevalence Index = S/A = (A) (B) Status Column Totals (A) (B) Status Column Totals (A) (B) Prevalence Index = S/A = (A) (B) (B) Status Column Totals (A) (B) Status Column Totals (A) (B) Status Column Totals (A) (B) Status Column Totals	4			FACW species X2 =
= Total Cover = Total Cover Herb Stratum (Plot size: 1 m²) = Total Cover Herb Stratum (Plot size: 1 m²) Y CACU Prevalence Index = S/A = Column Totals: (A) (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: Plantage I ancestata 20 Y CACU Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 2 - Estuca according coll 3 - Prevalence Index is s3 0' 4 - Morphological Adaptations' (Provide supportin data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants' 9	5		and some state of the state of	FACIL species x4=
Herb Stratum (Plot size:		= 1	otal Cover	UPL species x5=
Prevalence Index = B/A =	Herb Stratum (Plot size 101-)	1 76	Y CAC	Column Totals (A) (B)
Prevalence index = b/A	Agrostis scalific		ACU	Des alessa ladau - D/A -
Image: Stratum (Plot size:	- Hypochaer is carles	20	Y FACU	Hydrophytic Vegetation Indicators:
Construction reports Construction Cons	- plantago lanco atas	- 2 -	1	1 - Rapid Test for Hydrophytic Vegetation
	Reauscillis apons	2		2 - Dominance Test is >50%
	Festura zoundingez	5		3 - Prevalence Index is ≤3.0'
data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants' Problematic Hydrophytic Vegetation' (Explain) 'Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? YesNo emarks:	<u> </u>			4 - Morphological Adaptations' (Provide supporting
				data in Remarks or on a separate sheet)
0				5 - Wetland Non-Vascular Plants
1	0			- Problematic Hydrophytic Vegetation (Explain)
Voody Vine Stratum (Plot size:	1			be present, unless disturbed or problematic.
Voody Vine Stratum (Plot size:		20=To	tal Cover	and the second
Bare Ground in Herb Stratum 2.0	Voody Vine Stratum (Plot size:)			Hydrophytic
a Bare Ground in Herb Stratum 2.0	1			Vegetation
6 Bare Ground in Herb Stratum 20	·	= To	tal Cover	Present? Yes No Y
lemarks	6 Bare Ground in Herb Stratum 20			
	lemarks			

Dent	tion: (Describe	to the danth	Nechu	× 11/19/	21 Sampling Point: W/7
Depth	Matrix	to the depth	needed to document the indicator or	confirm the abse	nce of indicators.)
(inches)	Color (moist)	%	Color (moist) % Type	Los ² Tett	and a state of the
0-5 1	04 83/3	/00		Loc lextur	e Remarks
5-14 1	04R314	100		- Lia	M
	env/+	_700 _		- Loa	m
Type: C=Conc	entration. D=Dept	etion RM=P	adverd Matrix CD Course in a course		
Hydric Soil Indi	icators: (Applica	able to all LF	Res. unless otherwise noted)	Sand Grains.	Location: PL=Pore Lining, M=Matrix.
Histosol (A1)		Sandy Redox (S5)	Indic	ators for Problematic Hydric Soils ³ :
Histic Epipe	don (A2)		Stripped Matrix (S6)	_	2 cm Muck (A10)
Black Histic	(A3)	1.12	Loamy Mucky Mineral (F1) (except M	LRA 1)	/ery Shallow Dark Surface (TE12)
Hydrogen S	ulfide (A4)	100014	Loamy Gleyed Matrix (F2)		Other (Explain in Remarks)
Depleted Be	Now Dark Surface	e (A11)	_ Depleted Matrix (F3)		the part of the test of the
Sandy Much	Surface (A12)		Redox Dark Surface (F6)	³ Indic	ators of hydrophytic vegetation and
Sandy Glevi	ed Matrix (S4)	-	_ Depieted Dark Surface (F7) Redox Depressions (F8)	w	etland hydrology must be present,
Restrictive Lay	er (if present):		_ neodx Depressions (F8)	ur	less disturbed or problematic.
Type					
Depth (inches	5)				V
Remarks				Hydric S	oil Present? Yes No
YDROLOGY					
Votland Hudsol	nav Indiantara:	11			
Vetland Hydrol	ogy Indicators:	م د معالمه م			
Vetland Hydroli Irimary Indicator	ogy Indicators: s (minimum of one	e required, cl	heck all that apply)	<u>Se</u>	condary Indicators (2 or more required)
Vetland Hydrol rimary Indicator Surface Water T High Water T	ogy Indicators: s (minimum of one er (A1) Table (A2)	e required, cl	heck all that apply) Water-Stained Leaves (B9) (exception)	<u>Se</u>	condary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2,
Vetland Hydrol Primary Indicator Surface Wate High Water T Saturation (A	ogy Indicators: s (minimum of one er (A1) Fable (A2)	e required, cl	heck all that apply) Water-Stained Leaves (B9) (exce MLRA 1, 2, 4A, and 4B) Salt Crust (P11)	<u>Se</u>	condary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Vetland Hydroli <u>rimary Indicator</u> Surface Wate High Water T Saturation (A Water Marks	ogy Indicators: s (minimum of ond er (A1) Table (A2) (3) (B1)	e required, cl	heck all that apply) Water-Stained Leaves (B9) (exception of the state of the	<u>Se</u>	condary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) Drainage Patterns (B10)
Vetland Hydroli <u>rimary Indicator</u> Surface Wate High Water T Saturation (A Water Marks Sediment De	ogy Indicators: s (minimum of onder er (A1) Fable (A2) (3) (B1) posits (B2)	e required, cl	heck all that apply) Water-Stained Leaves (B9) (excep MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)	pt	Condary 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 Access
Vetland Hydroli Primary Indicator Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits	ogy Indicators: s (minimum of one er (A1) Fable (A2) (3) (B1) posits (B2) s (B3)	e required, cl	heck all that apply) — Water-Stained Leaves (B9) (exception) MLRA 1, 2, 4A, and 4B) — Salt Crust (B11) — Aquatic Invertebrates (B13) — Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir	pt	Condary 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 Pacifica (D2)
Vetland Hydroli Primary Indicator Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (ogy Indicators: s (minimum of one er (A1) Table (A2) 3) (B1) posits (B2) s (B3) Crust (B4)	e required, cl	heck all that apply) Water-Stained Leaves (B9) (exce) MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4)	Sei pt ng Roots (C3)	condary 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)
Vetland Hydroli Primary Indicator Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (Iron Deposits	ogy Indicators; s (minimum of one er (A1) Table (A2) (3) (B1) posits (B2) s (B3) Crust (B4) (B5)	e required, cl	heck all that apply) Water-Stained Leaves (B9) (excel MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	pt 	condary 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)
Vetland Hydroli Primary Indicator Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (Iron Deposits Surface Soil (ogy Indicators: s (minimum of one er (A1) Table (A2) (3) (B1) posits (B2) s (B3) Crust (B4) (B5) Cracks (B6)	e required, cl	heck all that apply) Water-Stained Leaves (B9) (excep MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L	See pt ng Roots (C3) wils (C6) .RR A)	condary 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)
Vetland Hydroli Primary Indicator Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (Iron Deposits Surface Soil (Inundation Vis Sparsely Veg	ogy Indicators: s (minimum of one er (A1) Table (A2) (3) (B1) posits (B2) s (B3) Crust (B4) (B5) Cracks (B6) sible on Aerial Ima elated Concave S	<u>e required, cl</u> agery (B7) Surface (B8)	heck all that apply) Water-Stained Leaves (B9) (excer MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L Other (Explain in Remarks)	See 	condary 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)
Vetland Hydroli Primary Indicator 	ogy Indicators: s (minimum of one er (A1) Fable (A2) 3) (B1) posits (B2) s (B3) Crust (B4) (B5) Cracks (B6) sible on Aerial Ima elated Concave S ns:	<u>e required, cl</u> agery (B7) Surface (B8)	heck all that apply) Water-Stained Leaves (B9) (excel MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L Other (Explain in Remarks)	pt	Condary 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)
Vetland Hydroli Primary Indicator Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (Iron Deposits Surface Soil (Inundation Vis Sparsely Vege eld Observation urface Water Pre	ogy Indicators: <u>s (minimum of one</u> er (A1) Table (A2) (3) (B1) posits (B2) s (B3) Crust (B4) (B5) Cracks (B6) sible on Aerial Ima elated Concave S ns: esent? Yes	e required, cl agery (B7) Surface (B8)	heck all that apply) Water-Stained Leaves (B9) (exce) MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L Other (Explain in Remarks)	pt	condary 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)
Vetland Hydroli Primary Indicator Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (C Iron Deposits Surface Soil (C Inundation Vis Sparsely Vege eld Observation urface Water Present State Table Present State Present	ogy Indicators: <u>s (minimum of one</u> er (A1) Table (A2) (3) (B1) posits (B2) s (B3) Crust (B4) (B5) Cracks (B6) sible on Aerial Ima elated Concave S ns: esent? Yes	e required, cl agery (B7) Surface (B8)	heck all that apply)	pt	condary 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)
Vetland Hydroli Primary Indicator Surface Wati- High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (Iron Deposits Surface Soil (Inundation Vis Sparsely Veg eld Observation urface Water Pre- ater Table Present cludes capillary	ogy Indicators: <u>s (minimum of one</u> er (A1) Table (A2) (B1) posits (B2) s (B3) Crust (B4) (B5) Cracks (B6) sible on Aerial Ima elated Concave S ns: esent? Yes ent? Yes fringe)	e required, cl agery (B7) Surface (B8) No _ No _	heck all that apply) Water-Stained Leaves (B9) (excelence) MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L Other (Explain in Remarks) X Depth (inches): Depth (inches): Depth (inches):	pt ng Roots (C3) nils (C6) .RR A) Wetland Hydrolc	condary 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)
Vetland Hydroli Primary Indicator Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (Iron Deposits Surface Soil (Inundation Vis Sparsely Vegent eld Observation urface Water Pre- ater Table Present cludes capillary scribe Recorded	ogy Indicators: <u>s (minimum of one</u> er (A1) Table (A2) (3) (B1) posits (B2) s (B3) Crust (B4) (B5) Cracks (B6) sible on Aerial Ima elated Concave S ns: esent? Yes ent? Yes fringe) d Data (stream ga	e required, cl agery (B7) Surface (B8) No _ No _ auge, monitor		pt	condary 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 Aenal Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Vetland Hydroli Primary Indicator Surface Wate High Water 1 Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (C Iron Deposits Surface Soil (C Inundation Vis Sparsely Vegention urface Water Pre- ater Table Present cludes capillary iscribe Recorded imarks:	ogy Indicators: <u>s (minimum of one</u> er (A1) Table (A2) (B1) posits (B2) s (B3) Crust (B4) (B5) Cracks (B6) sible on Aerial Ima elated Concave S ns: esent? Yes ent? Yes t? Yes fringe) d Data (stream ga	e required, cl agery (B7) Surface (B8) No _ No _ No _ No _	heck all that apply) Water-Stained Leaves (B9) (excelent MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livin Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): Depth (inches):	pt	Condary 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) Prost-Heave Hummocks (D7)
Vetland Hydroli Primary Indicator Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (C Iron Deposits Surface Soil (C Inundation Vis Sparsely Vege eld Observation urface Water Present cludes capillary scribe Recorded marks:	ogy Indicators: <u>s (minimum of one</u> er (A1) Table (A2) (3) (B1) posits (B2) s (B3) Crust (B4) (B5) Cracks (B6) sible on Aerial Ima elated Concave S ns: esent? Yes ent? Yes ent? Yes t? Yes fringe) d Data (stream ga	e required, cl agery (B7) Surface (B8) No _ No _ auge, monitor	heck all that apply) Water-Stained Leaves (B9) (excelent of the second seco	pt	Condary 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) Prost-Heave Hummocks (D7)
Vetland Hydroli Primary Indicator Surface Wati High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or (Iron Deposits Surface Soil (Inundation Vis Sparsely Vegi eld Observation urface Water Pre- ater Table Present cludes capillary scribe Recorded marks:	ogy Indicators: <u>s (minimum of one</u> er (A1) Table (A2) (3) (B1) posits (B2) s (B3) Crust (B4) (B5) Cracks (B6) sible on Aerial Ima elated Concave S ns: esent? Yes ent? Yes t? Yes fringe) d Data (stream ga	e required, cl agery (B7) Surface (B8) No _ No _ auge, monitor	Meck all that apply) Water-Stained Leaves (B9) (excelence) MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Livir Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Stunted or Stressed Plants (D1) (L Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): Depth (inches): Togeth (inches):	pt	Condary 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) Prost-Heave Hummocks (D7)

WETLAND DETERMINATION D	ATA FORM - V	Vestern Mou	intains, Valleys, and	Coast Region
oject/Site: heebo	City/C	Mr.K.	le Hell Lide	11/10/2
plicant/Owner GHO Ar Mary Kool	ha Devel	ounty Tierre	inguine manater	Sampling Date: 11/1-110
estigator(s) K. M. Dunild MS.L.	in dent.		State: CA	Sampling Point:
ndform (hillstope tomes at)	Section Section	n, Township, Ra	inge: 55, 16N, 1	216
bregion (I DB)	Local	relief (concave,	convex. none): rone	Slope (%):
il Mas Holes	Lat: Lat:	327843	Long: -124.697	3552 Datum 4/15 8
Wap Unit Name Worstk - Hriyhaz	complex, c	2-2915/00	NWI classifica	ition: name
e climatic / hydrologic conditions on the sile typical for	this time of year? Yo	es K No_	(If no, explain in Re	marks.)
e Vegetation, Soil, or Hydrology	_significantly disturt	oed? Are	"Normal Circumstances" pr	esent? Yes KNO
e Vegetation Soil, or Hydrology	_ naturally problema	itic? (If ne	eeded, explain any answer	s in Remarks.)
UMMARY OF FINDINGS – Attach site ma	p showing sam	pling point l	ocations, transects	important features ato
Hydrophytic Vegetation Present? Yes	No		terrent, nunscous,	important leatures, etc
Hydric Soil Present? Yes	No	Is the Sampled	d Area	/
Netland Hydrology Present? Yes	No	within a Wetlan	nd? Yes	No
Remarks		Alexandra (and an and an and an	Summary Design Statements	and the second lines of th
EGETATION lies estantific		When the second second	monupper statistic over	secol/accounts Southfittee sublation
- Ose scientific names of pla	ants.			
Free Stratum (Plot size:)	<u>% Cover</u> Spec	cies? Status	Dominance Test works	heet:
			Number of Dominant Sp That Are OBL FACW of	ecies 2 IA
2			Table of the second second	(A)
3			Species Across All Strat	nt 2 (B)
4			Percent of Device 4.0	
Sapling/Shrub Stratum (Plot size	= Tot	tal Cover	That Are OBL, FACW, o	FAC: LOO (A/B)
1)			Prevalence Index work	sheet:
2	and the second		Total % Cover of	Multiply by:
32			OBL species	x1=
4			FACW species	x 2 =
5			FAC species	x 3 =
Herb Stratum (Plateiza 1.02	= To	tal Cover	FACU species	x 4 =
1 Festuca annioacon	10	V Cha	UPL species	x 5 =
2 Aarostis stologilas	-30-	- EAC	Column Totals:	(A) (B)
3 Lotus corniculatus	- 40	I PAC	Prevalence Index	= B/A =
4. Plantage laoronlata		Chul	Hydrophytic Vegetatio	n Indicators:
5		- equ	1 - Rapid Test for H	ydrophytic Vegetation
ð			2 - Dominance Test	is >50%
7			3 - Prevalence Inde	x is ≤3.0'
8			data in Remarks	or on a separate sheet)
9			5 - Wetland Non-Va	scular Plants ¹
10			Problematic Hydrop	hytic Vegetation ¹ (Explain)
Hz			Indicators of hydric soil	and wetland hydrology must
Woody Vine Stratum (Plot size:	-16_= Tot	al Cover	be present, unless distu	rbed or problematic.
1			10.000 C	
2			Hydrophytic	
	= Tot	al Cover	Present? Yes	No No
	101		1	
% Bare Ground in Herb Stratum				

SOIL

4

Profile Desc Denth		and			10 11	19/4/	Sampling Point WII
Denth	cription: (Describe I	to the dep	th needed to docum	ent the Indica	tor or confirm	n the absence of i	ndicators.)
Deptil	Matrix		Redox	Features			
(inches)	Color (moist)		Color (moist)	<u>% Typ</u>	e' Loc ²	Texture	Remarks
0-6	109163/2	100		-		Siltla	an
2-14	104R3/2	90	7.5YR 4/4	10 0	m	Siltla	am
-	weighter and a second s						
Type C=C	oncentration, D=Depl	etion, RM=	Reduced Matrix, CS=	Covered or Co	ated Sand Gr		- PL=Pore Liping M=Matrix
lydric Soil I	Indicators: (Applica	able to all	LRRs, unless otherw	vise noted.)	Contract of the Advancement of the Advancement	Indicators fo	Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy Redox (St	5)		2 cm Mu	ck (A10)
Histic Ep	pipedon (A2)		Stripped Matrix (S6)		Red Pare	ent Material (TF2)
Black Hi	SUG (A3)		Loamy Mucky Mi	neral (F1) (exc	opt MLRA 1)	Very Sha	llow Dark Surface (TF12)
Depleter	1 Below Dark Surface	(411)	Loamy Gleyed M	atrix (F2)		Other (E	xplain in Remarks)
Thick Da	ark Surface (A12)	(Art)	- Depieted Matrix (F3)		January and	
Sandy N	lucky Mineral (S1)		Depleted Dark Sun	inface (F7)		Indicators of	hydrophytic vegetation and
Sandy G	leyed Matrix (S4)		Redox Depressio	ns (F8)		wetland hy	hurbed or problematic
Restrictive L	ayer (if present):			1 -/ uniper-		unicas disi	and or problematic.
Туре		_					
Depth (inc	ches)					Hydric Sell Dage	and we know
Remarks		Concern Contractor				rigane contries	entr tes / No
YDROLO Netland Hyc Primary Indic	GY drology Indicators: ators (minimum of or	në required	; check all that apply)			Secondary	Indicators (2 or more required)
Surface \	Water (A1)		Water-Staine	d Leaves (B9)	(except	Water-	Stained Leaves (B9) (MI PA 1 2
High Wa	ter Table (A2)		MLRA 1,	2, 4A, and 4B)	A NOT MADE	44.	and 4B)
_ Saturatio	n (A3)		Salt Crust (B	11)		Drainad	e Patterns (B10)
_ Water Ma	arks (B1)		Aquatic Inve	tebrates (B13)		Dry-Se	ason Water Table (C2)
Sedimen	t Deposits (B2)		Hydrogen SL	lifide Odor (C1)		Saturat	on Visible on Aerial Imageny (Co
_ Drift Dep	osits (B3)		Oxidized Rhi	zospheres alon	g Living Roots	(C3) X Geomo	rphic Position (D2) Such
_ Algal Mai	t or Crust (B4)		Presence of	Reduced Iron (C4)	Shallow	Aquitard (D3)
_ Iron Dep	osits (B5)		Recent Iron I	Reduction in Til	ed Soils (C6)	FAC-Ne	eutral Test (D5)
Surface :	Soll Cracks (B6)		Stunted or Si	ressed Plants (D1) (LRR A)	Raised	Ant Mounds (D6) (LRR A)
Inundatio	in visible on Aerial Im	hagery (B7	Other (Explained)	n in Remarks)		Frost-H	eave Hummocks (D7)
_ Inundatio	Venatated Comment	SUITACE (R	8)	a los a los anticidades de la companya de			
Inundatio	Vegetated Concave	ounace (D					
_ Inundatio _ Sparsely ield Observ	Vegetated Concave ations:		×				
Inundatic Sparsely Ield Observ urface Wate	Vegetated Concave ations: r Present? Yes	s N		es)	_		
Inundatic Sparsely Ield Observ urface Wate Vater Table F	Vegetated Concave ations: r Present? Yes Present? Yes	s N s N	o X Depth (inche o X Depth (inche	es)	_		100
Inundatic Sparsely Ield Observ Iurface Wate Vater Table F aturation Pre	Vegetated Concave ations: r Present? Ye: Present? Ye: esent? Ye: liao: frigge)	s N s N s N	o X Depth (inche o X Depth (inche o X Depth (inche	es): es):	Wetlar	id Hydrology Pres	ent? Yes X No
Inundatic Sparsely Ield Observ Iurface Wate Vater Table F aturation Pre ncludes capi escribe Rec	Vegetated Concave ations: r Present? Ye: Present? Ye: esent? Ye: llary fringe) orded Data (stream o	s N s N s N	o X Depth (inche o X Depth (inche o X Depth (inche	es) es) es)	Wetlar	nd Hydrology Pres	ent? Yes / No
Inundatic Sparsely Ield Observ Jurface Wate Vater Table F aturation Pre ncludes capi escribe Reci	Vegetated Concave rations: r Present? Ye: Present? Ye: esent? Ye: llary fringe) orded Data (stream g	s N s N s N auge, mor	o X Depth (inche o X Depth (inche o X Depth (inche itoring well, aerial pho	es) es): es): otos, previous ir	Wetlan spections), if	id Hydrology Pres available	ent? Yes / No
Inundatic Sparsely Ield Observ iurface Wate Vater Table F aturation Pre ncludes capi escribe Reco emarks.	Vegetated Concave ations: r Present? Yes Present? Yes esent? Yes llary fringe) orded Data (stream g	s N s N s N auge, mor	o X Depth (inche o X Depth (inche o X Depth (inche itoring well, aerial pho	es) es) es) etos, previous ir	Wetlar	nd Hydrology Pres available:	ent? Yes / No
Inundatic Sparsely iulface Wate Vater Table F aturation Pre ncludes capi lescribe Reco emarks	Vegetated Concave ations: r Present? Yes Present? Yes esent? Yes llary fringe) orded Data (stream g	s N s N s N auge, mor	o Construction of the provided set of the prov	es)es)es)es)es)es)es)es)es /es / _	Wetlar spections), if	id Hydrology Pres available	ent? Yes / No
Inundatic Sparsely ield Observ iurface Wate Vater Table F aturation Pre ncludes capi lescribe Reco	Vegetated Concave ations: r Present? Ye: Present? Ye: esent? Ye: Illary fringe) orded Data (stream g	s N s N s N auge, mor	o \times Depth (inche o \times Depth (inche o \times Depth (inche itoring well, aerial pho org dric Sor)	es): es): ntos, previous in + 6 e	wetlar spections), if	available available Dric PaSri	ent? Yes K No
Inundatic Sparsely ield Observ iurface Wate Vater Table F aturation Pre ncludes capi iescribe Reco emarks.	Vegetated Concave ations: r Present? Ye: Present? Ye: esent? Ye: Illary fringe) orded Data (stream g	s N s N s N auge, mor	o χ Depth (inche o χ Depth (inche o χ Depth (inche itoring well, aerial pho ag $dric Sort$	es): es): etos, previous in + 6 A	wetlar spections), if	available Dric Pasit	ent? Yes <u>K</u> No

Sampling Point WIT8-W

WEILAND DEIERMIN	ATION DATA FORM	- Western Mountains, V	falleys, and Coa	ast Region
Project/Site: heehn	Ci	ty/County: Mc Kihlesuill	Hembeld Same	Dling Date 11/19/21
Applicant/Owner 6HO for MI	my Keeh Deve	I Stat	e CA Samp	bling Point WI T8-L
Investigator(s) K Mc Donald,	1. Schwarz si	ection, Township, Range: 5	5, TON, 1	e1e
Landform (hillslope, terrace, etc.) dain	L	ocal relief (concave, convex, no	ne) Corvex	Slope (%)
Subregion (LRR)	Lat: 40.	93274843 Long -1	24.0973552	Datum_ 616584
Soil Map Unit Name Worsick - A	rlynda complex	0-2% slopes	NWI classification.	none
Are climatic / hydrologic conditions on the site	typical for this time of year	? Yes No (If n	o. explain in Remark	s)
Are Vegetation, Soil, or Hydrol	ogy significantly di	sturbed? Are "Normal Cir	cumstances" present	17 Yes 1 No
Are Vegetation Soil or Hydrol	ogy naturally probl	ematic? (If needed, expl	ain any answers in R	emarks)
SUMMARY OF FINDINGS - Attach	site map showing s	ampling point locations	, transects, imp	ortant features, etc.
Hydrophytic Vegetation Present? Ye Hydric Soil Present? Ye Wetland Hydrology Present? Ye	s No s No s No	Is the Sampled Area within a Wetland?	Yes 1	No_/_
Remarks: Small Convex	upland with	thin larger w	etland	
VEGETATION – Use scientific nam	es of plants.			

Too Chattan (Distaine)	Absolute	Dominant Indicator	Dominance Test worksheet:
1)	<u>76 COVEI</u>	Species Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3			Species Across All Strata (B)
4			Percent of Deminant Species
		= Total Cover	That Are OBL, FACW, or FAC
Sapling/Shrub Stratum (Plot size)			Prevalence Index worksheet:
1	ngilin. Sector con		Total % Cover ofMultiply by:
2			OBL species x 1 =
3			FACW species x 2 =
4.			FAC species B5 x3= 255
5.			FACU species 10 x4= 40
		= Total Cover	UPL species x 5 =
Herb Stratum (Plot size Im)	80	Y CAC	Column Totals: 95 (A) 295 (B)
1 Marostis Stola litera		- enc	
2 Flagtage lanceolata	- 10-	- FAC	Prevalence Index = B/A =
3 Lestuca annanacco		- FAC	Hydrophytic Vegetation Indicators:
4 Lotus comiculatus			1 - Rapid Test for Hydrophytic Vegetation
5			2 - Dominance Test is >50%
6			N 3 - Prevalence Index is ≤3.0 ¹
7			4 - Morphological Adaptations' (Provide supporting
8		Antonio antonio antonio antonio antonio	data in Remarks or on a separate sheet)
9	_		5 - Wetland Non-Vascular Plants
10			Problematic Hydrophytic Vegetation' (Explain)
11			Indicators of hydric soil and wetland hydrology must
	-95	= Total Cover	be present, unless distuibed of problematic.
Woody Vine Stratum (Plot size)			and the second se
1.			Hydrophytic
2			Present? Yes No V
% Bare Ground in Herb Stratum5	and the second s	= Total Cover	
Remarks Charles Ch	(500		
Dominated by FR	- she	cus	
		and the second	an and a standard and

SOIL

Keehn 11	1151	21	Sampling
	14		

Point WIT8-U

L/PL/H	A designed and a designed at the second s									
(inches)	Color (moist)	0/_	Redox	Features	s T I					
0-9	1048313	100	Color (moist)		Type	Loc	S TIT		Remark	(S
G 13	1.110212	100	7-10-11	-			DITLO	ang	,	
9-12	109KJD	90	4.5923/6	_/0	<u> </u>	m	Loam	Silte	lam	
					=			Arreles Arreles	adamatika Marina matakan	nite and a second s
Type C=Co Hydric Soil II Histosol (Histic Epi Black His Hydroger Depleted Thick Dar Sandy Mi	incentration, D=Depi indicators: (Applica (A1) ipedon (A2) itic (A3) in Sulfide (A4) Below Dark Surface rk Surface (A12) ucky Mineral (S1)	letion, RM able to all e (A11)	=Reduced Matrix, CS LRRs, unless otherv Sandy Redox (St Stripped Matrix (Loamy Mucky Mi Loamy Gleyed M Depleted Matrix (Redox Dark Suff. Depleted Dark Suff.	Covered vise note 5) S6) neral (F1) atrix (F2) F3) ace (F6) urface (F7)	or Coate d.)) (except	Sand Gr MLRA 1)	iains. ² Loca Indicator 2 cm Red F Very 3 Other ³ Indicators wetland	tion PL= s for Prol Muck (A1 Parent Ma Shallow D (Explain of hydrojo	Pore Lining blematic Hy 0) aterial (TF2) Dark Surface in Remarks) phytic vegeta	<u>M=Matrix</u> dric Soils ³ : (TF12) ation and
Sandy Gl	eyed Matrix (S4)		Redox Depressio	ns (F8)			unless	disturbed	or problems	resent,
Restrictive La	ayer (if present):	- optoning - optoning	and the second				1		or problems	
Туре			and the second se							(1
Depth (inch	nes)						Hydric Soil P	resent?	Var	No K
(0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.	Chroma	To	o hish/R	edoy	e To	s De	eρ			
YDROLOG Vetland Hydr	Chremo iY ology Indicators: tors (minimum of on	e required	o hish / R	edoy	e To	s De	ep	any Indica	tors (2 or mo	
YDROLOG Vetland Hydr Primary Indical Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat c Iron Depos Surface So Inundation Sparsely Vi ald Observat	Chremo in it is in it is is is is is is is is is is is is is	e required e required agery (B7) Surface (B	o hish / 2 . check all that apply) Water-Staine MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhi. Presence of I Recent Iron F Stunted or St Other (Explai B)	ed Leaves 2, 4A, an 11) tebrates (lifide Odo zosphere: Reduced Reduction ressed Pl n in Rema	c To (B9) (exc d 4B) (B13) r (C1) s along Li lron (C4) in Tilled S lants (D1) arks)	s De cept ving Roots Soils (C6) (LRR A)	<i>E</i> <u>Second</u> <u>Wat</u> <u>Dra</u> Dra <u>Satu</u> Satu Satu Satu Satu FAC <u>Rais</u> <u>Fros</u>	ary Indica er-Staine er-Staine A, and 4 nage Pat Season Vis aration Vis morphic I low Aquit -Neutral ed Ant M t-Heave I	tors (2 or mo d Leaves (B B) terns (B10) Water Table sible on Aen Position (D2) lard (D3) Test (D5) lounds (D6) Hummocks ((LRR A) D7)
YDROLOG Vetland Hydr Primary Indical Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat c Iron Depos Surface So Inundation Sparsely W eld Observat urface Water F ater Table Pres cludes capilla ascribe Recorr	Chremo iy ology Indicators: tors (minimum of on (ater (A1) ir Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Imi egetated Concave S ions: Present? Yes esent? Yes ent? Yes ent? Yes	e required	 check all that apply) check all that apply) Water-Staine MLRA 1, Salt Crust (B) Aquatic Inver Hydrogen Su Oxidized Rhi: Presence of I Recent Iron F Stunted or St Other (Explai B) Depth (inche Depth (inche Depth (inche 	edoy	c To s (B9) (exe d 4B) (B13) r (C1) s along Li lron (C4) in Tilled s lants (D1) arks)	s De sept ving Roots Soils (C6) (LRR A) Wetlan	ep <u>Seconda</u> Wat Drai Dry- Satu s (C3) Geo Sha FAC Rais Fros	ary Indica er-Staine A, and 4 nage Pat Season V iration Vis morphic I low Aquit -Neutral ed Ant M t-Heave I t-Heave I	tors (2 or mo d Leaves (B B) terns (B10) Nater Table sible on Aen Position (D2) tard (D3) Test (D5) tounds (D6) Hummocks (Yes	(C2) (LRR A) D7) No
YDROLOG Vetland Hydr Primary Indical Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat c Iron Depos Surface So Inundation Sparsely Vi eld Observat Vater Table Pre- ater Table Pre- ater Table Pre- scribe Record	Chremo iy ology Indicators: tors (minimum of on (ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Im- egetated Concave S ions: Present? Yes esent? Yes ent? Yes ent? Yes ent? Yes	agery (B7) Surface (B7) Surface (B7) Surface (B7) Surface (B7) Surface (B7)	check all that apply)	ed Leaves 2, 4A, an 11) tebrates (lifide Odo zosphere: Reduced Reduction ressed Pl n in Remains s): s): s): tos. previ	c To s (B9) (exc d 4B) (B13) r (C1) s along Li lron (C4) in Tilled s lants (D1) arks) ous inspe	s De	e Seconda Wat Dra Dry Satu	ary Indica er-Staine (A, and 4 nage Pat Season V iration Vis morphic I low Aquit -Neutral ed Ant M t-Heave I t-Heave I	tors (2 or mo d Leaves (B B) terns (B10) Water Table sible on Aen Position (D2; tard (D3) Test (D5) lounds (D6) Hummocks (Yes	(C2) (C2) (LRR A) D7)
YDROLOG Vetland Hydr Primary Indical Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat of Iron Depos Surface So Inundation Sparsely W eld Observat urface Water F ater Table Pre- aturation Press cludes capilla escribe Record	Chremo iy ology Indicators: tors (minimum of on (ater (A1) rr Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) il Cracks (B6) Visible on Aerial Im- egetated Concave S ions: Present? Yes esent? Yes ent? Yes ent? Yes or y fringe) ded Data (stream ga	agery (B7) Surface (B7) Surface (B7) Surface (B7) Surface (B7) Surface (B7) Surface (B7) Surface (B7) Surface (B7) Surface (B7)	 hish / 2 <u>check all that apply</u> <u>Water-Staine</u> MLRA 1, Salt Crust (B Aquatic Inver Hydrogen Su Oxidized Rhii Presence of I Recent Iron F Stunted or St Other (Explained) Depth (inche 	ed o y ed Leaves 2, 4A, an 11) tebrates (lifide Odo zosphere: Reduced Reduction ressed PI n in Rema s): s): s): tos, previ	c To (B9) (exc d 4B) (B13) r (C1) s along Li lron (C4) in Tilled S lants (D1) arks) ous inspe	s De	e P <u>Seconda</u> Wat Drai Dry- Satu S (C3) Geo Sha FAC Rais Fros Ad Hydrology P available	ary Indica er-Staine A, and 4 nage Pat Season Vis morphic I low Aquit -Neutral ed Ant M t-Heave I t-Heave I	tors (2 or mo d Leaves (B B) Vater Table sible on Aeri Position (D2) tard (D3) Test (D5) lounds (D6) Hummocks ((C2) (LRR A) D7) No
YDROLOG Vetland Hydr Inimary Indical Surface W High Wate Saturation Water Mar Sediment I Onft Depos Algal Mat o Iron Depos Surface So Inundation Sparsely V ald Observat Irface Water F ater Table Pre- turation Presidudes capilla scribe Record marks	Chremo SY ology Indicators: tors (minimum of on (ater (A1) rr Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) iil Cracks (B6) Visible on Aerial Ima egetated Concave S ions: Present? Yes ent? Yes ent? Yes ent? Yes ent? Yes	e required	 check all that apply) check all that apply) Water-Staine MLRA 1, Salt Crust (B) Aquatic Inver Hydrogen Su Oxidized Rhi: Presence of I Recent Iron F Stunted or St Other (Explai B) Depth (inche 	edos	c To s (B9) (exe d 4B) (B13) r (C1) s along Li lron (C4) in Tilled S lants (D1) arks) ous inspe	s De	e P Seconda Wat Drai Dry Satu S (C3) Geo Sha FAC Rais Fros Ad Hydrology P available	ary Indica er-Staine A, and 4 nage Pat Season V iration Vis morphic I low Aquit -Neutral ed Ant M t-Heave I resent?	tors (2 or mo d Leaves (B B) terns (B10) Nater Table sible on Aen Position (D2; tard (D3) Test (D5) tounds (D6) (Hummocks (Yes	(C2) (LRR A) D7) No

WETLAND DET	RMINATION D	ATA FOR	M - V	Vestern Mo	untains, Valleys, and	d Coast Region
rojecusite: heehn			Citulo	Mark	denville CA	12/2
pplicant/Owner GHD for	Mary Keek.	Devel	City/Ci	ounty: frice	tinter voice, cm	Sampling Date
ivestigator(s) 16 IMC Drog	12 UNA So	la sed	0		State	Sampling Point
andform (hillsione terrace ota)	And the se	NUDIC	Sectio	n, Township, R	ange:, 1.6, 14 1	E
ibregion (I BD)	Jusiope		Local	relief (concave.	convex, none)	ave_ slope (%)
	6 1 1	Lat:	0,93	32 + 755	Long: -124, 698.	2055 Datum 465
in wap Unit Name: <u>FNCATA</u>	3 landy	2 Mnt	12-	9 90 5 101	NWI classific	ation <u>None</u>
e climatic / hydrologic conditions on	the site typical for th	his time of ye	ear? Ye	es No	(If no, explain In R	emarks.)
e vegetation, Soil, c	r Hydrology	significantly	disturb	bed? Are	"Normal Circumstances" p	resent? Yes No
e Vegetation, Soil, o	r Hydrology	naturally pro	oblema	tic? (If n	eeded, explain any answe	rs in Remarks.)
UMMARY OF FINDINGS -	Attach site map	showing	sam	pling point	locations, transects	important features, etc
Hydrophytic Vegetation Present?	Yes_	No	T		and a second	
Hydric Soil Present?	Yes_//	No		Is the Sample	d Area /	(
Netland Hydrology Present?	Yes_	No		within a Wetla	nd? Yes V	No
kemarks:						
EGETATION – Use scientifi	c names of pla	nts.	- and a second			522
		Absolute	Domi	inant Indicator	Dominance Test works	sheet
ree Stratum (Plot size:)	% Cover	Spec	ies? Status	Number of Dominant Sp	ecies 🔿
	www.www.weighten.com				That Are OBL, FACW, o	r FAC: (A)
· · · · · · · · · · · · · · · · · · ·					Total Number of Domina	ant
			-	and a second	Species Across All Strat	a:(B)
			- Tete		Percent of Dominant Sp	ecies Icra
apling/Shrub Stratum (Plot size:)		= 10ta	al Cover	That Are OBL, FACW, o	rFAC: (A/B)
n and the second s		-	_		Prevalence Index work	sheet:
A					Total % Cover of	Multiply by:
					CBL species	x1=
and and a state of the state of					FAC species	X2=
 Second and Report to second straighter to second sec	n		-		FACU species	XJ
lerh Stratum (Plot size: Im2	1		= Tota	al Cover	UPL species	x5=
Lotis conculat	rus -	10			Column Totals:	(A) (B)
Festura acon	Linxez.	20	~	DAJ I		(0)
Agrostis stager	lifer 1	55	Y	CAC	Prevalence Index	= B/A =
Plantago lancer	Lith	IO			1 - Rapid Test for H	vdronbytic Vegetation
<u> </u>					2 - Dominance Test	is >50%
					3 - Prevalence Index	k is ≤3.0 ¹
	~			maintain (Markanton and	4 - Morphological Ac	laptations ¹ (Provide supporting
	and the second	-			data in Remarks	or on a separate sheet)
ner e some some spanner.	a and a substance and and a				5 - Wetland Non-Va	scular Plants'
).					Problematic Hydrop	hytic Vegetation' (Explain)
	6498000 (10 N)	66			be present, unless distur	and wetland hydrology must bed or problematic
		5	= Total	Cover		at his answer the
loody Vine Stratum (Plot size)	1					
/oody Vine Stratum (Plot size:)				Hydrophytic	
I)		_		Hydrophytic Vegetation	1
oody Vine Stratum (Plot size:)		= Total	Cover	Hydrophytic Vegetation Present? Yes	V No

Section -		-	V	lech	12/	2/21 9	Schwarz	Sampling Point:
Profile Des	cription: (Describe	to the dep	oth needed to docur	ment the i	indicator	or confirm	n the absence of i	ndicators.)
(inches)	Color (moist)	%	Redo	x Features	S.	1 - 2	-	
2-6	104R211	100		70	Type	Loc		Remarks
6-11	1002 211	-100	7-411				_ Coam_	and the state of t
0-14	1011-91	40	10/9/6	<u> </u>	M	_10_	Loam	the second s
			-					
_					_			
				-				
		_	N.		-			
Type C=C	oncentration D=Depl	ation PM-	Boducod Matrix CS			10.10	2.	
Hydric Soil	Indicators: (Applica	ble to all	LRRs. unless other	wise note	or Coate	d Sand Gr	ains. *Location	PL=Pore Lining, M=Matrix.
Histosol	(A1)		Sandy Redox (S	35)			2 cm Mu	- Froblematic Hydric Solls :
Histic Ep	pipedon (A2)		Stripped Matrix	(S6)			Red Pare	ent Material (TF2)
Black Hi	istic (A3)		Loamy Mucky M	lineral (F1) (except	MLRA 1)	Very Sha	llow Dark Surface (TF12)
Hydroge	n Sulfide (A4)		Loamy Gleyed N	Matrix (F2)			Other (E)	plain in Remarks)
Depleted	Below Dark Surface	(A11)	Peday Dark Sur	(F3)			31-15-1	
Sandy N	lucky Mineral (S1)		Depleted Dark Sur	Surface (FO)	7)		Indicators of	hydrophytic vegetation and
Sandy G	leyed Matrix (S4)		Redox Depressi	ons (F8)			unless dist	urbed or problematic.
lestrictive l	ayer (if present):						1	
Туре	an a suggestion of the second s							
Depth (inc	ches)						Hydric Soil Pres	ent? Yes X No
YDROLO(GY Irology Indicators:							
YDROLO(Vetland Hyd	GY Irology Indicators: ators (minimum of one	e required.	, check all that apply))			Secondary	Indicators (2 or more required)
YDROLO(Vetland Hyd Irimary Indica Surface V	GY Irology Indicators: ators (minimum of one Nater (A1)	e required.	<u>check all that apply</u>) hed Leaves	s (B9) (ex	cept	<u>Secondary</u> Water-S	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2,
YDROLOO Vetland Hyd Primary Indico Surface V High Wat	GY Irology Indicators: ators (minimum of one Nater (A1) er Table (A2)	e required,	<u>, check all that apply</u> Water-Stain MLRA 1,) ied Leaves , 2, 4A, an	s (B9) (ex id 4B)	cept	<u>Secondary</u> Water-3 4A,	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B)
YDROLO(Vetland Hyd Irimary Indica Surface V High Wat Saturation	GY Irology Indicators: ators (minimum of one Water (A1) er Table (A2) n (A3)	e required.	<u>, check all that apply</u> Water-Stain MLRA 1, Salt Crust (E) ed Leaves , 2, 4A, an 311)	s (B9) (ex d 4B)	cept	<u>Secondary</u> Water-S Drainag	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) Je Patterns (B10)
YDROLO(Vetland Hyd Irimary Indica Surface V High Wat Saturation Water Ma	GY Irology Indicators: ators (minimum of one Nater (A1) er Table (A2) n (A3) arks (B1)	e required.	check all that apply) Water-Stain MLRA 1, Salt Crust (I Aquatic Inve) ed Leaves , 2, 4A, an 311) ertebrates	s (B9) (ex d 4B) (B13)	cept	<u>Secondary</u> Water-S Drainag Dry-Sea	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) Je Patterns (B10) ason Water Table (C2)
YDROLO(Vetland Hyd Irimary Indice Surface V High Wat Saturation Water Ma Sediment	GY Irology Indicators: ators (minimum of one Nater (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) arks (B3)	e required,	check all that apply) Water-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen S Ovidized Rb) eed Leaves , 2, 4A, an B11) ertebrates ulfide Odo	s (B9) (ex d 4B) (B13) r (C1) s along l	cept	<u>Secondary</u> Water-S Drainag Dry-Sea Saturati	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) le Patterns (B10) ason Water Table (C2) ion Visible on Aerial Imagery (C9)
YDROLOO Vetland Hyd Surface V High Wat Saturation Water Ma Drift Depo Alnal Mat	GY Irology Indicators: ators (minimum of one Nater (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) osits (B3) or Chust (B4)	e required,	check all that apply) Water-Stain MLRA 1, Salt Crust (8 Aquatic Inve Hydrogen S Oxidized Rh	ed Leaves , 2, 4A, an 311) ertebrates ulfide Odo nizosphere Reduced	s (B9) (ex d 4B) (B13) rr (C1) s along Li Iron (C4)	cept ving Roots	Secondary Water-S 4A, Drainag Dry-Sea Saturati s (C3) X Geomo Shallow	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) Je Patterns (B10) ason Water Table (C2) Ion Visible on Aerial Imagery (C9) rphic Position (D2) COM Arm
YDROLOO Vetland Hyd Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo	GY Irology Indicators: ators (minimum of one Nater (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5)	e required.	check all that apply) Water-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron	ed Leaves , 2, 4A, an 311) ertebrates ulfide Odo izosphere Reduced Reduction	s (B9) (ex (B13) (B13) rr (C1) s along L Iron (C4) a in Tilled	cept ving Roots Soils (C6)	Secondary Water-S 4A, Drainag Dry-Sea Saturati s (C3) X Geomo Shallow FAC-Ne	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) Je Patterns (B10) ason Water Table (C2) Ion Visible on Aerial Imagery (C9) rphic Position (D2) COM Arca Aquitard (D3)
YDROLOG Vetland Hyd Irimary Indica Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S	GY Irology Indicators: ators (minimum of one Vater (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) soil Cracks (B6)	e required.	check all that apply) Water-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Recent Iron Stunted or S) ed Leaves , 2 , 4A , an 311) ertebrates ulfide Odo nizosphere Reduced Reduction Stressed Pl	s (B9) (ex d 4B) (B13) rr (C1) s along Li Iron (C4) h in Tilled (ants (D1)	cept ving Roots Soils (C6) (LRR A)	<u>Secondary</u> <u>Water-S</u> <u>4A</u> , <u>Drainag</u> <u>Dry-Sea</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u> <u>Saturati</u>	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) Je Patterns (B10) ason Water Table (C2) ion Visible on Aerial Imagery (C9) rphic Position (D2) COA Arca Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A)
YDROLOO Vetland Hyd Irimary Indica Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation	GY ators (minimum of one Nater (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) coil Cracks (B6) n Visible on Aerial Ima	e required,	check all that apply) Water-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla	ed Leaves , 2, 4A, an 311) ertebrates ulfide Odo iizosphere Reduced Reduction Stressed Pl ain in Rem	s (B9) (ex d 4B) (B13) rr (C1) s along Li lron (C4) in Tilled lants (D1) arks)	cept ving Roots Soils (C6) (LRR A)	Secondary Water-5 4A, Drainag Dry-Sea Saturati s (C3) X Geomo Shallow FAC-Ne Raised Frost-Hi	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) Je Patterns (B10) ason Water Table (C2) Ion Visible on Aerial Imagery (C9) rphic Position (D2) LOAL AICA Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A) eave Hummocks (D7)
YDROLOO Vetland Hyd Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely V	GY Irology Indicators: ators (minimum of one Nater (A1) ter Table (A2) n (A3) arks (B1) Deposits (B2) posits (B3) or Crust (B4) posits (B5) poil Cracks (B6) n Visible on Aerial Ima Vegetated Concave S	e required, agery (B7) urface (B8	check all that apply) Water-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla	ed Leaves , 2, 4A, an 311) ertebrates ulfide Odo izosphere Reduced Reduction Stressed Pl ain in Rem	s (B9) (ex dd 4B) (B13) rr (C1) s along L Iron (C4) h in Tilled lants (D1) arks)	ving Roots Soils (C6) (LRR A)	Secondary Water-S 4A, Drainag Dry-Sea Saturati s (C3) Ceomo Shallow FAC-Ne Raised Frost-Hi	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) le Patterns (B10) ason Water Table (C2) ion Visible on Aerial Imagery (C9) rphic Position (D2) COA Arca (Aquitard (D3) sutral Test (D5) Ant Mounds (D6) (LRR A) eave Hummocks (D7)
YDROLOO Vetland Hyd Surface V High Wat Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely V eld Observa	GY Irology Indicators: ators (minimum of one Nater (A1) er Table (A2) n (A3) arks (B1) Deposits (B2) osits (B3) or Crust (B4) osits (B5) isoil Cracks (B6) n Visible on Aerial Ima Vegetated Concave S ations:	e required, agery (B7) urface (B8	check all that apply) Water-Stain MLRA 1, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain 3)	ed Leaves , 2, 4A, an 311) ertebrates ulfide Odo izosphere Reduced Reduced Reduction stressed Pl ain in Rem	s (B9) (ex d 4B) (B13) rr (C1) s along Li Iron (C4) n in Tilled lants (D1) arks)	cept ving Roots Soils (C6) (LRR A)	Secondary Water-S 4A, Drainag Dry-Sea Saturati s (C3) X Geomo Shallow FAC-Ne Raised Frost-H	Indicators (2 or more required) Stained Leaves (B9) (MLRA 1, 2, and 4B) Je Patterns (B10) ason Water Table (C2) Ion Visible on Aerial Imagery (C9) rphic Position (D2) COA Arca Aquitard (D3) eutral Test (D5) Ant Mounds (D6) (LRR A) eave Hummocks (D7)
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WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region
Project/Site hechn city/County McKinley-1/2/Humboldt Sampling Date 2221
Applicant/Owner_640 for Mary /Lechn DevelStale 14 Sampling Point 6179-0
Investigator(s): K McDonald, M. Schuss Section, Township, Range 55, T6N, RIE
Landform (hillslope, terrace, etc.) Lillslope Local relief (concave, convex, none). Mone Slope (%) 5
Subregion (LRR): A Lat 40.93357755 Long -124.098203) Datum 64584
Soll Map Unit Name: Arczthand Condy Monnin, 2-9% slopes NWI classification: hone
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 V No
Are Vegetation Soit, 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? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	is the Sampled Area within a Wetland?	Yes	No
Remarks				

	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size. 1	% Cover	Species? Status	Number of Dominant Species (A)
2			Total Number of Dominant Species Across All Strata (B)
4		= Total Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size:)			Prevalence Index worksheet:
1	-		Total % Cover of: Multiply by:
2	-		OBL species x 1 =
3		-	FACW species x 2 =
4	-		FAC species x 3 =
5			
		= Total Cover	
Herb Stratum (Plot size Imc)	162	FACU	OPL species x 5 Column Totals (A) (B)
2 Lecotodon Savatilis	15	YEACO	Prevalence Index = B/A =
2 Unachancis radicata	8	EACU	Hydrophytic Vegetation Indicators:
Accestis stalmitera	45	Y FAC	1 - Rapid Test for Hydrophytic Vegetation
A BROSTIS STORATOR	IO	AC	2 - Dominance Test is >50%
5 Kanunculus repens	- 1	CAC	2 Provalence Index is <3.0"
2 Castura 2 cultinalea	2	EAC	4 - Morphological Adaptations ¹ (Provide supporting
°			data in Remarks or on a separate sheet)
0			5 - Wetland Non-Vascular Plants
9			Problematic Hydrophytic Vegetation' (Explain)
10.			¹ Indicators of hydric soil and welland hydrology must
11	ar	Table Cause	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size)	00	= Total Cover	- 199
1			Hydrophytic
2			Vegetation
Rare Ground in Herb Stratum		= Total Cover	
Demarks	- manual C		
Relians.			

Profile Description	Describe	to the dept	h maad	A 4					the second se		and the second sec
Depth	Matrix	to the dept	n need	ed to docu	ment the	Indićator	or confirm	m the abse	once of ind	licators.)	mb Mary II
(inches) Color	(moist)	%	Colo	r (moist)	ox Feature	Tupa	1.02				
0-7 104	R312	100		<u>unoisu</u>		Type	LOC	lextur	<u>e</u>	Rema	rks
7-15 10483	12+	100		and the second				1	<u></u>		
112 19111	7-1	100		* * 7 ¹			-	Loan	7	and an and an and an and an and	
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Tune CaCanana											
Hydric Soil Indicator	on, D=Depl	etion, RM=	Reduce	d Matrix, CS	S=Covered	d or Coate	d Sand Gr	rains.	² Location.	PL=Pore Lining	, M=Matrix
Histosol (A1)	- (Applica	to all L	RRS, U	niess othe	rwise not	ed.)		India	ators for l	Problematic H	ydric Soils ³ :
Histic Epipedon (A	21		_ San	dy Redox (S5)			_	2 cm Muck	(A10)	
Black Histic (A3)	-/		_ Suit	my Mucky M	(S6)	1. /		-	Red Parent	Material (TF2)	
Hydrogen Sulfide	(A4)		Loar	my Gleved	Matrix (F2) (except	MLRA 1)	-	Very Shallo	w Dark Surface	(TF12)
Depleted Below D.	ark Surface	(A11)	Dep	leted Matrix	(F3)	<i>.</i>		-	other (Expl	ain in Remarks) -
Thick Dark Surface	e (A12)		Red	ox Dark Su	face (F6)			³ India	cators of hy	drophytic year	lation and
_ Sandy Mucky Mine	eral (S1)	-	_ Dep	leted Dark :	Surface (F	7)		w	etland hydr	ology must be i	present.
Sandy Gleyed Mat	rix (S4)		_ Red	ox Depress	ions (F8)			u	less distur	bed or problem	atic.
Tuno:	resent):							1			
Dooth (ashas)			-					1.50			6.
Depin (inches)								Hydric S	oil Presen	t? Yes	No X
								L ₁₀₀			
YDROLOGY								Libert			
YDROLOGY Vetland Hydrology In	dicators:					7					
YDROLOGY Vetland Hydrology In Inimary Indicators (min	dicators:	e required,	check a	II that apply)	3ª		<u>Se</u>	condary Inc	licators (2 or m	ore required)
YDROLOGY Vetland Hydrology In Irimary Indicators (mini Surface Water (A1)	dicators:	e required,	check a	II that apply Water-Stair	ned Leave	s (B9) (ex	cept	<u>Se</u>	condary Inc	licators (2 or m	ore required)
YDROLOGY Vetland Hydrology In Inimary Indicators (min Surface Water (A1) High Water Table (dicators: imum of on A2)	e required,	check a	II that apply Water-Stain MLRA 1	r) ned Leave I, 2, 4A, ar	s (B9) (ex nd 4B)	cept	<u>Se</u>	condary Inc Water-Sta 4A, an	licators (2 or m ined Leaves (B d 4B)	ore required) 9) (MLRA 1, 2,
YDROLOGY Vetland Hydrology In Primary Indicators (min Surface Water (A1) High Water Table (Saturation (A3)	dicators: imum of on A2)	e required,	check a	ll that apply Water-Stain MLRA 1 Salt Crust (r) ned Leave I, 2, 4A, ar B11)	s (B9) (ex nd 4B)	cept	<u>Se</u>	condary Inc Water-Sta 4A, an Drainage I	licators (2 or m ined Leaves (B d 4B) Patterns (B10)	ore required) 19) (MLRA 1, 2,
YDROLOGY Vetland Hydrology In Immary Indicators (mini Surface Water (A1) High Water Table (Saturation (A3) Water Marks (B1)	dicators: imum of on A2)	e required,	check a	II that apply Water-Stair MLRA 1 Salt Crust (Aquatic Inv	ned Leave , 2, 4A, ar B11) ertebrates	s (B9) (ex nd 4B) (B13)	cept	<u>Se</u>	condary Inc Water-Sta 4A, an Drainage I Dry-Seasc	licators (2 or m ined Leaves (B d 4B) Patterns (B10) on Water Table	ore required) 19) (MLRA 1, 2, (C2)
YDROLOGY Vetland Hydrology In Immary Indicators (mining Surface Water (A1) High Water Table (Saturation (A3) Water Marks (B1) Sediment Deposits	dicators: mum of on A2) (B2)	e required,	<u>check a</u>	II that apply Water-Stair MLRA 1 Salt Crust (Aquatic Invi Hydrogen S	ned Leave , 2, 4A, ar B11) ertebrates Sulfide Odd	s (B9) (ex nd 4B) (B13) or (C1)	cept	<u>Se</u>	condary Ind Water-Sta 4A, an Drainage I Dry-Seasc Saturation	licators (2 or m ined Leaves (B d 4B) Patterns (B10) on Water Table Visible on Aeri	ore required) (9) (MLRA 1, 2, (C2) ial Imagery (C9)
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WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: we have up	City/County: Mdana	the / Humico	Sampling Date: 9/15/22
Applicant/Owner: many kedn Development		State: CA	Sampling Point: UP -10
Investigator(s): M. Schwarz, Klundgen	Section, Township, Range:	55 TON.	216
Landform (hillslope, terrace, etc.):	_ Local relief (concave, conv	ex, none):	Slope (%): D-3
Subregion (LRR): A- Lat: L	0.9343 Lo	ng-124.099	nis Datum: •
Soil Map Unit Name: Marcala & Candymontain Souls	0-27. slopes	NWI classifi	cation: NA
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes No	_ (If no, explain in F	Remarks.)
Are Vegetation, Soil, or Hydrology significant	y disturbed? Are "Non	nal Circumstances"	present? Yes 🗹 No
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If neede	d, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showin	g sampling point loca	tions, transects	s, important features, etc.
Hydrophytic Vegetation Present? Yes No	1		

Hydric Soil Present? Wetland Hydrology Present?	Yes	Is the Sampled Area within a Wetland?	Yes	No
Remarks:				

	Absolute	Dominan	t Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2	_			Total Number of Dominant
3	_	-		Species Across All Strata: (B)
4.		_		Demant of Deminant Proving
		= Total Co	over	That Are OBL, FACW, or FAC: 2/5= 40 % (A/B)
Sapling/Shrub Stratum (Plot size:)				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2	_		_	
3	_			
4.		-	_	
5				FAC species X 3 =
LA		= Total Co	over	FACU species x 4 =
Herb Stratum (Plot size:)	1000			UPL species x 5 =
1. Agrostis stolonifera	15	Y	PAC	Column Totals: (A) (B)
2. Princila vulgans	20	Y	FACU	Prevalence Index = B/A =
3. Hypochaeris Ladicata	15	Y	FACU	Hydrophytic Vegetation Indicators:
4. Lotus comioulatus	S	127.0	FAC	1 - Rapid Test for Hydrophytic Vegetation
5. plantago Janceolata	10	+	FACU	2 - Dominance Test is >50%
6 Festive perennis	30	Y	FAC	3 - Prevalence Index is ≤3.0 ¹
7.		_	-	4 - Morphological Adaptations ¹ (Provide supporting
8.		1	Sec	data in Remarks or on a separate sheet)
9		2		5 - Wetland Non-Vascular Plants1
10	-			Problematic Hydrophytic Vegetation ¹ (Explain)
11	1.1.1	-	_	¹ Indicators of hydric soil and wetland hydrology must
	90	- Total Co	wor 45	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)	10	- (01a) 00	18	
1				Hudrophytic
2				Vegetation
£		= Total Co	Wer	Present? Yes No
% Bare Ground in Herb Stratum 10		- 1010100	Wei	
Remarks:				

Tork decy fibric (Description (Descriptin (Descriptin (Descriptin (Description (Descriptin (Description (JIL .		irm the absence of indicators 1
Matrix Color (mailt) Color Total Locit Total	rofile Description: (Describe to the c	lepth needed to document the indicator or cont	arm the absence of indicators.)
Control Control Signal Control Signal Signal <th>Depth Matrix</th> <th> Redox Features</th> <th>Texture Remarks</th>	Depth Matrix	Redox Features	Texture Remarks
	$\frac{1}{1}$		Siltingun
2 13 104 K 5/5 100	-b 109 K 13 100		
Type:	- 13 104 K 5/6 100		- Zanoli Louin
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ¹ Locarty Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Solis':			
ype: C-Concentration, D-Depletion, RM-Reduced Matrix, CS=Covered or Coaled Sand Grains. * Location: PL-Pore Lining, M-Matrix, Solis: ydric Soil Indicators: (Applicable to all LRs, unless otherwise noted.)			
yptic Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators: (Applicable to all LRS, unless otherwise noted.) Indicators: (Applicable to all LRS, unless otherwise noted.) Histos pipedion (A2) Stripped Matrix (S6) 2 cm Muck (A10) Red Parent Material (TF2) Black Histic (A3) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Indicators of hydrophytic vegetation and welland hydrology must be present. Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Unless disturbed or problematic. Sandy Oleyed Matrix (S4) Redox Depressions (F8) Indicators of hydrophytic vegetation and welland hydrology must be present. Type:	Type: C=Concentration, D=Depletion, I	RM=Reduced Matrix, CS=Covered or Coated Sand	Grains. *Location: PL=Pore Lining, M=Matrix.
Histos (A1)	lydric Soil Indicators: (Applicable to	all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric cons :
Histic Epipedon (A2)	Histosol (A1)	Sandy Redox (S5)	2 cm Muck (A10) Red Parent Material (TE2)
Black Histic (A3)	_ Histic Epipedon (A2)	Stripped Matrix (S6)	Very Shallow Dark Surface (TF12)
- ryouger Sums (w)	Black Histic (A3)	Loamy Gleved Matrix (F2)	Other (Explain in Remarks)
Depleted Dark Surface (A12) Redox Dark Surface (F6) Pindicators of hydrophydr vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Gleyed Matrix (S4) Redox Depressions (F8) Pindicators of hydrophydr vegetation and hydrology must be present, unless disturbed or problematic. Retrictive Layer (if present): Type: Pindicators of hydrophydr vegetation and hydrology must be present, unless disturbed or problematic. Remarks: Duty in dtraining to some the present of the p	Penleted Below Dark Surface (A11)	Depleted Matrix (F3)	
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) wetland hydrology must be present, unless disturbed or problematic. Sandy Gleyed Matrix (S4) Redox Depressions (F8) unless disturbed or problematic. Restrictive Layer (if present): Type: hydric Soil Present? Yes No X Depth (inches): Duc in diffactors: hydric Soil Present? Yes No X Wotland Hydrology Indicators: Duc in diffactors: wetland hydrology indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more required) Sutration (A3) Salt Crust (B11) Water-Stained Leaves (B9) (except High Water Table (A2) MLRA 1, 2, 4A, and 4B) Dry-Season Water Table (C2) Saturation (A3) Salt Crust (B11) Dry-Season Water Table (C2) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation (24) Agal Mat Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Surface Soil Cracks (B6) Sutured or Stressed Plants (D1) (LRR A) Raised Ant Mondos (D6) (LRR A) Shaltow Aguitar (D3) Sturdae or Stressed Plants (D1) (LRR A) Raised Ant Mondos (D6) (LRR A) Sharks (Present? Yes No X Depth (inches): Mo Y <td>Thick Dark Surface (A12)</td> <td> Redox Dark Surface (F6)</td> <td>³Indicators of hydrophytic vegetation and</td>	Thick Dark Surface (A12)	Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and
	Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	wetland hydrology must be present,
Itestrictive Layer (if present): Itype:	Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	unless disturbed or problematic.
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Saturation (A3)	Remarks: Dusin d YDROLOGY Netland Hydrology Indicators: Primary Indicators (minimum of one reg Surface Water (A1)	lyrainge Sayarl uired: check all that apply) Water-Stained Leaves (B9) (except	Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2 40 and 48)
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Sediment Deposits (B2) Hydrogen Sumde Coor (C1) / Geomorphic Position (D2) 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) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Remarks: Dusin d YDROLOGY Netland Hydrology Indicators: Primary Indicators (minimum of one req Surface Water (A1) High Water Table (A2) Saturation (A3)	uired; check all that apply) Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) Salt Crust (B11) Amount in Inscrimentary (D12)	Secondary Indicators (2 or more required) — Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) — Drainage Patterns (B10) Dry-Season Water Table (C2)
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1.7

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

Project/Site: We Are up	City/County: makinlande/Hum Co Sampling Date: 9/15/22
Applicant/Owner: May keep Development	State: Sampling Point: P = 11
Investigator(s): M. schwarz, Kundgren	Section, Township, Range: SS, TGN, R1E
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none):
Subregion (LRR): A	6.93434 Long: -124 0994 Datum:
Soil Map Unit Name: Arceh & Condymoniais S	oils, 0-2 % dapes NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Normal Circumstances" present? Yes <u>No</u> No
Are Vegetation, Soil, or Hydrology naturally pr	roblematic? (If needed, explain any answers in Remarks.)
Second succession and a second s	the second state and second state the second state at a

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

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

Tree Stratum (Plot size:) 1) 2	Absolute <u>% Cover</u>	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant
3			_	Species Across All Strata: (B)
4		= Total Co	over	Percent of Dominant Species That Are OBL, FACW, or FAC: $2/5 = 40\%$ (A/B)
Sapling/Shrub Stratum (Plot size:)				Prevalence Index worksheet:
1	-			Total % Cover of: Multiply by:
2				OBL species x 1 =
3				FACW species x 2 =
4		,		FAC species x 3 =
5	_			FACU species x 4 =
Harb Stratum /Plot size	-	= Total Co	over	UPL species x 5 =
1 Rumer acetoscila	15	Y	FALL	Column Totals: (A) (B)
2 Leventhemm vulgare	25	4	UPL	Prevalence index = B/A =
3 Huppchaeric radicata	5		FACU	Hydrophytic Vegetation Indicators:
1 Advostis stolen fera	15	Y	FAC	1 - Rapid Test for Hydrophytic Vegetation
5 Thifalium bearing	7	Y	FACU	2 - Dominance Test is >50%
6. Pos annua	30	Y	FAC	3 - Prevalence Index is ≤3.0 ¹
7				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
8	_			5 - Wetland Non-Vascular Plants1
9	_	-		Problematic Hydrophytic Vegetation ¹ (Explain)
11	_			¹ Indicators of hydric soil and welland hydrology must
	a2	= Total Co	ver 48.5	be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size:)		- 10101 00	19.4	
1		-		Hydrophytic
2				Vegetation
% Bare Ground in Herb Stratum		= Total Co	ver	Present? Yes No V
Remarks:				

			7/15/	22 U	vel	tre	P	M)	Sam	ipling Point	
Profile Descri	iption: (Describe	to the de	pth needed t	o docum	ent the ir	ndicator	or confirm	m the ab	sence of in	dicators	.)	
Depth _	Matrix Color (moist)	0/.	Color (n	Redox	Features	Tune	Loc2	Text	Ine		Remarks	
a (1040313	100		1015()		Type		Cil	1/ 10 100	7	Tromano	
1-10	NTK 12	100						- 211	4600 00			
0-14	104K313	100		-	-			Sil	+ Usan			
1		1-1-1							1.11			
		100	-					1				
					_							
						_						
						_			-			
Type: C=Cor	centration, D=Dep	pletion, RM	A=Reduced N	latrix, CS=	Covered	or Coat	ed Sand G	Grains.	² Location	: PL=Po	re Lining, N	A=Matrix.
lydric Soil In	dicators: (Applic	cable to al	I LRRs, unle	ss otherv	vise note	ed.)		In	dicators fo	r Proble	matic Hydr	ric Soils ³ :
_ Histosol (A1)		Sandy	Redox (S	5)			_	_ 2 cm Mu	ck (A10)		
Histic Epi	pedon (A2)		Strippe	d Matrix (S6)		فاطح تحدث	- E	_ Red Pare	ent Mater	ial (TF2)	
_ Black Hist	tic (A3)		Loamy	Mucky Mi	neral (F1) (excep	t MLRA 1) _	_ Very Sha	Illow Dark	CSurface (1	(+12)
Hydrogen	Sulfide (A4)		Loamy	Gleyed M	latrix (F2))		-	_ Other (E	xpiain in i	Remarks)	
Depleted	Below Dark Surface	ce (A11)	Depiet	Dark Surf	ace (E6)			31	ndicators of	hydrophy	tic vegetat	ion and
Sandy Mi	icky Mineral (S1)		Deplet	ed Dark S	urface (F	7)			wetland hy	drology i	must be pre	esent.
Sandy Gle	eved Matrix (S4)		Redox	Depressio	ons (F8)	.,			unless dis	turbed or	problemati	C.
	avor lif propont).							-				
Restrictive La	ayer (in present).											
Restrictive La	ayer (ii present).											
Restrictive La Type: Depth (inch	nes):		-					Hydri	ic Soil Pres	sent?	res	No X
Restrictive La Type: Depth (inch Remarks:	nes):		=					Hydri	ic Soil Pres	sent? \	res	No X
Restrictive La Type: Depth (inch Remarks:	nes):		=	_				Hydri	ic Soil Pres	sent?	Yes	No X
Restrictive La Type: Depth (inch Remarks:	nes):		3	-	_			Hydri	ic Soil Pres	sent? \	/es	No <u>×</u>
Restrictive La Type: Depth (inch Remarks:	nes):		=			_		Hydri	ic Soil Pres	sent?	Yes	No <u>×</u>
Restrictive La Type: Depth (inch Remarks:	nes):		=					Hydri	c Soil Pres	sent?	Yes	No <u>×</u>
Restrictive La Type: Depth (inch Remarks: YDROLOG	ayer (in present): nes):							Hydri	ic Soil Pres	sent?	Yes	<u>No X</u>
Restrictive La Type: Depth (inch Remarks: YDROLOG Wetland Hydio	BY rology Indicators	4	at chark all					Hydri	Secondary	sent?	Yes	No X
Restrictive La Type: Depth (inch Remarks: YDROLOG Wetland Hydi Primary Indica	BY rology Indicators ators (minimum of	t one requir	ed; check all	that apply)			Hydri	Secondary Water	sent?	Yes	No X
Restrictive La Type: Depth (incl Remarks: YDROLOG Wetland Hydi Primary Indica Surface V	BY rology Indicators ators (minimum of Vater (A1) ar Table (A2)	: one requir	ed; check all	that apply /ater-Stain) ned Leave	es (B9) (r	əxcept	Hydri	Secondary Water	sent?	Yes rs (2 or mor Leaves (B9	No <u>×</u>
Restrictive La Type: Depth (incl Remarks: YDROLOG Wetland Hyde Primary Indica Surface V High Wate Saturation	GY Fology Indicators ators (minimum of Vater (A1) er Table (A2) o (A3)	t one requir	ed: check all	that apply /ater-Stain MLRA 1) ned Leave , 2, 4A, a B11)	es (B9) (r nd 4B)	əxcept	Hydri	Secondary Water 4A Draina	sent?	Yes rs (2 or mor Leaves (B9) ms (B10)	No <u>×</u> re required)) (MLRA 1, 2
Restrictive La Type: Depth (incl Remarks: YDROLOG Wetland Hyde Primary Indica Surface V High Wate Saturation Water Ma	GY rology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) orter (B1)	: one requir	ed: check all V S	that apply /ater-Stain MLRA 1 alt Crust (I) ned Leave , 2, 4A, a B11)	es (B9) (i ind 4B) s (B13)	except	Hydri	Secondary Water 4A Draina Drv-Si	Indicator Stained , and 4B) age Patter eason Wa	Yes rs (2 or mor Leaves (B9) ms (B10) ater Table (No <u>×</u> re required)) (MLRA 1, 2 C2)
Restrictive La Type: Depth (incl Remarks: YDROLOG Wetland Hyde Primary Indica Surface V High Wate Saturation Water Ma Sediment	GY rology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) arks (B1) (Deposits (B2)	: one requir	ed; check all W S A A	that apply /ater-Stain MLRA 1 alt Crust (I quatic Invo vdrogen S) ned Leave , 2, 4A, a B11) ertebrates Sulfide Oc	es (B9) (d ind 4B) s (B13) dor (C1)	except	Hydri	Secondary Water Water Draina Dry-Si Satura	r Indicator Stained I, and 4B) age Patter eason Wa ation Visit	Yes rs (2 or mor Leaves (B9) ms (B10) ater Table (ole on Aeria	No <u>×</u> re required)) (MLRA 1, 2 C2) Il Imagery (CS
Restrictive La Type: Depth (incl Remarks: YDROLOG Wetland Hyde Primary Indica Surface V High Wate Saturation Water Ma Sediment Drift Depo	GY rology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) arks (B1) : Deposits (B2) posits (B3)	: one requir	ed; check all W S A H	that apply /ater-Stain MLRA 1 alt Crust (I quatic Invo ydrogen S xidized RI) ned Leave , 2, 4A, a B11) ertebrates Sulfide Oc	es (B9) (d ind 4B) s (B13) dor (C1) res alonc	except	Hydri	Secondary Water Water Draina Dry-Si Satura Geom	ent? Indicator Stained , and 4B) age Patte eason Wa ation Visit orphic Po	Yes rs (2 or mor Leaves (B9) rms (B10) ater Table (ole on Aeria osition (D2)	No X re required)) (MLRA 1, 2 C2) Il Imagery (CS
Restrictive La Type: Depth (incr Remarks: YDROLOG Wetland Hyde Primary Indica Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat	GY rology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) or Crust (B4)	: one requir	ed; check all V S A H C P	that apply /ater-Stain MLRA 1 alt Crust (i quatic Inve ydrogen S xidized Ri resence o) ned Leave , 2, 4A, a B11) ertebrates Sulfide Oc hizospher f Reduce	es (B9) (d ind 4B) s (B13) dor (C1) res along d Iron (C	except	Hydri bots (C3)	Secondary Water 4A Draina Dry-Se Satura Satura Shallo	ent? Indicator Stained , and 4B) age Patter eason Wa ation Visit orphic Po w Aquita	Yes rs (2 or mor Leaves (B9) mrs (B10) ater Table (ble on Aeria bsition (D2) rd (D3)	No X re required)) (MLRA 1, 2 C2) il Imagery (CS
Restrictive La Type: Depth (incl Remarks: YDROLOG Wetland Hyde Primary Indica Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo	GY rology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3) or Crust (B4) posits (B5)	: one require	ed; check all W S A H C P R	that apply /ater-Stain MLRA 1 alt Crust (i quatic Invo ydrogen S xidized RI resence o ecent Iron) ned Leave , 2, 4A, a B11) ertebrates Sulfide Oc nizospher f Reduce i Reducetio	es (B9) (r Ind 4B) s (B13) dor (C1) res along d Iron (C on in Tille	except	Hydri boots (C3)	Secondary Water Water Draina Dry-Se Satura Geom Shallo Shallo	sent? Indicator Stained , and 4B) age Patter eason Wa ation Visitor orphic Por w Aquitar Neutral Te	Yes rs (2 or mor Leaves (B9) mrs (B10) ater Table (ble on Aeria bsition (D2) rd (D3) est (D5)	No X re required)) (MLRA 1, 2 C2) il imagery (CS
Restrictive La Type: Depth (incl Remarks: YDROLOG Vetland Hyde Primary Indica Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S	GY rology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3) t or Crust (B4) posits (B5) Soil Cracks (B6)	: one requir	ed; check all V S A H C P R R	that apply) /ater-Stain MLRA 1 alt Crust (I quatic Inve ydrogen S xidized RI resence o ecent Iron tunted or \$) ned Leave , 2, 4A, a B11) ertebrates Sulfide Oc hizospher f Reduce t Reduceto Stressed	es (B9) (r nd 4B) s (B13) dor (C1) res along d Iron (C on in Tille Plants (I	except Living Ro 4) ed Soils (C D1) (LRR /	Hydri bots (C3)	Secondary Water Water Draina Dry-St Satura Geom Shallo FAC-N Raiset	ent? Indicator -Stained , and 4B) age Patter asson Wa ation Visit orphic Po w Aquitan Neutral Te d Ant Mon	Yes rs (2 or mor Leaves (B9) ms (B10) ater Table (ble on Aeria osition (D2) rd (D3) est (D5) unds (D6) (No X re required)) (MLRA 1, 2 C2) il Imagery (CS
Restrictive La Type: Depth (incl Remarks: YDROLOG Vetland Hyde Primary Indica Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation	GY rology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3) t or Crust (B4) posits (B5) Soil Cracks (B6) n Visible on Aerial	t one require Imagery ()	ed: check all V S A A P R R S B7) C	that apply /ater-Stain MLRA 1 alt Crust (I quatic Inve ydrogen S xidized RI resence o ecent Iron tunted or s ther (Expl) ned Leave , 2 , 4A , a B11) ertebrates Sulfide Oc nizospher f Reduce a Reducetio Stressed ain in Re	es (B9) (i nd 4B) s (B13) dor (C1) res along d Iron (C on in Tille Plants (I marks)	except Living Ro 4) ed Soils (C D1) (LRR /	Hydri bots (C3) (C3)	Secondary Water 4A Draina Dry-Si Satura Geom Shallo FAC-N Raisee Frost-	ent? Indicator -Stained , and 4B) age Pattel eason Wa ation Visit orphic Po w Aquitan Neutral Te d Ant Mon Heave He	Yes rs (2 or mor Leaves (B9) ms (B10) ater Table (ole on Aeria osition (D2) rd (D3) est (D5) unds (D6) (ummocks (I	No X re required)) (MLRA 1, 2 C2) Il Imagery (CS LRR A) D7)
Restrictive La Type: Depth (incl Remarks: YDROLOG Wetland Hyde Primary Indica Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparselv	GY rology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) trks (B1) t Deposits (B2) posits (B3) t or Crust (B4) posits (B5) Soil Cracks (B6) n Visible on Aerial Vegetated Concav	t one require Imagery (i ve Surface	ed: check all V S A P R R S B7) C (B8)	that apply) /ater-Stain MLRA 1 alt Crust (I quatic Invo ydrogen S xidized RI resence o ecent Iron tunted or s ther (Expl) and Leave , 2 , 4A , a B11) ertebrates Sulfide Oc nizospher f Reduce f Reduce Reductio Stressed ain in Re	es (B9) (i ind 4B) s (B13) for (C1) res along d Iron (C on in Tille Plants (I marks)	except Living Ro 4) ed Soils (C D1) (LRR /	bots (C3) (6) (A)	Secondary Water 4A Draina Dry-Si Satura Geom Shallo FAC-N Raiser Frost-	ent? Indicator -Stained , and 4B) age Pattel eason Wa ation Visit orphic Po w Aquitan Neutral Te d Ant Mon Heave He	Yes rs (2 or mor Leaves (B9) ms (B10) ater Table (ole on Aeria osition (D2) rd (D3) est (D5) unds (D6) (ummocks (1	No X re required)) (MLRA 1, 2 C2) Il Imagery (CS LRR A) D7)
Restrictive La Type: Depth (incl Remarks: YDROLOG Wetland Hyde Primary Indica Surface V High Wate Saturation Water Ma Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely Field Observ.	GY rology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) posits (B3) to r Crust (B4) posits (B5) Soil Cracks (B6) n Visible on Aerial Vegetated Concav ations:	: one require imagery (i ve Surface	ed: check all V S A H C P R S B7) C (B8)	that apply /ater-Stain MLRA 1 alt Crust (I quatic Inve ydrogen S xidized RI resence o ecent Iron tunted or s ther (Expl) ned Leave , 2 , 4A , a B11) ertebrates Sulfide Oc hizospher f Reduce Reductio Stressed ain in Re	es (B9) (d and 4B) s (B13) dor (C1) res along d Iron (C on in Tille Plants (I marks)	except 1 Living Ro 24) ed Soils (C D1) (LRR /	bots (C3) (C3)	Secondary Water 4A Draina Dry-Si Satura Geom Shallo FAC-h Raiser Frost-	r Indication -Stained I , and 4B) age Pattele eason Wa ation Visit orphic Po w Aquitan Veutral Te d Ant Mon Heave He	Yes rs (2 or mor Leaves (B9) mrs (B10) ater Table (oble on Aeria osition (D2) rd (D3) est (D5) unds (D6) (ummocks (I	No X re required)) (MLRA 1, 2 C2) Il Imagery (CS LRR A) D7)
Restrictive La Type: Depth (incl Remarks: YDROLOG Wetland Hyde Primary Indica Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely Field Observ.	GY rology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) tor Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial Vegetated Concav ations: r Present?	: one require Imagery (ve Surface Yes	ed; check all 	that apply /ater-Stain MLRA 1 alt Crust (I quatic Inve ydrogen S xidized RI resence o ecent Iron tunted or S ther (Expl) ned Leave , 2, 4A, a B11) ertebrates sulfide Oc nizospher f Reduce i Reductio Stressed ain in Re	es (B9) (d and 4B) s (B13) dor (C1) res along d Iron (C on in Tille Plants (I marks)	except 1 Living Ro :4) ed Soils (C D1) (LRR /	Hydri oots (C3) (C3)	Secondary Water 4A Draina Dry-Si Satura Geom Shallo FAC-h Raiser Frost-	r Indicator Stained I , and 4B) age Patte eason Wa ation Visit orphic Po w Aquitan Veutral Te d Ant Mon Heave He	Yes rs (2 or mor Leaves (B9) ms (B10) ater Table (oble on Aeria osition (D2) rd (D3) est (D5) unds (D6) (ummocks (I	No X re required)) (MLRA 1, 2 C2) Il Imagery (CS LRR A) D7)
Restrictive La Type: Depth (incl Remarks: YDROLOG Wetland Hyde Primary Indica Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely Field Observe Surface Water	GY rology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) tor Crust (B4) osits (B5) Soil Cracks (B6) n Visible on Aerial Vegetated Concav ations: r Present?	: one require Imagery (ve Surface Yes Yes	ed: check all 	that apply /ater-Stain MLRA 1 alt Crust (I quatic Invo ydrogen S xidized RI resence o ecent Iron tunted or s ther (Expl Depth (incl Depth (incl) ed Leave , 2, 4A, a B11) ertebrates Sulfide Oc hizospher f Reducte Reductio Stressed ain in Re hes): hes):	es (B9) (d ind 4B) dor (C1) res along d Iron (C on in Tille Plants (I marks)	except (Living Ro (4) ed Soils (C D1) (LRR /	Hydri bots (C3) 26) A)	Secondary Water Water Draina Dry-Si Satura Geom Shallo FAC-N Raiser Frost-	ent? Indicator Stained I , and 4B) age Patter eason Wa ation Visit orphic Po w Aquitan Neutral Te d Ant Mon Heave He	Yes rs (2 or mor Leaves (B9) mrs (B10) ater Table (ble on Aeria bition (D2) rd (D3) est (D5) unds (D6) (ummocks (I	No X re required)) (MLRA 1, 2 C2) Il Imagery (CS LRR A) D7)
Restrictive La Type: Depth (incl Remarks: IYDROLOG Wetland Hyde Primary Indica Surface V High Wate Saturation Water Ma Sediment Drift Depo Algal Mat Iron Depo Surface S Inundation Sparsely Field Observe Surface Water	GY rology Indicators ators (minimum of Vater (A1) er Table (A2) n (A3) arks (B1) 1 Deposits (B2) posits (B3) 1 or Crust (B4) posits (B5) Soil Cracks (B6) n Visible on Aerial Vegetated Concav ations: r Present? Present?	: one require Imagery () ve Surface Yes Yes Yes	ed; check all 	that apply /ater-Stain MLRA 1 alt Crust (i quatic Invo ydrogen S xidized RI resence o ecent Iron tunted or s ther (Expl Depth (incl Depth (incl Depth (incl	ed Leave , 2, 4A, a B11) ertebrates Sulfide Oc hizospher f Reduce f Reduce stressed ain in Re hes): hes):	es (B9) (d ind 4B) s (B13) dor (C1) res along d Iron (C on in Tille Plants (I marks)	except (Living Ro 24) ed Soils (C D1) (LRR /	Hydri bots (C3) 26) A)	Secondary Water 4A Draina Dry-Se Satura Geom Shallo FAC-h Raiser Frost-	ent? Indicator Stained I , and 4B) age Patter eason Wa ation Visit orphic Po w Aquitan Veutral Te d Ant Moo Heave He esent?	Yes rs (2 or mor Leaves (B9) mrs (B10) ater Table (ble on Aeria bition (D2) rd (D3) est (D5) unds (D6) (ummocks (I Yes	No X re required)) (MLRA 1, 2 C2) Il Imagery (CS LRR A) D7) No X

Remarks:
WETLAND	U.S DETERMINATIO See ERDC	Army Corps of E N DATA SHEET – N /EL TR-10-3; the pro- /EL TR-10-3; the pro-	ingineer Nestern oponent	s Mountains, N agency is CEC	/alleys, and C CW-COR	oast Reg	jion		OMB Control #: 0710-0024, Exp:4/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)			
Project/Site:	We Are Up		City/C	ounty:		McKin	leyville		Samplir	ng Date:	04/16/2024	
Applicant/Owner:	Keehn Develo	pment	State:			Californ	<u>ia</u>		Samplir	ng Point:	<u>Up12</u>	
Investigator(S):	Hartnett and C	ipra_	Sectio	n, Township, F	Range:	05 6N 1	I <u>E</u>					
Landform (Hillside, Ter	race, Etc.): <u>s</u>	Slope	Local	Relief (Concav	ve, Convex, Nor	ne):	None		Slo	ope (%):	5	
Subregion (LRR):	<u>A</u>		Lat:	40.93331202	<u>1_</u>	Long:	-124.1003981	19	C	Datum:	WGS84	
Soil Map Unit Name:	226 - Arcata a	nd Candymountain	soils, 2-	9% slopes			NWI Classificat	ion:	Nor	<u>10</u>		
Are climatic / hydrologie	c conditions on th	e site typical for this	s time of	year?		П ү	′es ☑ No	(If r	no, explain in F	Remarks.)		
Are 🗆 Vegetation, 🗋	Soil, or 🗌 Hydr	ology significantly d	isturbed	?		Are "	Normal Circumst	tances" pr	esent? 🗆 Yes	3 🗹 No		
Are \Box Vegetation, \Box	Soil, or 🗌 Hydr	ology naturally prob	lematic?			(If ne	eded, explain an	y answers	s in Remarks.)			
SUMMARY OF FINE	DINGS – Attach	n site map showi	ng san	npling point	locations, tr	ansects	s, important fe	eatures,	etc.			
Hydrophytic Vegetatio	on Present?	Yes	\checkmark	No								
Hydric Soil Present?		Yes	\checkmark	No								
Wetland Hydrology Pr	resent?	Yes	\checkmark	No	Is the Samp	led Area	within a Wetla	nd?	☐ Yes	\checkmark	No	

Remarks: Precipitation is well above normal..

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point	t: <u>Up12</u>
Tree Stratum (Plot Size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u>Salix lasiolepis (Arrovo Willow)</u> 2 -	<u>25</u>	<u>Yes</u>	FACW	Number of Dominant Species That Are OBL, FACW, or FAC:	<u>2</u> (A)
3 4 5 6.	- - -	- - -	- - -	Total Number of Dominant Species	<u>4</u> (B)
7 8	- - 25	– – =Total Cover		Across All Strata:	- 50 (A/D)
<u>Sapling/Shrub Stratum</u> (Plot Size: 15 ft) 1	Absolute % Cover	Dominant Species?	Indicator Status	OBL, FACW, or FAC:	э <u>50</u> (Аль)
2	-	-	-	Prevalence Index worksheet:	
4 5	-	-	-	Total % Cover of:	Multiply by:
6 7 8	-	-	-	OBL species U	$x_{1} = 0$
Herb Stratum (Plot Size: 5 ft)	0 Absolute %	=Total Cover Dominant	- Indicator	FAC species 20	^ 2 - 50 × 3 - 90
1. <u>Poa annua (Annual Blue Grass)</u> 2. Prunella vulgaris (Common Selfheal)	Cover 25 10	Species? <u>Yes</u> Yes	Status <u>FAC</u> FACU	FACU species 37	x 4 = ₁₄₈
 Holcus Ianatus (Common Velvet Grass) Hypochaeris radicata (Hairy Cat's-Ear) 	2 2	No No	FAC FACU	UPL species 0	x 5 = 0
5 6 7	-	-	-	Column Totals: 92 (A)	288 (B)
8	39	- Total Cover	-	Prevalence Index = B/A = Hydrophytic Vegetation Indicators:	<u>= 3.13043478</u>
Woody Vine Stratum (Plot Size: 15 ft)	Absolute % Cover	Dominant Species?	Indicator Status	☐ 1- Rapid Test for Hydrophytic Ve	getation
<u>Rubus ursinus (caiirornia Dewoerry)</u> <u>Rubus armeniacus (Himalayan Blackberry)</u> <u>3</u>	3	<u>No</u>	FAC	□ 2- Dominance Test is >50%	
5 5		-	-	☐ 3 - Prevalence Index is ≤3.0 ¹	
67	-	-	-	4 - Morphological Adaptations ¹ (F	Provide supporting data in
8. <u>–</u>	28	=Total Cover	-	5 – Wetland Non-Vascular Plant	s ¹
% Bare Ground in Herb Stratum: <u>50</u>				Problematic Hydrophytic Vegetat	tion ¹ (Explain)
				¹ Indicators of hydric soil and wetland h unless disturbed or problematic.	nydrology must be present,
				Hydrophytic Vegetation Present	No No
Remarks:					

Problematic Hydrophytic Vegetation Explanation:

SOIL

SAMPLING POINT: Up12

Profile Desc	ription: (Describe to th	e depth needed to	o document th	e indicate	or or conf	irm the a	bsence of indicators.)	<u> </u>
Depth	Matrix		Redox	Features	3		·····,	
(inches)	Color (moist)	% Co	lor (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-4	10YR3/2	100		_	_	_	Loam (class unknown)	_
4-14	<u>10YR 4/3</u>	100		_	—	_	Loam (class unknown)	-
¹ Type: C=Co	oncentration, D=Depletion	n, RM=Reduced Ma	atrix, CS=Cover	red or Coa	ated Sand	Grains.	² Location: PL	_=Pore Lining, M=Matrix.
		o all LINKS, utiless		eu.)			Indicators for Pro	blematic Hydric Solis":
LI Hist	osol (A1)		∐ Sandy	Gleyed M	latrix (S4)		☐ 2 cm Muck (A1	0) (LRR A, E)
Hist	ic Epipedon (A2)		☐ Sandy	Redox (S	5)		Iron-Manganes	e Masses (F12) (LRR D)
🗆 Blac	ck Histic (A3)		Indicate	ors of hyd	rophytic		Red Parent Ma	aterial (F21)
🗆 Hyd	rogen Sulfide (A4)		vegetation (S6)	and Strip	ped Matrix	¢	□ Very Shallow [Dark Surface (F22)
🗆 1 cn	n Muck (A9) (LRR D, G)		□ Loamy	Mucky M	ineral (F1))	☐ Other (Explain	in Remarks)
🗆 Dep	leted Below Dark Surface	e	(except M	LRA 1)			2	
(A11)			🗆 Loamy	Gleyed N	latrix (F2)		°Indicators of hydi hydrology must be	rophytic vegetation and wetland e present, unless disturbed or
Thic	k Dark Surface (A12)			ed Matrix	(F3)		problematic.	
🗆 San	dy Mucky Mineral (S1)		Redox	Dark Surf	ace (F6)			
2.5	cm Mucky Peat or Peat (S2)		ed Dark Sun	urface (F7	.)		
(LRR G)	,		Depressi		,		
Destated at				Depressio	505 (FO)			
Type:	Layer (If observed):							
Depth (i	inches):							
Bomorko:	,						Hydric Soil Present?	∐ Yes 🗹 No
	CV							
Wetland Hy	drology Indicators:						Secondary Ir	adicators (2 or more required)
			II 41					
	cators (minimum of one is	s required; check a					∐ Water-Sta	ained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
L Surf	ace Water (A1)		L Water- 2. 4A. and √	Stained Lo 4B)	eaves (B9) (except l	MLRA 1, U Drainage	Patterns (B10)
🗆 High	n Water Table (A2)		☐ Salt Cr	, ust (B11)			Dry-Seas	son Water Table (C2)
🗆 Satu	uration (A3)			: Fauna (F	313)			n Visible on Aerial Imagery (C9)
Wate	er Marks (B1)				- 0.1 (0)	4	□ Shallow	Aquitard (D3)
□ Sed	iment Denosits (B2)			en Sullide		1)	G FAC-Neu	ıtral Test (D5)
	intent Deposits (DZ)			ed Rhizos	pheres on	Living Ro	oots 🛛 Raised A	nt Mounds (D6) (LRR A)
L Drift	Deposits (B3)		(C3)				Erost-He	aved Hummocks (D7)
🗆 Alga	al Mat or Crust (B4)		∐ Presen	ce of Red	luced Iron	(C4)		
🗆 Iron	Deposits (B5)		Recent	Iron Red	uction in T	illed Soils	5	
□ Surf	ace Soil Cracks (B6)		(C6)					
	ndation Visible on Aerial I	magery (B7)	∐ Stunted	d or Stres	sed Plants	s (D1) (LR	R	
	rselv Vegetated Concave	Surface (B8)	A)					
			└ Other (Explain in	Remarks)		
Field Obser	vations: er Present?		De	epth (inch	es):			
Field Obsert Surface Wate Water Table	vations: er Present? Present?	□Yes ☑No	De	epth (inch epth (inch	es): es):			
Field Obser Surface Wat Water Table Saturation P	vations: er Present? Present? resent?	□ Yes ☑ No □ Yes ☑ No	De De	epth (inch epth (inch epth (inch	es): es): es):			
Field Obserr Surface Wat Water Table Saturation P	vations: er Present? Present? resent? pillary fringe)	 Yes ✓ No Yes ✓ No Yes ✓ No 		epth (inch epth (inch epth (inch	es): es): es):		Wetland Hydrology Prese	nt? □Yes ☑No
Field Obserr Surface Wate Water Table Saturation P (includes cap Describe Re	vations: er Present? Present? resent? pillary fringe) corded Data (stream gaug	☐ Yes ☑ No ☐ Yes ☑ No ☐ Yes ☑ No ge, monitoring well	De De <u>, aerial ph</u> otos, j	epth (inch epth (inch epth (inch <u>previo</u> us i	es): es): es): <u>nspec</u> tion:	s), if <u>a</u> vaila	Wetland Hydrology Presei	nt? 🗌 Yes 🗹 No

WETLAND D	U.S. Army Corps of • ETERMINATION DATA SHEET • See ERDC/EL TR-10-3; the p	on	OMB Control #: 0710-0024, Exp:4/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)					
Project/Site:	We Are Up	City/County:		McKinle	eyville	Sampling	Date:	04/16/2024
Applicant/Owner:	Keehn Development	State:		California	<u>a</u>	Sampling	Point:	W2-T1-U
Investigator(S):	Hartnett and Cipra	Section, Township	p, Range:	<u>05 6N 1E</u>	<u> </u>			
Landform (Hillside, Terra	ace, Etc.): <u>Slope</u>	Local Relief (Cond	cave, Convex, No	one):	None	Slope	(%):	5
Subregion (LRR):	<u>A</u>	Lat: <u>40.93316</u> 4	44	Long:	-124.09979169	Date	um:	WGS84
Soil Map Unit Name:	226 - Arcata and Candymountain	n soils, 2-9% slopes		I	NWI Classification:	None		
Are climatic / hydrologic	conditions on the site typical for th	nis time of year?		🗌 Ye	es 🗹 No	(If no, explain in Rer	narks.)	
Are D Vegetation, D	Soil, or 🛛 Hydrology significantly	disturbed?		Are "N	ormal Circumstance	es" present? 🗆 Yes 🛛	∃ No	
Are 🗌 Vegetation, 🗌	Soil, or 🛛 Hydrology naturally pro	blematic?		(If nee	ded, explain any an	swers in Remarks.)		
SUMMARY OF FIND	INGS – Attach site map show	ving sampling poi	int locations, t	ransects,	important featu	ires, etc.		
Hydrophytic Vegetatio	n Present? Yes	☑ No						
Hydric Soil Present?	☐ Yes	☑ No						
Wetland Hydrology Pre	esent? 🗌 Yes	☑ No	Is the Sam	pled Area v	within a Wetland?	□ Yes	\checkmark	No
Remarks: 125% of nor	nal precip for the year.							
VEGETATION - Use	scientific names of plants.					Sampling Point	:: <u>W2-T1-</u>	<u>U</u>
Tree Stratum (Plot Size: 3	0 ft)	Absolute %	Dominant	ndicator	Dominance Tes	t worksheet:		
1 Salix lasiolenis (Arrovo	Willow)	5	Yes	FACW	Number of Dom	inant Species That	3	(A)

1. <u>Salix lasiolepis (Arrovo Willow)</u> 2. <u>Prunus serotina (Black Cherry)</u>	<u>5</u> 2	Yes Yes	FACW FACU	Number of Dominant Species That Are OBL, FACW, or FAC:	<u>3</u> (A)
3	_	-	-		
4 5	_	-	-	Total Number of Dominant Species	4 (B)
6.	_	_	_	Across All Strata:	<u>+</u> (D)
7	-	-	-		
0	7	=Total Cover	-	Demonst of Deminent Species That Are	7E (A/D)
Sapling/Shrub Stratum (Plot Size: 15 ft)	Absolute % Cover	Dominant Species?	Indicator Status	OBL, FACW, or FAC:	<u>15</u> (А/Б)
1 2	-	-	-		
3.	-	-	-	Prevalence Index worksheet:	
4	-	-	-	Total % Cover of:	Multiply by:
5 6	-	-	-	OBL species	x 1 =
7.	-	_	_		X 1
8	<u>-</u>		_	FACW species 5	x 2 = ₁₀
Herb Stratum (Plot Size: 5 ft)	0 Absolute % Cover	Dominant Species?	Indicator Status	FAC species 93	x 3 = 279
<u>Agrostis stolonifera (Spreading Bent)</u> <u>Holcus lanatus (Common Velvet Grass)</u>	<u>50</u> 40	Yes Yes	FAC FAC	FACU species 5	x 4 = ₂₀
<u>Anunculus repens (Creeping Buttercup)</u> <u>Anunculus repens (Creeping Buttercup)</u> <u>Anunculus repens (Creeping Buttercup)</u>	<u>3</u> 1	No	FACU	UPL species	x 5 =
5. Trifolium dubium (Suckling Clover)	1	No	FACU	Column Totals (A) 103	D) 200
6. <u>Trifolium dubium (Suckling Clover)</u>	-	-	-		Б) 309
78	-	-	-	Prevalence Index = B/A	= 3.00
o	95	=Total Cover	-	Hydrophytic Vegetation Indicators:	
Woody Vine Stratum (Plot Size: 15 ft)	Absolute % Cover	Dominant Species?	Indicator Status	□ 1- Rapid Test for Hydrophytic Veget	tation
2.	-	-	-	✓ 2- Dominance Test is >50%	
3	_	_	-		
4	-	-	-	□ 3 - Prevalence Index is ≤3.0 ¹	
5 6.	-	-	-	4 - Morphological Adaptations ¹ (Pro	vide supporting data in
7.	_	_	-		11 5
8	-	-Total Cause	-	Remarks or on a separate sneet)	
	U	= I otal Cover		5 – Wetland Non-Vascular Plants ¹	
% Bare Ground in Herb Stratum: <u>5</u>				Problematic Hydrophytic Vegetation	n ¹ (Explain)
				¹ Indicators of hydric soil and wetland hyd unless disturbed or problematic.	Irology must be present,
				Hydrophytic Vegetation Present	Z No
Remarks: Passed dominance test with facultative vegetation	Lack of hydric	soil and wetland	d hydrology inc	dicate facultative plants not acting as hydror	ohytes
Problematic Hydrophytic Vegetation Explanation:			,		,

SOIL

SAMPLING POINT: W2-T1-U

Profile Descr	iption: (Describe to t	he depth needed to	document	the indicat	or or con	firm the a	absence of ind	licators.)			
Depth	Matrix		Re	dox Features	3						
(inches)	Color (moist)	% Col	or (moist)	%	Type ¹	Loc ²	Textu	re	Remark	s	
<u>0-11</u> 11-14	10YR 3/3 10YR 3/3	<u>100</u> 96 5YR 5	/8	4	-	-	Loam (class	<u>s unknown)</u> s unknown)	-		
14-16	10YR 3/2	60 5YR 5	/8	10	С	_	Loam (class	s unknown)	_		
14-16	<u>10YR 4/2</u>	30									
¹ Type: C=Cor	centration, D=Depletic	on, RM=Reduced Ma	trix, CS=Co	vered or Co	ated Sand	l Grains.		² Location: PL=Pc	ore Lining, M=Matr	ix.	
Hydric Soil In	dicators: (Applicable	to all LRRs, unless	otherwise n	oted.)			Indic	ators for Problem	natic Hydric Soils	3:	
Histor	sol (A1)		□ San	dy Gleyed N	latrix (S4)			2 cm Muck (A10) (I	LRR A, E)		
Histic	Epipedon (A2)		□ San	dy Redox (S	5)			Iron-Manganese Ma	asses (F12) (LRR [))	
Black	Histic (A3)		India	ators of hyd	rophytic			Red Parent Materi	al (F21)		
	ogen Sulfide (A4)		vegetati (S6)	on and Strip	ped Matri	x		Very Shallow Dark	Surface (F22)		
🗌 1 cm	Muck (A9) (LRR D, G)		🗌 Loai	my Mucky M	lineral (F1)		Other (Explain in F	Remarks)		
	ted Below Dark Surfac	e	(except	MLRA 1)			³ Ind	licators of hydroph	vtic vegetation and	t wetlar	nd
(A11)			🗌 Loai	my Gleyed N	/latrix (F2)		hyd	rology must be pre	esent, unless distu	rbed or	
Thick	Dark Surface (A12)		🗌 Dep	leted Matrix	(F3)		prot	plematic.			
□ Sand	y Mucky Mineral (S1)		🗌 Red	ox Dark Sur	face (F6)						
□ 2.5 cr	n Mucky Peat or Peat	(S2)	🗌 Dep	leted Dark S	urface (F7	7)					
(LRR G)			🗌 Red	ox Depressi	ons (F8)						
Restrictive La	ayer (if observed):										
Type:											
Depth (In	cnes):						Hydric So	oil Present?	☐ Yes	V 1	No
Remarks: Chro	oma too high for F6. De	pletion to low in profi	e for F3								
Wetland Hyde								Secondary Indica	ators (2 or more re	auired)	
	tore (minimum of one i	is required, sheek al	that apply)							<u>quircuj</u>	
		is required, check an		e t i 11	(50			☐ Water-Stained	Leaves (B9) (MLR	A 1, 2, 4	4A, and 4B)
	ce Water (A1)		L Wat 2. 4A. a	er-Stained L 1d 4B)	eaves (B9) (except	MLRA 1,	☐ Drainage Pat	terns (B10)		
🗆 High	Water Table (A2)		☐ Salt	Crust (B11)				☐ Dry-Season \	Water Table (C2)		
□ Satur	ation (A3)		🗆 Aqu	atic Fauna (B13)			Saturation Vie Geomorphic	sible on Aerial Ima Position (D2)	igery (C	:9)
□ Water	Marks (B1)		Пни	rogen Sulfid	e Odor (C	1)		Shallow Aqui	tard (D3)		
	pent Deposits (B2)			logen Sulliu		1)		FAC-Neutral	Test (D5)		
				lized Rhizos	pheres on	Living Ro	oots	□ Raised Ant M	lounds (D6) (LRR	A)	
	Jeposits (B3)		(03)	(5		(a 1)		Frost-Heaved	d Hummocks (D7)		
☐ Algal	Mat or Crust (B4)			sence of Rec	luced Iron	(C4)					
L Iron D	eposits (B5)			ent Iron Red	uction in	I liled Soli:	S				
🗌 Surfa	ce Soil Cracks (B6)		(C0) □ Stur	nted or Stres	sed Plants	s (D1) (LF	R				
	ation Visible on Aerial	Imagery (B7)	A)			- (/ (
□ Spars	ely Vegetated Concav	e Surface (B8)	Othe	er (Explain ir	n Remarks	;)					
Field Observa	ations:										
Surface Water	Present?	🗆 Yes 🗹 No		Depth (inch	ies):						
Water Table F	resent?	🗆 Yes 🗹 No		Depth (inch	ies):						
Saturation Pre	sent?			Depth (inch	ies): 13						
(includes capi	lary fringe)						Wetland Hyd	rology Present?		Yes	🗹 No
Describe Reco	orded Data (stream gau	uge, monitoring well,	aerial photo	s, previous i	nspection	s), if avail	able:				

WETLAND D	U.S. DETERMINATION See ERDC/E	Army Corps of Er DATA SHEET – W EL TR-10-3; the pro	i gineer /estern ponent	's Mountains, V agency is CEC	/alleys, and C W-COR	oast Reg	ion		OMB Contr Requireme (Authority	rol #: 0710-0024, Ex ent Control Symbo y: AR 335-15, parag	(p:4/30/2 EXEMF raph 5-:	2024 PT: 2a)
Project/Site:	We Are Up		City/Co	ounty:		McKinl	eyville		Sa	ampling Date:	(04/16/2024
Applicant/Owner:	Keehn Developr	ment_	State:			Californ	ia_		Sa	ampling Point:	<u>,</u>	W2-T1-W
Investigator(S):	Miles Hartnet &	Jane Cipra	Sectio	n, Township, F	lange:	<u>05 6N 1</u>	<u>E</u>					
Landform (Hillside, Terra	ace, Etc.): <u>Sl</u>	ope	Local I	Relief (Concav	e, Convex, No	ne):	None			Slope (%):	<u>_</u>	5
Subregion (LRR):	<u>A</u>		Lat:	40.93322338	<u></u>	Long:	-124.09970	485		Datum:	<u>\</u>	WGS84
Soil Map Unit Name:	226 - Arcata and	<u>d Candymountain s</u>	oils, 2-9	<u>9% slopes</u>			NWI Classific	ation:		PSS		
Are climatic / hydrologic	conditions on the	site typical for this	time of	year?			Yes 🗆 No	((If no, expla	in in Remarks	.)	
Are D Vegetation, D	Soil, or 🗌 Hydrol	logy significantly dis	sturbed	?		Are "I	Normal Circum	istances"	present?	🛛 Yes 🗆 No)	
Are D Vegetation, D	Soil, or 🗌 Hydrol	logy naturally proble	ematic?			(If ne	eded, explain a	any answ	ers in Rem	arks.)		
SUMMARY OF FIND	INGS – Attach	site map showir	ng san	npling point	locations, tr	ansects	s, important	feature	s, etc.			
Hydrophytic Vegetatio	n Present?	☑ Yes		No								
Hydric Soil Present?		☑ Yes		No								
Wetland Hydrology Pre	esent?	☑ Yes		No	Is the Samp	led Area	within a Wetl	and?	☑ Yes			٩o
Remarks: . Above norn	nal precipitation Ja	n-Mar 2024.										

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point:	<u>W100-T1</u>
Tree Stratum (Plot Size: 30 ft)	Absolute %	Dominant	Indicator	Dominance Test worksheet:	
A Delivere interview (America 1460-00)	Cover	Species?	Status		•
1. <u>Salix lasiolepis (Arroyo Willow)</u> 2	30	Yes	FACW	Number of Dominant Species That	<u>3</u> (A)
3.	_	_	_	Ale OBL, FACW, of FAC.	
4	_	_	_		
5	-	-	-	Total Number of Dominant Species	<u>3</u> (B)
7.	-	-	-	Across All Strata:	
8	_	_	_		
Sapling/Shrub Stratum (Plot Size: 15 ft)	30 Absolute % Cover	=Total Cover Dominant Species?	Indicator Status	Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>100</u> (A/B)
1	-	-	-		
<u>2.</u> 3.	-	-	-	Prevalence Index worksheet:	
4	-	-	_	Total % Cover of	Multiply by:
5	-	-	_		watipiy by.
6 7	-	-	-	OBL species	x 1 =
8	<u>-</u>	– =Total Cover	_	FACW species	x 2 =
Herb Stratum (Plot Size: 5 ft)	Absolute % Cover	Dominant Species?	Indicator Status	FAC species	x 3 =
 <u>Carex obnupta (Slough Sedge)</u> Ranunculus repens (Creeping Buttercup) 	<u>35</u> 15	<u>Yes</u> Yes	OBL FAC	FACU species	x 4 =
3. <u>Agrostis stolonifera (Spreading Bent)</u> 4.	5	No	FAC	UPL species	x 5 =
5	-	-	-	Column Totals: (A)	(D)
6	_	-	-		(B)
7 8	-	-	-	Prevalence Index = E	3/A =
0. <u>_</u>	55	=Total Cover	-	Hydrophytic Vegetation Indicators:	
<u>Woody Vine Stratum</u> (Plot Size: 15 ft)	Absolute % Cover	Dominant Species?	Indicator Status	□ 1- Rapid Test for Hydrophytic Vege	ation
 <u>Rubus armeniacus (Himalayan Blackberry)</u> 	<u>3</u>	No	FAC	✓ 2- Dominance Test is >50%	
3 4	_	-	-	☑ 3 - Prevalence Index is ≤3.0 ¹	
5 6	-	-	-	4 - Morphological Adaptations ¹ (Pro	ovide supporting data in
78	-	-	-	Remarks or on a separate sheet)	
	3	=Total Cover		5 – Wetland Non-Vascular Plants ¹	
% Bare Ground in Herb Stratum: 0					
				Problematic Hydrophytic Vegetatio	n¹ (Explain)
				¹ Indicators of hydric soil and wetland hydric soil and hydric soil a	drology must be present,
				uniess disturbed or problematic.	
				Vegetation Ves	□ No
Remarks:				1	
Problematic Hydrophytic Vegetation Explanation:					

SOIL

								, ,		1. <u>VVZ-11-VV</u>
Profile Descr	iption: (Describe to t	he depth n	eeded to document	the indicat	tor or con	firm the a	bsence of i	ndicators.)		
Depth	Matrix		Re	dox Feature	s1		_		_	
(inches)	Color (moist)	100	Color (moist)	%	Type'	Loc ²	leam	ture	Rema	rks
<u>0-5</u> 5-10	10YR 3/2	92	 2 5YR 4/6	8	_ C	_ PL/M	Loam		-	
10-15	10YR 5/1	75	<u>5 YR 5/8</u>	25	C	M	silt loam		_	
¹ Type: C=Cor	ncentration, D=Depletio	n, RM=Re	duced Matrix, CS=Co	vered or Co	ated San	d Grains.		² Location: PL=Po	ore Lining, M=Mat	rix.
Hydric Soil In	dicators: (Applicable	to all LRRs	s, unless otherwise r	noted.)			Ind	icators for Problen	natic Hydric Soil	s³:
Histor	sol (A1)		□ San	dy Gleyed N	/latrix (S4))	C] 2 cm Muck (A10) (LRR A, E)	
Histic	Epipedon (A2)		□ San	dy Redox (S	S5)		C	Iron-Manganese Ma	asses (F12) (LRR	D)
Black	Histic (A3)		🗌 Indi	cators of hyd	drophytic			Red Parent Materi	al (F21)	
	ogen Sulfide (A4)		vegetati (S6)	on and Strip	oped Matri	ix	C	Very Shallow Dark	Surface (F22)	
🗌 1 cm	Muck (A9) (LRR D, G)		Loa	my Mucky N	lineral (F1)	E	Other (Explain in F	Remarks)	
	eted Below Dark Surfac	е	(except	MLRA 1)			2.			
(A11)			🗆 Loa	my Gleyed N	Matrix (F2))	эl by	dicators of hydroph	ytic vegetation ar	id wetland
Thick	Dark Surface (A12)		🗹 Dep	leted Matrix	(F3)		pi	oblematic.	sent, unless usu	
□ Sand	y Mucky Mineral (S1)			ov Dark Sur	face (E6)					
☐ 2.5 cr	m Mucky Peat or Peat (S2)	Dep	leted Dark S	Surface (F	7)				
(LRR G)				ox Depressi	ions (F8)					
Restrictive La	ayer (if observed):									
Type:										
Depth (in	ches):						Hvdric	Soil Present?	V Yes	
Remarks:							,			
HYDROLOO	<u>a</u> Y									
Wetland Hvd	rology Indicators:							Secondary Indica	ators (2 or more r	equired)
Primary Indica	ators (minimum of one i	s required:	check all that apply)							
	aa Watar (A1)			or Ctained I)) (ave and)				RA 1, 2, 4A, and 4B)
	ce water (AT)		2. 4A. a	er-Stained L nd 4B)	eaves (D	except i	WLKA I,	Drainage Pat	terns (B10)	
🗹 High	Water Table (A2)		□ Salt	Crust (B11))			Dry-Season	Water Table (C2)	
✓ Satur	ation (A3)			()				☐ Saturation Vi —	sible on Aerial Im	agery (C9)
			Ll Aqu	atic Fauna ((B13)				Position (D2)	
U Water	Marks (B1)		🗆 Hyd	rogen Sulfid	le Odor (C	:1)		🛛 Shallow Aqui	tard (D3)	
☐ Sedin	nent Deposits (B2)						-4-	☐ FAC-Neutral	Test (D5)	
					spheres of	I LIVING RO	ots	🛛 Raised Ant M	lounds (D6) (LRF	RA)
	Jeposits (B3)		(C3)					Frost-Heaved	d Hummocks (D7)
🗆 Algal	Mat or Crust (B4)		✓ Pres	sence of Red	duced Iror	n (C4)				
🗌 Iron 🛙	Deposits (B5)		Rec	ent Iron Rec	duction in	Tilled Soils	\$			
🗌 Surfa	ce Soil Cracks (B6)		(C6)							

Stunted or Stressed Plants (D1) (LRR

Other (Explain in Remarks)

Depth (inches):

Depth (inches): 10

Depth (inches): 8

A)

🗆 Yes 🗹 No

🗹 Yes 🛛 No

🗹 Yes 🛛 No

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

Remarks: Positive alpha alpha dip at 10 inches

□ Inundation Visible on Aerial Imagery (B7)

□ Sparsely Vegetated Concave Surface (B8)

Field Observations: Surface Water Present?

Water Table Present?

Saturation Present?

(includes capillary fringe)

Wetland Hydrology Present?

🗹 Yes

🗆 No

WETLAND D	U.S. Army Corps of DETERMINATION DATA SHEET – See ERDC/EL TR-10-3; the p	Engineers Western Mountains, \ oponent agency is CEC	/alleys, and Coast Region CW-COR		OMB Control #: 0710-0024, Exp. Requirement Control Symbol E (Authority: AR 335-15, paragra	4/30/2024 EXEMPT: ph 5-2a)
Project/Site:	We Are Up	City/County:	McKinleyvi	ille	Sampling Date:	04/16/2024
Applicant/Owner:	Keehn Development	State:	<u>California</u>		Sampling Point:	<u>W3-T1-U</u>
Investigator(S):	Hartnett and Cipra	Section, Township, F	Range: <u>05 6N 1E</u>			
Landform (Hillside, Terra	ace, Etc.): <u>Slope</u>	Local Relief (Concav	re, Convex, None): <u>N</u>	lone	Slope (%):	5
Subregion (LRR):	<u>A</u>	Lat: <u>40.93331323</u>	<u> </u>	124.10000938	Datum:	WGS84
Soil Map Unit Name:	226 - Arcata and Candymountain	soils, 2-9% slopes	NW	VI Classification:	None	
Are climatic / hydrologic	conditions on the site typical for th	s time of year?	🗌 Yes [🔽 No	(If no, explain in Remarks.)	
Are D Vegetation, D	Soil, or 🛛 Hydrology significantly o	listurbed?	Are "Norn	nal Circumstances	" present? 🗌 Yes 🗹 No	
Are 🗌 Vegetation, 🗌	Soil, or 🗌 Hydrology naturally prol	plematic?	(If needed	d, explain any ans	wers in Remarks.)	
SUMMARY OF FIND	INGS – Attach site map show	ing sampling point	locations, transects, in	nportant feature	es, etc.	
Hydrophytic Vegetation	n Present? Ves	□ No	Wetland 5 (W5) -1-Para	meter Wetland		
Hydric Soil Present?	☑ Yes	□ No				
Wetland Hydrology Pre	esent? 🗌 Yes	☑ No	Is the Sampled Area with	hin a Wetland?	🗆 Yes	Z No
Remarks: This is a 1-Pa	rameter Wetland under the Mckinnl	eyville Community Plan.	Above normal rain year.			

VEGETATION - Use scientific names of plants. Sampling Point: W3-T1-U Tree Stratum (Plot Size: 30 ft) Indicator Absolute % Dominant **Dominance Test worksheet:** Cover Status Species? Number of Dominant Species That (A) 1 _ _ _ _ Are OBL, FACW, or FAC: _ _ _ _ _ _ _ _ _ Total Number of Dominant Species (B) 1 _ _ Across All Strata: _ 0 =Total Cover Percent of Dominant Species That Are 100 (A/B) Sapling/Shrub Stratum (Plot Size: 15 ft) Absolute % Dominant Indicator OBL, FACW, or FAC: Cover Species? Status 1 _ _ _ _ 2. _____ 3. ____ 4. ____ 5. ____ 6. ____ 7. ____ -_ Prevalence Index worksheet: _ _ _ Total % Cover of: Multiply by: --**OBL** species x 1 = _ _ -FACW species x 2 = 0 =Total Cover Herb Stratum (Plot Size: 5 ft) Absolute % Dominant Indicator FAC species 85 x 3 = 255 Cover Species? Status Poa pratensis (Kentucky Blue Grass) 60 10 15 1 Yes FAC x 4 = FAC FAC FACU species Ranunculus repens (Creeping Buttercup) No 2. 3. Holcus lanatus (Common Velvet Grass) No UPL species x 5 = 4. -5. _ Column Totals: (A) 85 (B)255 6. _ 7. _ 8. _ _ Prevalence Index = B/A = 3.00 85 =Total Cover Hydrophytic Vegetation Indicators: Woody Vine Stratum (Plot Size: 15 ft) Absolute % Dominant Indicator □ 1- Rapid Test for Hydrophytic Vegetation Cover Species? Status 1. _ ✓ 2- Dominance Test is >50% _ _ _ -□ 3 - Prevalence Index is $\leq 3.0^{1}$ _ _ _ 4 - Morphological Adaptations¹ (Provide supporting data in _ _ _ Remarks or on a separate sheet) 0 =Total Cover 5 – Wetland Non-Vascular Plants¹ % Bare Ground in Herb Stratum: 0 Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic ☑ Yes Vegetation Present

Remarks: Passed dominance test with facultative only vegetation.

Problematic Hydrophytic Vegetation Explanation:

JOIL

SAMPLING POINT: W3-T1-U

Profile Descri	ption: (Describe to t	the depth neede	d to documer	t the indicat	tor or con	firm the a	absence of inc	dicators.)	
Depth (inchos)	Matrix	0/.	Relat (maint)	edox Feature	S Turne ¹	1.002	Tart		Pomorka
(incnes)	Lolor (moist)	% 100	olor (moist)	%	í ype'	L0C [∠]	Textu	ire	Remarks
<u>8-13</u> <u>13-16</u> <u>13-16</u>	<u>10YR 3/1</u> <u>10YR 3/1</u> <u>10YR 3/1</u> 2.5Y 6/6	<u>92</u> 7.5 60 5Y 25	5YR 4/8 R 5/8 and	 	 	_ _ <u>PL</u> _	Loam (clas Medium sil	<u>s unknown)</u> t loam_	– Horizon at 13-16 had a mixed matrix (dark grey – yellow) with red redox
¹ Type: C=Con	centration, D=Depletion	on, RM=Reduced	Matrix, CS=C	overed or Co	ated San	d Grains.		² Location: PL=F	Pore Lining, M=Matrix.
Hydric Soil In	dicators: (Applicable	to all LRRs, unle	ess otherwise	noted.)			Indic	ators for Proble	matic Hydric Soils ³ :
	ol (A1)		🗆 Sa	ndy Gleyed N	/latrix (S4))		2 cm Muck (A10)	(LRR A, E)
Histic	Epipedon (A2)		□ Sa	ndy Redox (S	85)			Iron-Manganese M	lasses (F12) (LRR D)
L Black	Histic (A3)			icators of hyd	drophytic	~		Red Parent Mate	rial (F21)
Hydro	gen Sulfide (A4)		(S6)	tion and Strip	oped Matr	x		Very Shallow Dar	k Surface (F22)
	Muck (A9) (LRR D, G)		🗆 Loa	amy Mucky M	lineral (F1)		Other (Explain in	Remarks)
	ted Below Dark Surfac	ce	(excep	ot MLRA 1)			³ Inc	dicators of hydrop	hytic vegetation and wetland
(A11)	Dark Surface (A12)		L Loa	amy Gleyed N	Matrix (F2)		hyd	Irology must be p	resent, unless disturbed or
	Dark Sunace (A12)		🗆 De	pleted Matrix	(F3)		pro		
	/ Mucky Mineral (S1)	(00)	☑ Re	dox Dark Sur	face (F6)	_,			
(LRR G)	n Mucky Peat or Peat	(82)		pleted Dark S		()			
				dox Depress	ions (F8)				
Restrictive La	iyer (if observed):								
Depth (inc	ches):						Hvdric S	oil Present?	⊠Yes □ No
Remarks: Evid	ence of soil mixing. Br	rick pieces and mi	xed horizons. F	-6 at 8 inche	s may be ı	emnant fr	om before surro	ounding developm	ent altered hydrology.
HYDROLOG	iΥ								
Wetland Hydr	ology Indicators:							Secondary Indi	cators (2 or more required)
Primary Indica	tors (minimum of one	is required; checl	c all that apply	<u>)</u>				□ Water-Staine	ed Leaves (B9) (MLRA 1, 2, 4A, and 4B)
L Surfac	ce Water (A1)		L Wa 2, 4A, a	iter-Stained L and 4B)	eaves (B) (except	MLRA 1,		atterns (B10)
L High V	Water Table (A2)		🗆 Sa	lt Crust (B11))			Saturation \	/isible on Aerial Imagery (C9)
□ Satura	ation (A3)		🗆 Aq	uatic Fauna ((B13)			Geomorphic	c Position (D2)
□ Water	Marks (B1)		🗆 Ну	drogen Sulfid	le Odor (C	:1)		Shallow Aqu	uitard (D3)
Sedim	nent Deposits (B2)		□ ox	idized Rhizos	pheres or	n Living R	oots		Il Test (D5)
🗆 Drift D	eposits (B3)		(C3)					Frost-Heave	ed Hummocks (D7)
🗌 Algal I	Mat or Crust (B4)		🗆 Pre	esence of Re	duced Iror	n (C4)			
🗌 Iron D	eposits (B5)		Re	cent Iron Rec	duction in	Tilled Soil	ls		
□ Surfac	ce Soil Cracks (B6)		(C6) □ <+	inted or Stree	sed Plan	s (D1) /I	RR		
	ation Visible on Aerial	Imagery (B7)	A)						
☐ Spars	ely Vegetated Concav	/e Surface (B8)	□ Otł	ner (Explain i	n Remark	s)			
Field Observa	tions:								
Surface Water	Present?	🗆 Yes 🗆 N	lo	Depth (incl	nes):				
Water Table P	resent?	🗹 Yes 🗌 N	lo	Depth (incl	nes): 16				
Saturation Pre	sent?	🗹 Yes 🗌 N	lo	Depth (incl	nes): 13		Wotland U.	Irology Dresset	
(Includes capil Remarks: Positiv	iary tringe) ve Alpha Alpha Din at 1	13", negative at 1	2". Water table	at 16 inches	s in a parti	cularly we	vvenand Hyd	s this point usual	v does not satisfy wetland hydrology
Hydrology on sit	e may have been affe	cted by surround	ing developme	ent diverting s	sheet flow	away fror	n site.		,

WETLAND D	U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Western Mountains, Valleys, and Coast Region See ERDC/EL TR-10-3; the proponent agency is CECW-COR								OMB Control #: 0710-0024, Exp:4/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)			
Project/Site:	We Are Up		City/C	County:		McKinle	eyville	S	ampling Dat	te: <u>04/1</u>	6/2024	
Applicant/Owner:	Keehn Develo	opment_	State:			California	<u>a</u>	S	ampling Poi	int: W3	-T1-W	
Investigator(S):	Hartnett and (<u>Cipra</u>	Sectio	Section, Township, Range:			<u>=</u>					
Landform (Hillside, Terra	ice, Etc.):	Terrace	Local	Relief (Cor	ncave, Convex,	None):	None		Slope (%	6): <u>3</u>		
Subregion (LRR):	<u>A</u>		Lat:	40.93339	9349	Long:	-124.09996	6578	Datum	: WG	<u>584</u>	
Soil Map Unit Name:	226 - Arcata a	and Candymountain	soils, 2-	oils, 2-9% slopes NWI Clas			NWI Classific	cation:	None			
Are climatic / hydrologic conditions on the site typical for this time of year?					🗆 Ye	es 🗹 No	(If no, expla	ain in Remar	rks.)			
Are 🗹 Vegetation, 🗆 Soil, or 🗆 Hydrology significantly disturbed?						Are "N	ormal Circun	nstances" present?]Yes ☑I	No		
Are Vegetation. Soil. or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)												
SUMMARY OF FIND	NGS – Attac	h site map show	ing saı	mpling po	oint locations	s, transects,	, important	features, etc.				
Hydrophytic Vegetation	Present?	☑ Yes		No								
Hydric Soil Present?		☑ Yes		No								
Wetland Hydrology Pre	sent?	Ves		No	Is the Sa	ampled Area	within a Wet	land? 🗹 Yes				
Remarks: Willow trees r	ecently cut and	resprouting as sapli	ng/shrub	os. Minimal I	herbaceous veo	g and a lot of s	lash present	. Above normal rain y	vear.			
VEGETATION – Use	scientific nar	nes of plants.						Sampl	ing Point:			
Tree Stratum (Plot Size: 30) ft)	•	Ab	solute %	Dominant	Indicator	Dominan	ce Test worksheet:	0			
1. Salix lasiolepis (Arroyo	Willow)		Cc 	over 5_	Species? Yes	Status FACW	Number of	of Dominant Species	That	5	(A)	
2 3			-		-	-	Are OBL,	FACW, or FAC:				
4 5			-		-	-	Total Num	wher of Dominant Cr		c		
6			-		_	-	Across A	ll Strata:	ecies _	0	(D)	
7 8			Ξ.		_	-						
Sapling/Shrub Stratum (Plo	ot Size: 15 ft)		15 Ab Co	i osolute %	=Total Cover Dominant Species?	Indicator Status	Percent o OBL, FA	of Dominant Species CW, or FAC:	That Are	83	(A/B)	
1. <u>Salix lasiolepis (Arroyo</u>	Willow)		20	<u>D</u>	Yes	FACW/						
2. <u>ilex aquitolium (English</u>	1. Salix Iasiolepis (Arroyo Willow) 20 2. Ilex aquifolium (English Holly) 3					FAOU						
0.	2. <u>Ilex aquifolium (English Holly)</u> 3.				No	FACU	Prevalenc	ce Index worksheet	:			

1. <u>Salix Iasiolepis (Arroyo Willow)</u>	20	Yes	FACW		
2. <u>Ilex aquifolium (English Holly)</u> 3	3	<u>No</u>	FACU	Prevalence Index worksheet:	
4	-	_	_	Total % Cover of:	Multiply by:
5 6	-	-	-	OBL species	x 1 =
7	-	_	_		
8	_		_	FACW species	x 2 =
Hart Otratum (Dist Cines E 4)	23	=Total Cover	Indicator		
Herb Stratum (Plot Size: 5 ft)	Absolute %	Dominant Species?	Status	FAC species	x 3 =
1. Crocosmia X crocosmiiflora (?)	3_	Y <u>es</u>	F <u>AC</u>		x 4 =
2. Equisetum telmateia (Giant Horsetail)	2	Yes	FACW	FACU species	× + -
3. <u>Epilobium ciliatum (Fringed Willowherb)</u>	1	No	FACW	LIDI species	x 5 =
45	-	-	-		× 0 –
5 6.	-	-	-	Column Totals: (A)	(B)
7	_	-	-	Prevalence Index	= B/A =
8	-		-	Hydrophytic Vogotation Indicators	<u>- b/A -</u>
Woody Vine Stratum (Plot Size: 15 ft)	6 Absolute %	= I otal Cover	Indicator	Hydrophytic vegetation indicators	·-
	Cover	Species?	Status	1- Rapid Test for Hydrophytic V	/egetation
<u>1. Rubus armeniacus (Himalayan Blackberry)</u> <u>2. Rubus ursinus (California Dewberry)</u>	3	<u>Yes</u> Yes	FAC FACU	✓ 2- Dominance Test is >50%	
3	-	-	-	□ 3 - Prevalence Index is ≤3.0 ¹	
5	-		-		(Drawide supporting data in
0 7	-	-	-		(Provide supporting data in
8	-	-	-	Remarks or on a separate sheet)	
	6	=Total Cover		5 – Wetland Non-Vascular Plar	nts ¹
% Bare Ground in Herb Stratum: <u>0</u>					
				Problematic Hydrophytic Veget	ation ¹ (Explain)
				¹ Indicators of hydric soil and wetland	hydrology must be present,
				unless disturbed or problematic.	
				Hydrophytic Vegetation Present	□ No
Remarks:					
Problematic Hydrophytic Vegetation Explanation:					

SAMPLING POINT: W3-T1-W

Profile Descr	ription: (Describe to th	he depth nee	ded to document	the indicat	or or con	firm the	absence of inc	dicators.)		
Depth (inches)	Matrix		Rec	lox Feature:	S Tumo1	1.002	Tautu		Demorko	
(incries) 0-4	10YR 3/2	100	Color (moist)		Type.	LOC-	l oam (clas	s unknown)	Remarks	
4-8	10YR 3/1	96	2.5YR 4/6	4	_	PL	Loam (clas	s unknown)	_	
<u>8-15</u>	<u>10YR 4/1</u>	<u>35</u>	7.5YR 5/8 and	25	-	M	<u>silt loam</u>		8-14 horizon has a mixed (dark grey and yellow) with	<u>d matrix</u>
	2.51 7/6	<u>45</u>							redox	
¹ Type: C=Co	ncentration, D=Depletio	n, RM=Reduc	ed Matrix, CS=Cov	vered or Co	ated Sand	d Grains.		² Location: PL=Pc	ore Lining, M=Matrix.	
Hydric Soil Ir	idicators: (Applicable t	to all LRRs, u	nless otherwise n	oted.)			Indic	ators for Problem	natic Hydric Soils ³ :	
Histo	sol (A1)		Sanc	ly Gleyed N	latrix (S4))		2 cm Muck (A10) (LRR A, E)	
Histic	: Epipedon (A2)		Sanc	ly Redox (S	\$5)			Iron-Manganese Ma	asses (F12) (LRR D)	
Black	(A3)		Indic	ators of hyd	Irophytic			Red Parent Materi	al (F21)	
🗌 Hydro	ogen Sulfide (A4)		vegetation and Stripped Matrix (S6)				Very Shallow Dark	Surface (F22)		
🗌 1 cm	Muck (A9) (LRR D, G)		Loamy Mucky Mineral (F1)				Other (Explain in F	Remarks)		
	eted Below Dark Surfac	e	(except MLRA 1)			21				
(A11)			Loamy Gleyed Matrix (F2)			sinc hyd	lrology must be pre	esent, unless disturbed or		
	Dark Surface (A12)		🗌 Depl	eted Matrix	(F3)		problematic.			
□ Sand	y Mucky Mineral (S1)		☑ Redo	ox Dark Sur	face (F6)					
☐ 2.5 c	m Mucky Peat or Peat ((S2)	🗌 Depl	eted Dark S	Surface (F	7)				
(LRR G)				ox Depressi	ons (F8)					
Restrictive L	ayer (if observed):									
Type:										
Depth (in	iches):						Hydric S	oil Present?	🗹 Yes 🛛 No	
Remarks: soil	mixing at 8 inches									
HYDROLOG	GY									
Wetland Hyd	rology Indicators:							Secondary Indica	ators (2 or more required)	
Primary Indica	ators (minimum of one i	s required; ch	eck all that apply)					□ Water-Stained	d Leaves (B9) (MLRA 1, 2, 4A ,	and 4B)
□ Surfa	ice Water (A1)		2 40 an	er-Stained L	eaves (B	9) (except	MLRA 1,	Drainage Pat	tterns (B10)	
🗆 High	Water Table (A2)			и чо) Cruct (B11)				Dry-Season \	Water Table (C2)	
V Satu	ration $(\Lambda 3)$			Ciusi (BTT)				□ Saturation Vi	sible on Aerial Imagery (C9)	
			🗆 Aqua	atic Fauna (B13)			Geomorphic	Position (D2)	
∐ Wate	r Marks (B1)		🗌 Hydr	ogen Sulfid	e Odor (C	:1)		☐ Shallow Aqui	itard (D3)	
🗌 Sedir	ment Deposits (B2)		DixO	ized Rhizos	nheres or	n Livina R	oots	FAC-Neutral	Test (D5)	
🗌 Drift I	Deposits (B3)		(C3)		pricies of	r Eiving i C	0013	Raised Ant M	lounds (D6) (LRR A)	
🗌 Algal	Mat or Crust (B4)		☑ Pres	ence of Red	duced Iror	ח (C4)		L Frost-Heaved	d Hummocks (D7)	
□ Iron [Deposits (B5)			ent Iron Rec	luction in	Tilled Soil	s			
□ Surfe	ice Soil Cracks (B6)		(C6)							
	lation Visible on Aerick	magery (B7)	🗌 Stun	ted or Stres	sed Plant	is (D1) (L l	RR			
		ayery (D7)	A)							
	sely vegetated Concave	e Sullace (Bo) 🗌 Othe	r (Explain ir	n Remarks	s)				
Field Observ Surface Wate	ατιons: r Present?			Depth (inch	nes):					
Water Table F	Present?			Depth (inch	nes): 13.8	5				
Saturation Pre	esent?		l No	Depth (inch	nes): 8					
(includes cap	illary fringe)						Wetland Hyd	Irology Present?	Yes	
Describe Rec	orded Data (stream gau	ıge, monitorin	g well, aerial photo	s, previous	inspectior	ns), if avail	able:			

ENG FORM 6116-9, FEB 2024

WETLAND D	U.S. Army Corps of - DETERMINATION DATA SHEET - See ERDC/EL TR-10-3; the p	Engineers • Western Mountains roponent agency is CE	, Valleys, and Coast Region ECW-COR	OMB Control #: 0710-002 Requirement Control Sy (Authority: AR 335-15,	OMB Control #: 0710-0024, Exp:4/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)			
Project/Site:	We Are Up	City/County:	McKinleyville	Sampling Da	ate: 04/16/2024			
Applicant/Owner:	Keehn Development	State:	California	Sampling Po	pint: <u>W4-T1-U</u>			
Investigator(S):	Hartnett and Cipra	Section, Township	, Range: <u>05 6N 1E</u>					
Landform (Hillside, Terr	ace, Etc.): <u>Slope</u>	Local Relief (Conc	ave, Convex, None): None	e Slope (%): <u>8</u>			
Subregion (LRR):	<u>A</u>	Lat: <u>40.932949</u>	21 Long: <u>-124.</u>	.1002839 Datum	n: <u>WGS84</u>			
Soil Map Unit Name:	226 - Arcata and Candymountain	n soils, 2-9% slopes	NWI C	lassification: <u>None</u>				
Are climatic / hydrologic	conditions on the site typical for th	is time of year?		No (If no, explain in Rema	arks.)			
Are D Vegetation, D	Soil, or 🛛 Hydrology significantly	disturbed?	Are "Normal Circumstances" present? Yes No					
Are 🗹 Vegetation, 🗌	Soil, or 🛛 Hydrology naturally pro	blematic?	(If needed, explain any answers in Remarks.)					
SUMMARY OF FIND	INGS – Attach site map show	ving sampling poir	nt locations, transects, impo	ortant features, etc.				
Hydrophytic Vegetatio	n Present? 🗌 Yes	☑ No						
Hydric Soil Present?	□ Yes	☑ No						
Wetland Hydrology Pre	esent? 🗌 Yes	☑ No	Is the Sampled Area within	a Wetland? 🗌 Yes	☑ No			
Remarks: Mowed lawn	; precipitation above normal. Fac do	ominant veg not hydrop	hytes.					
VEGETATION - Use	e scientific names of plants.			Sampling Point:	<u>W4-T1-U</u>			
Tree Stratum (Plot Size: 3	(0 ft)	Absolute %	Dominant Indicator Dom	ninenee Teet werkeheet				

•				1.0	
Tree Stratum (Plot Size: 30 ft)	Absolute %	Dominant	Indicator	Dominance Test worksheet:	
	Cover	Species?	Status		
1. <u>_</u>	_	_	_	Number of Dominant Species That	1 (A)
2	_	_	_	Are OBL_EACW_or EAC	
3	_	_	_	,	
4	_	_	_		
5.	_	_	_	Total Number of Dominant Species	1 (B)
6.	_	_	_	Across All Strate:	<u> </u>
7.	_	_	_	ACIOSS All Strata.	
8.	_	_	_		
-	0	=Total Cover	-	Dereent of Dominant Species That Are	100 (A/P)
Sapling/Shrub Stratum (Plot Size: 15 ft)	Absolute %	Dominant	Indicator		<u>100</u> (A/B)
	Cover	Species?	Status	OBL, FACW, or FAC:	
1.					
2.	-	-	-		
3.	-	-	-	Prevalence Index worksheet:	
4.	-	-	-	T () () ()	
5.	-	-	-	Total % Cover of:	Multiply by:
6	-	-	-	OBL species	x 1 =
7	-	-	-	ODE oposioo	× 1
8	-	-	-		× 2 -
0	0	- Total Cover	-	FACVV species	x z =
Herb Stratum (Plot Size: 5 ft)	Absolute %	Dominant	Indicator		
Herb Stratum (Flot Size, 5 ft)	Absolute %	Dominant	Status	FAC species 81	x 3 = 243
1 Des protonois (Kentuslas Blue Creas)	Cover	Species?	Status		
1. <u>Poa pratensis (Kentucky Blue Grass)</u>	60	<u>Yes</u>	FAC	FACU species 7	x 4 = ₂₈
2. Schedonorus arundinaceus (Tali Faise Rye Grass)	10	<u>NO</u>	FAC		20
3. <u>Ranunculus repens (Creeping Buttercup)</u>	10	No	FAC	LIPL species 1	x 5 - 5
4. <u>Trifolium dubium (Suckling Clover)</u>	5	No	FACU	OFL Species 1	x 3 = 3
5. <u>Rumex crispus (Curly Dock)</u>	1	No	FAC	Column Totals: (A)89	(B)276
<u>Rumex crispus (Curly Dock) : Bellis perennis</u>	<u>1</u>	No	UPL		(B)270
Hypochaeris radicata (Hairy Cat's-Ear)	1	No	FACU	Provalance Index - B/A	- 3 10
Sonchus asper (Spiny-Leaf Sow-Thistle)	<u>1</u>	No	FACU		x = 5.10
	89	=Total Cover		Hydrophytic Vegetation Indicators:	
Woody Vine Stratum (Plot Size: 15 ft)	Absolute %	Dominant	Indicator		
	Cover	Species?	Status	1- Rapid Test for Hydrophytic Vege	etation
1	_	_	_		
2	_	_	_	✓ 2- Dominance Test is >50%	
3	_	_	_		
4	_	_	_	3 - Prevalence Index is ≤3.0 ¹	
5.	_	_	_	_	
6	_	_	_	4 - Morphological Adaptations ¹ (Pro-	ovide supporting data in
7	_	_	_		
8	_	_	_	Remarks or on a separate sheet)	
	0	=Total Cover			
				□ 5 – Wetland Non-Vascular Plants ⁺	
% Bare Ground in Herb Stratum: 11					
—				Problematic Hydrophytic Vegetation	n ¹ (Explain)
				, , , , , , , , , , , , , , , , , , , ,	(1)
				The discovery of boundary and south and bound bound	
				indicators of hydric soli and wetland hyd	arology must be present,
				unless disturbed or problematic.	
				Hydrophytic	
				Vegetation U Yes	⊻ No
				Present	
				Present	
Remarks: Passed dominance test only with facultative veget	ation. Lack of h	yaric soil and w	etiand hydrolog	gy indicate facultative plants not acting as h	nyarophytes.
Problematic Hydrophytic Vegetation Explanation: Mowed lawn					
,,					

SOIL

SAMPLING POINT: W4-T1-U

Profile Descr	iption: (Describe to tl	ne depth needed to	document th	e indicat	or or con	firm the a	bsence of ind	dicators.)			
Depth	Matrix	<u> </u>	Redox	Features	3			,			
(inches)	Color (moist)	% Colo	r (moist)	%	Type ¹	Loc ²	Textu	ire	Remarks		
0-12	10YR 3/3	100		-	-	-	-		-		
12-15	<u>101R 3/2</u>	_100_		-	-	-	-		-		
¹ Type: C=Co	ncentration, D=Depletio	n, RM=Reduced Mat	rix, CS=Cover	ed or Co	ated Sand	Grains.		² Location: PL=Pore	Lining, M=Matrix.		
Hydric Soil Ir	dicators: (Applicable	to all LRRs, unless o	otherwise not	ed.)			Indic	ators for Problemati	ic Hydric Soils ³ :		
☐ Histo	sol (A1)		☐ Sandy	Gleyed N	latrix (S4)			2 cm Muck (A10) (LR	R A, E)		
☐ Histic	Epipedon (A2)		☐ Sandy	Redox (S	5)			Iron-Manganese Masse	es (F12) (LRR D)		
Black	Histic (A3)		□ Indicate	ors of hyd	rophytic			Red Parent Material ((F21)		
Hydro	ogen Sulfide (A4)		vegetation (S6)	and Strip	ped Matrix	ĸ	☐ Very Shallow Dark Surface (F22)				
🗆 1 cm	Muck (A9) (LRR D, G)		Loamy Mucky Mineral (F1))		Other (Explain in Ren	narks)		
	eted Below Dark Surfac	е	(except MLRA 1)				3.				
(A11)			Loamy Gleyed Matrix (F2)				³ Inc hvd	licators of hydrophytic Irology must be prese	c vegetation and v	ed or	
Thick	Dark Surface (A12)		Deplete	ed Matrix	(F3)		pro	blematic.	,		
☐ Sand	y Mucky Mineral (S1)		□ Redox	Dark Sur	face (F6)						
🗌 2.5 c	m Mucky Peat or Peat (S2)	Deplete	ed Dark S	urface (F7	")					
(LRR G)			□ Redox	Depressi	ons (F8)						
Restrictive L	ayer (if observed):										
Туре:											
Depth (in	ches):						Hydric S	oil Present?	□ Yes	🗹 No	1
Remarks:											
HYDROLOG	6Y										
Wetland Hyd	rology Indicators:							Secondary Indicator	rs (2 or more requ	<u>iired)</u>	
Primary Indica	ators (minimum of one i	s required; check all t	<u>that apply)</u>					U Water-Stained Le	eaves (B9) (MLRA	1, 2, 4A	, and 4B)
🗌 Surfa	ce Water (A1)		Water- 2. 4A. and	Stained L 4B)	eaves (B9) (except l	MLRA 1,	☐ Drainage Patter	ns (B10)		
🗌 High	Water Table (A2)		□, <i>u</i> , unu □ Salt Cr	ust (B11)				Dry-Season Wat Saturation Visible	ter Table (C2) le on Aerial Imag	ary (C.9)	
🛛 Satur	ation (A3)		☐ Aquatio	Fauna (B13)				sition (D2)	siy (03)	
□ Water	Marks (B1)		□ Hydrog	en Sulfid	e Odor (C	1)		Shallow Aquitare	d (D3)		
🗌 Sedir	nent Deposits (B2)			ed Rhizos	pheres on	Living Ro	oots		st (D5)		
🗆 Drift I	Deposits (B3)		(C3)						ummocks (D7)	,	
🗌 Algal	Mat or Crust (B4)		Presen	ce of Red	luced Iron	(C4)		- i iost-neaved H			
🗆 Iron 🛙	Deposits (B5)		□ Recent	Iron Red	luction in T	Filled Soils	6				
🗌 Surfa	ce Soil Cracks (B6)		(C6)				_				
	ation Visible on Aerial I	magery (B7)	L Stunted	d or Stres	sed Plants	s (D1) (LR	R				
	sely Vegetated Concave	e Surface (B8)	A)	Explain ir	Remarks	.)					
Field Observ	ations					<i>,</i>					
Surface Wate	r Present?	🗆 Yes 🗹 No	De	epth (inch	ies):						
Water Table F	Present?	🗆 Yes 🗹 No	De	epth (inch	ies):						
Saturation Pre	esent?	🗆 Yes 🗹 No	De	epth (inch	ies):						
(includes capi	llary fringe)						Wetland Hyd	Irology Present?	□ Ye	es	🗹 No
Describe Rec	orded Data (stream gau	ige, monitoring well, a	aerial photos, j	previous i	nspection	s), if availa	able:				
i terrial KS.		aniyeai									

WETLAND D	U.S. Army Corps DETERMINATION DATA SHEE See ERDC/EL TR-10-3; th	of Engineers F – Western Mountains , [*] e proponent agency is CE0	Valleys, and Coast Regi CW-COR	i, and Coast Region R A B Coast Region R			0/2024 MPT: 5-2a)
Project/Site:	We Are Up	City/County:	McKinle	eyville_	Sampling	J Date:	04/16/2024
Applicant/Owner:	Keehn Development	State:	California	<u>a</u>	Sampling) Point:	W4-T1-W
Investigator(S):	Hartnett and Cipra	Section, Township,	Range: 05 6N 1	<u>E</u>			
Landform (Hillside, Terra	ace, Etc.): <u>Slope</u>	Local Relief (Conca	ve, Convex, None):	None	Slop	e (%):	8
Subregion (LRR):	<u>A</u>	Lat: <u>40.9329275</u>	<u>8</u> Long:	-124.10013421	Da	itum:	WGS84
Soil Map Unit Name:	226 - Arcata and Candymount	ain soils, 2-9% slopes		NWI Classification:	None	<u>.</u>	
Are climatic / hydrologic	conditions on the site typical for		es 🗹 No	(If no, explain in Re	emarks.)		
Are D Vegetation, D	Soil, or 🛛 Hydrology significant	ly disturbed?	Are "Normal Circumstances" present? 🛛 Yes 🔲 No				
Are 🗹 Vegetation, 🗌	Soil, or 🗌 Hydrology naturally p	problematic?	(If needed, explain any answers in Remarks.)				
SUMMARY OF FIND	INGS – Attach site map sh	owing sampling point	locations, transects	, important featu	res, etc.		
Hydrophytic Vegetatio	n Present? Ves	□ No					
Hydric Soil Present?	V Yes	🗆 No					
Wetland Hydrology Pre	esent? Ves	🗆 No	Is the Sampled Area	within a Wetland?	✓ Yes		No
Remarks: Seep. Mowe	d lawn with saturated soils and w	ater seeping out onto the s	surface. Precipitation is ab	ove normal for the ye	ear.		
	i i i i i i i i i i i i i i i i i i i						

VEGETATION – Use scientific names of plants.				Sampling Point.	<u>vv4-1 1-vv</u>	
Tree Stratum (Plot Size: 30 ft)	Absolute %	Dominant	Indicator Status	Dominance Test worksheet:		
1	00101	openeo.	Oldido	Number of Dominant Species That	1	(A)
2	-	-	-		<u> </u>	(~)
2	-	-	-	Are OBL, FACW, or FAC:		
3	-	-	-			
4. <u>-</u>	-	-	-			
5	-	-	-	Total Number of Dominant Species	1	(B)
6	-	-	-	Across All Strata:		. ,
7	-	-	-			
8	-	-	-			
	0	=Total Cover		Percent of Dominant Species That Are	100	(A/B)
Sapling/Shrub Stratum (Plot Size: 15 ft)	Absolute %	Dominant	Indicator		100	((()))
	Cover	Species?	Status	UBL, FACVV, OF FAC:		
1	_	_	_			
2.	_	_	_			
3.	_	_	_	Prevalence Index worksheet:		
4.	-	-	-	T 1 100 0 1		
5.	-	-	-	Total % Cover of:	wuitipiy by:	
6	-	-	-	OBL species	x 1 =	
7	-	-	-	OBE openie	~ 1	
8	-	-	-	EACW anapian	× 2 –	
0	0	- Total Cover	-	FACVV species	x 2 -	
Harb Stratum (Diat Size: 5 ft)	Abaclute %	Dominant	Indicator			
Herd Stratum (Piot Size: 5 It)	Absolute %	Dominant	Indicator	FAC species	x 3 =	
	Cover	Species?	Status			
1. <u>Agrostis stolonitera (Spreading Bent)</u>	80	Yes	FAC	FACU species	x 4 =	
2. Ranunculus repens (Creeping Buttercup)	5	No	FAC	Theo species		
3. <u>Cyperus eragrostis (Tall Flat Sedge)</u>	3	No	FACW			
Holcus lanatus (Common Velvet Grass)	3	No	FAC	UPL species	- C X	
5. <u> </u>	_	_	_	Column Totals: (A)		
6	_	_	_			(B)
7	_	_	_	Dravalance Index -		
8.	_	_	_	Prevalence index =	D/A =	
_	91	=Total Cover	-	Hydrophytic Vegetation Indicators:		
Woody Vine Stratum (Plot Size: 15 ft)	Absolute %	Dominant	Indicator			
(Cover	Species?	Status	1- Rapid Test for Hydrophytic Veg	etation	
1.						
2	-	-	-	✓ 2- Dominance Test is >50%		
3	-	-	-			
<u> </u>	-	-	-	\square 3 - Prevalence Index is <3.0 ¹		
	-	-	-			
5. <u>–</u>	-	-	-	1 - Morphological Adaptations ¹ (Pr	ovide supporting	ni eteb r
7	-	-	-		ovide supporting	y uata ili
7 8	-	-	-	Remarks or on a separate sheet)		
0	-	-Total Cover	-			
	0	- Total Cover		5 – Wetland Non-Vascular Plants	1	
% Bare Ground in Herb Stratum: 9					.	
				Problematic Hydrophytic Vegetatic	on¹ (Explain)	
				¹ Indicators of hydric soil and wetland hy	drology must be	present
				indicators of hydric son and wetland hy	arology must be	, present,
				unless disturbed or problematic.		
				Hydrophytic III	—	
				Vegetation Ves	LI No	
				Drecent		
				Present		
8 1				-		
Remarks:						
Problematic Hydrophytic Vegetation Explanation:						

SOIL

SAMPLING POINT: W4-T1-W

Profile Desc	cription: (Describe to th	e depth needed to d	document the	e indicat	or or conf	firm the a	absence of indicators	.)			
Depth	Matrix		Redox	Features	5			-			
(inches)	Color (moist)	% Color	(moist)	%	Type ¹	Loc ²	Texture		Remark	s	
0-4	10YR 3/2	<u>100</u>	1/0	45	_	-	Loam (class unkno	<u>wn)</u>	-		
4-11	<u>101R 3/1</u>	<u>65</u> <u>2.51R4</u>	<u>H/O</u>	15	-	-	Loam (class unkno	<u>wnj</u>	-		
¹ Type: C=C	oncentration, D=Depletion	n, RM=Reduced Matr	ix, CS=Cover	ed or Co	ated Sand	Grains.	² Locati	on: PL=Pore	Lining, M=Matri	x.	
Hydric Soil	Indicators: (Applicable t	o all LRRs, unless of	therwise note	ed.)			Indicators for	or Problemat	ic Hydric Soils ³	:	
Hist	tosol (A1)		☐ Sandy	Gleyed N	latrix (S4)		🗌 2 cm Mu	uck (A10) (LR	R A, E)		
🗆 Hist	tic Epipedon (A2)		☐ Sandy	Redox (S	5)		🗆 Iron-Mar	nganese Masse	es (F12) (LRR D)	
🗆 Blad	ck Histic (A3)		□ Indicate	ors of hyd	rophytic		🗌 Red Par	rent Material ((F21)		
🗆 Hyd	Irogen Sulfide (A4)		vegetation (S6)	and Strip	ped Matrix	K	☐ Very Shallow Dark Surface (F22)				
🗆 1 cr	m Muck (A9) (LRR D, G)		Loamy	☐ Loamy Mucky Mineral (F1)			Other (E	Explain in Rer	marks)		
🗆 Dep	oleted Below Dark Surface	e	(except MI	LRA 1)			31 1. 1				
(A11)			Loamy Gleyed Matrix (F2)			^o Indicators hvdrology n	ot nyaropnytic nust be prese	c vegetation and ent. unless distur	bed or	1	
Thic	ck Dark Surface (A12)			ed Matrix	(F3)		problematic		,		
🗌 San	ndy Mucky Mineral (S1)		☑ Redox	Dark Surl	face (F6)						
2.5	cm Mucky Peat or Peat (S2)	Deplete	ed Dark S	urface (F7	')					
(LRR G	i)		□ Redox	Depressi	ons (F8)						
Restrictive	Layer (if observed):										
Туре:											
Depth (inches):						Hydric Soil Pres	ent?	V Yes		0
Remarks:											
HYDROLO	GY										
Wetland Hy	drology Indicators:						Secon	dary Indicator	rs (2 or more red	<u>quired)</u>	
Primary Indi	cators (minimum of one is	s required; check all the	<u>hat apply)</u>				🗆 Wa	ater-Stained Le	eaves (B9) (MLR	A 1, 2, 4	A, and 4B)
Suri	face Water (A1)		Water- 2, 4A, and	Stained L 4B)	eaves (B9) (except	MLRA 1, Dra	ainage Patter	ms (B10)		
🗹 Higi	h Water Table (A2)		□ Salt Cr	ust (B11)				y-Season Wa	iter Table (C2) ile on Aerial Ima	aerv (C9))
☑ Satu	uration (A3)		□ Aquatio	: Fauna (I	B13)			eomorphic Po	sition (D2)	9) (,
□ Wat	er Marks (B1)		□ Hydrog	en Sulfid	e Odor (C	1)	□ Sh	allow Aquitar	d (D3)		
□ Sed	liment Deposits (B2)		Oxidize	ed Rhizos	pheres on	Living R	Dots	C-Neutral Te	st (D5)	A)	
Drift	t Deposits (B3)		(C3)					nst-Heaved H	lummocks (D7)	~)	
🗆 Alga	al Mat or Crust (B4)		V Presen	ce of Rec	luced Iron	(C4)					
🗆 Iron	Deposits (B5)		Recent	Iron Red	uction in T	Tilled Soil	s				
□ Suri	face Soil Cracks (B6)		(C6)								
	ndation Visible on Aerial I	magery (B7)	☐ Stunted	d or Stres	sed Plants	s (D1) (Ll	RR				
	risely Vegetated Concave	e Surface (B8)	A)								
			U Other (Explain ir	n Remarks)					
Field Obser Surface Wat	vations: ter Present?		De	epth (inch	es):						
Water Table	Present?		De	epth (inch	es): 4						
Saturation P	resent?		De	epth (inch	es): 0						
(includes ca	pillary fringe)						Wetland Hydrology	Present?		/es	
Describe Re	corded Data (stream gau	ge, monitoring well, a	erial photos, p	previous i	nspection	s), if avail	able:				

Appendix C Site Photographs



Photo 1. Looking north from the southern edge of the PSB.



Photo 2. The northeastern edge of the PSB, showing the Coastal Willow Alliance backed by the Sitka Spruce Alliance behind it.



Photo 3. Viewing the southern edge of the PSB near Mill Creek.



Photo 4. Facing west in the center of the PSB.



Photo 5. Viewing a swale in the center of the PSB facing north.



Photo 6. Viewing more hydrophytic vegetation within Wetland 1, present on the upper slope.



Photo 7. Viewing a swale at the base of the slope within Wetland 1.



Photo 8. Dormant Coastal Willow Alliance SNC within the riparian corridor of Mill Creek.



Photo 9. SNCs Coastal Willow Alliance backed by Sitka Spruce Alliance within the riparian corridor of Mill Creek.



Photo 10. Mill Creek in late January 2022.

Appendix D

Rapid Assessment Datasheets

Combined Vegetation Rapid Assessment and Relevé Field Form (Revised March 27, 2018)

1

"North State

		Final vegetation type: Association
. LOCATIONAL	ENVIRONMENTAL	L DESCRIPTION circle: Relevé or RA
Database #:	Date:	Name of recorder: Belsey McDonald
MANGIN	19/14/2	Other surveyors:
venau	UID:	Location Name: Werrup /Keehn Development
For Office Use: Final database #: Final vegetation type: Allance Association Citcle: Relevé or RA L. LOCATIONALENVIRONMENTAL DESCRIPTION citcle: Relevé or RA Database #: Date: Name of recorder: hels (L)		
UTME	UT	MN Zone: 11 NAD83 GPS error: 11/ m./ PDOP
Decimal degrees:	LAT	LONG
GPS within stan	d? Yes / No If N	No, cite from GPS to stand: distance (m) bearing ° inclination °
and record: Base	point ID	Projected UTMs: UTME UTMN
Camera Name: \F Other photos:	hone Cardinal	Iphotos at ID point: NESW 12,29pm
Stand Size (acres) Exposure, Actual	Propaty >5 1	Plot Area (m ²): 100 / Plot Dimensions x m RA Radius 20 m SE (SW) Flat Variable Steepness, Actual °: 0° (1-5°) > 5-25° > 25
Topography: M Geology code:	acro: top upper Soil Tex	mid lower bottom Micro: convex flat concave undulating sture code: Upland or Wetland/Riparian (circle one)
% Surface cover: H20: BA Stee	ms:25 Litter:30	Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud) Bedrock: Boulder: Stone: Cobble: \Gravel: Stines: 38 =100%
% Current year b	ioturbation	Past bioturbation present? Yes / No % Hoof punch
Site history, stand of prof willow Similar	es / No (circle one) If age, comments: C Derty. Ser devicinant tree Sp at NG	fyes, describe in Site history section, including date of fire, if known. haracterizing forested area on outer edg parated out areas of strong coastal ce without taller spruce/alder canopy. pecces composition along Mill Creek.
Fire evidence: Yes Site history, stand of prof willow Similar FA point	es / No (circle one) If age, comments: C Derty. Sec devision tree sp at NE	fyes, describe in Site history section, including date of fire, if known. haracterizing forested area on outer edg parated out areas of strong coastal ce without taller spruce/alder canopy, pecces composition along Mill Creek.
Fire evidence: Ye Site history, stand of prof willow Similar FA point	res / No (circle one) If age, comments: (perty . Sec devicinant tree sp at NE (/ Intensity (L,M,H):	fyes, describe in Site history section, including date of fire, if known. haracterizing forested area on outer edg parated out areas of strong coastal ce without taller spruce / alder canopy, pecces composition along Mill Creek.
Fire evidence: Ye Site history, stand of prof willow Similar FA point Disturbance code II. HABITAT DE	es / No (circle one) If age, comments: (perty. Sec devicinant tree Sp at NE (/ Intensity (L,M,H): SCRIPTION	fyes, describe in Site history section, including date of fire, if known. haracterizing forested area on outer edg parated out areas of strong coasta! ce without taller spruce/alder canopy, pecces composition along Mill Creek. corner.
Fire evidence: Ya Site history, stand of prof willow Similar FA peint Disturbance code <u>II. HABITAT DE</u> Tree DBH : <u>T1</u> (< Shrub: <u>S1</u> scedlin Herbaceous: <u>H1</u> (- Desert Riparian T	es / No (circle one) If age, comments: $($ derive Set $derive Setderive Set derive Setderive Setderive Set derive Setderive Setderiv$	fyes, describe in Site history section, including date of fire, if known. haracterizing forested area on outer edg parated out areas of strong coastal ce without taller spruce/after canopy, pecces composition along Mill Creek. corner. T3 (6-11"dbh), T4 (11-24" dbh), T5 (>24" dbh), T6 multi-layered (T3 or T4 layer under T5, >60% cover) ng (<1% dead, S3 mature (1-25% dead), S4 decadent (>25% dead) "ht.) mem ht.), 2 (2-100. ht.), 3 (10-200. ht.), 4 (>200. ht.)
Fire evidence: Ye Site history, stand of prof willow Similar FA point A point FA point Interbance code II. HABITAT DE Tree DBH : <u>T1</u> (< Shrub: <u>S1</u> seedlin Herbaccous: <u>H1</u> (- Desert Riparian T Desert Palm/Josh	es / No (circle one) If age, comments: $($))))))))))	fyes, describe in Site history section, including date of fire, if known. haracterizing forested area on outer edg parated out areas of strong coastal ce without taller spruce/alder canopy, pecces composition along Will Creek. corner. T3 (6-11" dbh), T4 (11-24" dbh), T5 (>24" dbh), T6 multi-layered (T3 or T4 layer under T5, >60% cover) ng (<1% deadle <u>S3</u> mature (1-25% dead). <u>S4</u> decadent (>25% dead) "h.) tem ht.), 2 (2-10ft. ht.), 3 (10-20ft. ht.), 4 (>20ft. ht.) e diameter). 2 (1.5-6" diam.), 3 (>6" diam.)
Fire evidence: Ya Site history, stand of prof willow Similar FA peint Disturbance code <u>II. HABITAT DE</u> Tree DBH : <u>T1</u> (< Shrub: <u>S1</u> scedlin Herbaccous: <u>H1</u> (- Desert Riparian T Desert Palm/Joshu <u>III. INTERPRET</u>	es / No (circle one) If age, comments: (-) (fyes, describe in Site history section, including date of fire, if known. haracterizing forested area on outer edg parated out areas of strong coastal ce without taller spruce /afder canopy, pecces composition along Mill Creek. carrer. <u>T3 (6-11" dbh). T4 (11-24" dbh). T5 (>24" dbh). T6 multi-layered (T3 or T4 layer under T5, >60% cover)</u> mg (<1% dead. <u>S3 mature (1-25% dead).</u> <u>S4 decadent (>25% dead)</u> "ht) mem ht.), 2 (2-10ft. ht.), 3 (10-20ft. ht.), 4 (>20ft. ht.) e diameter), 2 (1.5-6" diam.), 3 (>6" diam.)
Fire evidence: Ya Site history, stand of prof willow Similar FA peint Disturbance code <u>II. HABITAT DE</u> Tree DBH : <u>T1</u> (< Shrub: <u>S1</u> scedlin Herbaccous: <u>H1</u> (- Desert Riparian T Desert Palm/Joshu <u>III. INTERPRET</u> , Field-assessed veg	es / No (circle one) If age, comments: Control of the Sector of the Sect	fyes, describe in Site history section, including date of fire, if known. haracterizing forested area on outer edg parated out areas of strong coastal ce without taller spruce/alder canopy, pecces composition along Mill Creek. Carner. <u>T3</u> (6-11" dbh). <u>T4</u> (11-24" dbh), <u>T5</u> (>24" dbh), <u>T6</u> multi-layered (T3 or T4 layer under T5, >60% cover) ng (<1% dead. <u>S3</u> mature (1-25% dead), <u>S4</u> decadent (>25% dead) "ht.) atem ht.), 2 (2-10f. ht.), 3 (10-20ft. ht.), 4 (>20ft. ht.) e diameter). 2 (1.5-6" diam.), 3 (>6" diam.) He: <u>StHL3 Spruce forest Alliance</u>
Fire evidence: Ye Site history, stand of prof Similar Similar FA point A point A point II. HABITAT DE Tree DBH : <u>T1</u> (< Shrub: <u>S1</u> seedlin Herbaceous: <u>H1</u> (- Desert Riparian T Desert Palm/Joshu <u>III. INTERPRET</u> . Field-assessed veg Field-assessed Ass	es / No (circle one) If age, comments: Deffy Sec developments: Tree Sec At NE SCRIPTION I" dbh), <u>T2</u> (1-6" dbh), g (<3 yr. old), <u>S2</u> your <12" plant ht. <u>H2</u> (>12" ree/Shrub: T (<2ft. s ia Tree: 1 (<1.5" base ATION OF STAND etation Alliance name ociation name (option	fyes, describe in Site history section, including date of fire, if known. haracterizing forested area on outer edg parated out areas of strong coastal ce without taller spruce /alder canopy, pecces composition along Mill Creek. Carner. T3 (6-11" dbh), T4 (11-24" dbh), T5 (>24" dbh), T6 multi-layered (T3 or T4 layer under T5, >60% cover) ng (<1% dead. S3 mature (1-25% dead). S4 decadent (>25% dead) "ht.) nem ht.), 2 (2-10fl. ht.), 3 (10-20fl. ht.), 4 (>20fl. ht.) e diameter), 2 (1.5-6" diam.), 3 (>6" diam.) He: SittLa Spruce forest Alliance nal): Picea sitchen is a state of the state o
Fire evidence: Ye Site history, stand of prof Similar Similar FA point A point	es / No (circle one) If age, comments: Control of devicine of tree Sp at NG (/ Intensity (L,M,H): SCRIPTION (dbh), <u>T2</u> (1-6" dbh), g (3 yr. old), <u>S2</u> your (2" plant ht, <u>H2</u> ()12" ree/Shrub: 1 (<2ft. s at Tree: 1 (<1.5" base ATION OF STAND etation Alliance nam ociation name (option s/direction: Salue)	fyes, describe in Site history section, including date of fire, if known. haracterizing forested area on outer edg parated out areas of strong coastal ce without taller spruce / area on outer edg pecces composition along Mill Creek. corner. <u>T3</u> (6-11" abh). <u>T4</u> (11-24" abh), <u>T5</u> (>24" abh), <u>T6</u> multi-layered (T3 or T4 layer under T5, >60% cover) ng (<1% dead. <u>S3</u> matrixe (1-25% dead), <u>S4</u> decadent (>25% dead) "ht) tem ht.), 2 (2-10ft. ht.), 3 (10-20ft. ht.), 4 (>20ft. ht.) e diameter), 2 (1-56" diam.), 3 (>6" diam.) <u>te: Sittlas Spruce forest Allisonce</u> nal): <u>Picea sitcheonest Allisonce</u> <u>khocheriana</u> / <u>S</u> . <u>Agrostis staloi fesa / Sk</u>
Fire evidence: Ya Site history, stand of prof willac FA prof Field-assessed veg Field-assessed veg Field-assessed veg Field-assessed veg Field-assessed veg Field-assessed veg	es / No (circle one) If age, comments:	fyes, describe in Site history section, including date of fire, if known. haracterizing forested area on outer edg parated out areas of strong coastal ce without taller spruce /arder canopy, pecces composition along Mill Creek. Coner. T3 (6-11" dbh). T4 (11-24" dbh), T5 (>24" dbh), T6 multi-layered (T3 or T4 layer under T5, >60% cover) and (1% dead, S3 mature (1-25% dead). "ht) tem ht), 2 (2-10ft. ht), 3 (10-20ft. ht), 4 (>20ft. ht.) e diameter). 2 (1.5-6" diam.) He: Sittka Spruce forest Alliance nal): Picea sitche gis-Almus rubra k hooteriang / S. Agrostis stolorifes a /SW L (M) H Explain: patchy distribution

Combined Vegetation Rapid Assessment and Relevé Field Form (Revised March 27, 2018) SPECIES SHEET

Database #:	WEIROO1	

IV. VEGETATION DESCRIPTION	A Star	and the second second second second second second second
<u>% Cover</u> - Conifer tree / Hardwood tree: <u>CO / 4(</u>) Reger	% NonVasc cover: Total % Vasc Veg cover: 60
Height classes 1 = 1/2m 2=1/2 1m 2=1/2m 4=2 fr	Z Regel	G = 10 15m 7=15 20m 8=20.35m 9=35-50m 10=>50m
Height classes. 1-~1/2th, 2-1/2-1th, 3-1-2th, 4-2-3t	n, 3-3-101	ii, 6-10-15iii, 7-15-20iii, 8-20-55iii, 7-55 50iii, 7-55
Cover Intervals for reference: r = trace, + =	$rac{100}{100}, E = SE$	eding, S = Shrub, H= Herb, N= Non-vascular %, >5-15%, >15-25%, >25-50%, >50-75%, >75%
Stratum Species	% cover	C Final species determination
T Picea sitchensis	40	
T Thuiz olicata	20	
T Alnus rubra	35	
TIS Francia purshiana	S	
T Eucalizetus aldorlus	5	
5 Salix hockediana	5	
5 Bulas acmeniacus	6	
5 RUBUSUSINUS	3	
5 Erica luscitania	1	
5 Morella californica	(
5 Cotonesster	.5	
It Equisation telmaters	1	
H Grex obrupta	.5	
H Holeus Lanatus	1	
H Agrostis stolonifera	1	
H Lotis conjulator	.5	
A Ranuncilus repens	.5	
It Anthoxanthun doratur	1.7	
	· · · · ·	
Unusual species:		

Combined Vegetation Rapid Assessment and Relevé Field Form (Revised March 27, 2018)

For Office Use:	Final database #:	Final vegetation type: Alliance				
LUCATIONAL	ENVIRONMENTAL	DESCRIPTION circle: Relevé or RA				
Database #:	Date:	Name of recorder: Kelsen McDonald				
	9/14/2	Other surveyors:				
WEIRCO	UID:	Location Name: DEVEND				
N	0	For Palavia only: Bearing ^o left axis at ID point of Long / Short side				
GPS name: Acre	ND IT	Zone: 11 NAD83 GPS error: ft./ m./ PDOP				
UTME	UI					
Decimal degrees:	LAT	LONG				
GPS within stan	d? Yes / No If N	o, cite from GPS to stand: distance (m) bearing ° inclination °				
and record: Base	point ID	Projected UTMs: UTME UTMN				
Camera Name: p	hone Cardinal	photos at ID point: NESW 12:56				
Other photos:	-					
Stand Size (acres) Exposure, Actual	<1) 1-5, >5 1 *: NE NW	Plot Area (m ²): 100 / Plot Dimensions x m RA Radius m SE (SW) Flat Variable Steepness, Actual °: 0° (1-5°) > 5-25° > 25				
Topography: Ma	acro: top upper Soil Tex	mid lower bottom Micro: convex flat concave undulating ture code: Upland or (Wetland/Riparjan (circle one)				
% Surface cover: (Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud) % BA Stems: Litter: Bedrock: Boulder: Stone: Cobble: Gravel: Fines: 20 = 100%						
% Current year b Fire evidence: Ye	% Current year bioturbation Past bioturbation present? Yes / No % Hoof punch Fire evidence: Yes / No (circle one) If yes, describe in Site history section, including date of fire, if known.					
аууламир жалаа (100 с. с. с. алуулаа (100 с.						
Disturbance code	CRIPTION					
Tree DBH : <u>T1</u> (<1 Shrub: <u>S1</u> seedling Herbaceous: <u>H1</u> (<	" dbh), <u>T2</u> (1-6" dbh), g (<3 yr. old), <u>S2</u> youn 12" plant ht (. <u>H2</u> (>12"	<u>T3</u> (6-11" dbh). <u>T4</u> (11-24" dbh), <u>T5</u> (>24" dbh), <u>T6</u> multi-layered (T3 or T4 layer under T5, >60% cover) g (<1% dead, <u>S3</u> mature (1-25% dead), <u>S4</u> decadent (>25% dead) ht.)				
Desert Riparian T	ree/Shrub: 1 (<2ft. st	em ht.), 2 (2-10ft. ht.), 3 (10-20ft. ht.), 4 (>20ft. ht.)				
Desert Palm/Joshu	a Tree: 1 (<1.5" base	diameter), 2 (1.5-6" diam.), 3 (>6" diam.)				
III. INTERPRETA	TION OF STAND					
Field-assessed veg	etation Alliance name	" Coastal willow Thicket Alliance				
Field generad Acr	ociation name (option	al):				
Adjacent Alliances	direction: Pices	sitchensis NES. Agrostisstdonitera (L)				
Confidence in Allia	ance identification:	I. M. H. Explain: Patches on edge of Sitka sprice for				
Phenology (E,P,L)	Herbe Shrube	Tree Other identification or mapping information:				
-, -,-m=1 -mm						

Database	Combined Vegetation 1 #: <u>LJEIROS</u> 2	Rapid A (Revised N SPECII	sses larch ES S	sment and Relevé Field Form 27, 2018) HEET
IV. VEGI	ETATION DESCRIPTION	Passeca		A CARL CONTRACTOR OF THE OWNER OF
<u>% Cover</u> - <u>Height Cla</u> <i>Heigh</i>	Conifer tree / Hardwood tree: //	Rege Rege 1, 5=5-101 ng, E = SI	% nera nera n, 6 Eedlii	NonVasc cover: - Total % Vasc Veg cover: 00 ting Tree: 1 Shrub: 00 Herbaceous: 5 ting Tree: 3 Shrub: 5 Herbaceous: 1 =10-15m, 7=15-20m, 8=20-35m, 9=35-50m, 10=>50m ng, S = Shrub, H= Herb, N= Non-vascular
<u>s</u> , , le	% Cover Intervals for reference: r = trace, + = -	<1%, 1-5	%,	>5-15%, >15-25%, >25-50%, >50-75%, >75%
Stratum S	pecies	% cover	C	Final species determination
1.10	Alnus rubrz	6		
5	Salux hockeriana	85		
5	Rubus ursinus	20		
5	Rubus armeniacus	5		
H	Ranunculus repens	1		
H	Holous lanatus			
# 7	Juncus hesperius	1		
H	Lotus conficulatus	.5		~
H	Agrostis Stalonifera	.5		
H	Anthoxantium coordium	.5		
H	Carex obnupta	.5		
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Appendix E NRCS Custom Soil Resources Report

Map Unit Description

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named, soils that are similar to the named components, and some minor components that differ in use and management from the major soils.

Most of the soils similar to the major components have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Some minor components, however, have properties and behavior characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities. Soils that have profiles that are almost alike make up a *soil series*. All the soils of a series have major horizons that are similar in composition, thickness, and arrangement. Soils of a given series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Additional information about the map units described in this report is available in other soil reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the soil reports define some of the properties included in the map unit descriptions.

Report—Map Unit Description

Humboldt County, Central Part, California

171—Worswick-Arlynda complex 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2ll1w Elevation: 0 to 810 feet

Mean annual precipitation: 60 to 75 inches Mean annual air temperature: 50 to 55 degrees F Frost-free period: 275 to 330 days Farmland classification: Prime farmland if irrigated and drained

Map Unit Composition

Worswick and similar soils: 55 percent Arlynda and similar soils: 35 percent Minor components: 10 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Worswick

Setting

Landform: River valleys Landform position (two-dimensional): Backslope Landform position (three-dimensional): Mountainbase Down-slope shape: Linear Across-slope shape: Linear Parent material: Alluvium derived from mixed sources

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material

A1 - 1 to 2 inches: silt loam

A2 - 2 to 4 inches: silt loam

Bwg - 4 to 9 inches: silt loam

Cg1 - 9 to 15 inches: loamy sand

Cg2 - 15 to 30 inches: gravelly loam

- Cg3 30 to 36 inches: silt loam
- Cg4 36 to 60 inches: silt loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly 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: About 0 to 4 inches
Frequency of flooding: NoneOccasional
Frequency of ponding: Occasional
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 5w Hydrologic Soil Group: B/D Ecological site: F004BX111CA - Redwood/western swordfernredwood sorrel, floodplains and terraces, loam Other vegetative classification: Forest Type IV, coastal (RNPF004CA)

Hydric soil rating: Yes

Description of Arlynda

Setting

Landform: River valleys Landform position (two-dimensional): Backslope Landform position (three-dimensional): Mountainbase Down-slope shape: Linear Across-slope shape: Linear Parent material: Alluvium derived from mixed sources

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material *A - 1 to 2 inches:* silt loam *Bwg - 2 to 15 inches:* loam *Cg - 15 to 35 inches:* loam *2CAgb - 35 to 60 inches:* loam

Properties and qualities

Slope: 0 to 2 percent Depth to restrictive feature: More than 80 inches Drainage class: Very poorly drained Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr) Depth to water table: About 2 to 20 inches Frequency of flooding: NoneOccasional Frequency of ponding: Frequent Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm) Available water supply, 0 to 60 inches: High (about 11.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 5w Hydrologic Soil Group: B/D Ecological site: F004BX111CA - Redwood/western swordfernredwood sorrel, floodplains and terraces, loam Other vegetative classification: Forest Type IV, coastal (RNPF004CA) Hydric soil rating: Yes

Minor Components

Bigtree

Percent of map unit: 5 percent Landform: Alluvial fans, terraces, fan remnants Landform position (two-dimensional): Backslope, toeslope Landform position (three-dimensional): Mountainbase Down-slope shape: Linear Across-slope shape: Linear Ecological site: F004BX111CA - Redwood/western swordfernredwood sorrel, floodplains and terraces, loam

Other vegetative classification: Forest Type IV, coastal (RNPF004CA) *Hydric soil rating:* No

Fluventic dystrudepts, loamy-skeletal

Percent of map unit: 5 percent Landform: Alluvial fans Landform position (two-dimensional): Backslope Landform position (three-dimensional): Mountainbase Down-slope shape: Linear Across-slope shape: Linear Ecological site: F004BX111CA - Redwood/western swordfernredwood sorrel, floodplains and terraces, loam Other vegetative classification: Forest Type IV, coastal (RNPF004CA) Hydric soil rating: No

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

226—Arcata and Candymountain soils, 2 to 9 percent slopes

Map Unit Setting

National map unit symbol: 2lmt1 Elevation: 10 to 310 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: Farmland of statewide importance

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 sedimentary rock

Typical profile

A - 0 to 27 inches: loam AB - 27 to 36 inches: loam Bw - 36 to 63 inches: sandy loam

Properties and qualities

Slope: 2 to 9 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: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): 2e Land capability classification (nonirrigated): 2e

 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 sedimentary rock

Typical profile

A - 0 to 17 inches: fine sandy loam Bw - 17 to 55 inches: fine sandy loam C - 55 to 79 inches: loamy very fine sand

Properties and qualities

Slope: 2 to 9 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 8.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 3e 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

Halfbluff

Percent of map unit: 4 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 Other vegetative classification: Forest Type IV, coastal (RNPF004CA) 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

Timmons

Percent of map unit: 2 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

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 7, Sep 6, 2021
Appendix F

Record of Climatological Observations and WETS Table

WETS Station: ARCATA EUREKA AP, CA

Requested years: 1994 -2024

Month	Avg Max Temp	Avg Min Temp	Avg Mean Temp	Avg Precip	30% chance precip less than	30% chance precip more than	Avg number days precip 0.10 or more	Avg Snowfall	
Jan	56.1	40.5	48.3	7.16	4.66	8.61	12	-	
Feb	55.6	39.6	47.6	6.60	3.64	8.05	11	-	
Mar	56.0	40.3	48.2	6.64	4.56	7.92	12	-	
Apr	56.9	42.1	49.5	3.95	2.54	4.75	9	-	
May	59.2	45.7	52.4	1.93	0.91	2.36	5	-	
Jun	62.2	48.3	55.2	0.95	0.31	1.09	2	-	
Jul	63.2	51.4	57.3	0.17	0.04	0.17	0	-	
Aug	64.3	51.3	57.8	0.18	0.05	0.19	0	-	
Sep	64.8	48.5	56.7	0.99	0.31	1.13	2	-	
Oct	62.8	44.9	53.8	2.98	1.07	3.59	5	-	
Nov	58.5	42.1	50.3	5.83	3.93	6.97	10	-	
Dec	55.5	39.8	47.7	8.82	5.47	10.67	13	-	
Annual:					38.92	49.89			
Average	59.6	44.5	52.1	-	-	-	-	-	
Total	-	-	-	46.21			81	-	

GROWING SEASON DATES

Years with missing data:	24 deg = 1	28 deg = 2	32 deg = 2
Years with no occurrence:	24 deg = 29	28 deg = 10	32 deg = 0
Data years used:	24 deg = 30	28 deg = 29	32 deg = 29
Probability	24 F or higher	28 F or higher	32 F or higher
50 percent *	No occurrence	1/9 to 1/19: 375 days	3/29 to 11/26: 242 days
70 percent *	No occurrence	No occurrence	3/20 to 12/5: 260 days

* Percent chance of the growing season occurring between the Beginning and Ending dates.

STATS TABLE - total precipitation (inches)													
Yr	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annl
1945					M4.07	MT	0.01	M0.00	M0. 37	4. 60	13. 01	12. 89	34. 95
1946	5.01	6.44	5.31	M0.50									17. 26
1947													
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1998		14.12	8.13	2.33	4.51	0.24	0.06	0.02	0.	4.	16.		50.
1000	E 00	10.00	0.04	2 42	0.01	0.06	0.01	0.25	20	1	0	2	91
1999	5.80	12.28	9.94	2.42	2.31	0.00	0.01	0.25	0. 01	1. 53	8. 32	3. 66	40. 59
2000	12.80	8.67	3.09	3.78	2.77	1.08	0.02	0.02	0.	3.	4.	2.	43.
									44	37	26	76	06
2001	3.92	4.53	2.21	3.07	0.99	1.00	0.17	0.23	0. 41	1. 78	9. 54	11. 41	39. 26
2002	7 56	6.95	4 75	3.06	0 70	0.83	0.07	0.04	0	0	2	22	20 40
2002	1.00	0.50	4.70	0.00	0.10	0.00	0.07	0.04	19	06	36	96	53
2003	7.81	3.78	5.63	12.92	1.45	0.11	0.04	0.58	0.	0.	6.	12.	52.
									55	56	08	97	48
2004	6.71	9.07	2.59	2.07	1.14	0.07	0.11	0.70	0. 63	4. 98	1. 71	9. 11	38. 89
2005	5.54	2.16	6.13	6,55	4.86	4.10	0.10	0.14	0.	3.	9.	13.	56
		-							17	42	38	99	54
2006	11.94	5.97	10.63	4.50	1.48	0.56	0.08	0.10	0.	0.	9.	9.	55.
2007	0.60	10.11	2.60	0.71	0.05	0.67	0.96	0.10	1	70	50	68 7	31
2007	2.03	13.11	3.00	3.71	0.95	0.07	0.86	0.12	1. 03	5. 73	3. 23	7. 78	43. 48

2008	10.26	3.65	4.79	2.40	0.10	0.40	0.09	0.82	0. 18	1. 13	5. 08	10. 01	38. 91
2009	2.06	6.78	6.78	1.38	3.86	0.31	0.19	0.14	0. 63	2. 45	4. 34	5. 08	34. 00
2010	10.49	5.38	6.76	8.36	3.58	3.46	0.10	0.21	2. 00	5. 29	6. 35	12. 38	64. 36
2011	2.69	4.66	12.57	5.07	1.72	1.31	0.25	M0.05	M0. 37	5. 16	4. 64	3. 31	41. 80
2012	9.11	M2.12	12.65	5.66	1.08	2.41	0.76	0.08	0. 10	3. 55	6. 93	11. 06	55. 51
2013	2.94	2.00	3.47	2.24	1.88	0.78	0.00	0.10	4. 37	0. 05	1. 70	0. 98	20. 51
2014	2.16	7.90	8.85	1.84	1.05	0.73	Т	0.00	3. 23	5. 74	5. 11	9. 96	46. 57
2015	2.07	5.59	3.78	2.39	0.10	0.07	0.13	0.51	0. 59	1. 10	5. 30	18. 77	40. 40
2016	12.30	2.93	10.48	3.27	0.64	0.11	0.59	0.02	Т	12. 03	7. 20	8. 22	57. 79
2017	11.03	14.24	10.09	5.32	1.26	0.72	0.01	0.01	0. 73	1. 81	8. 55	2. 31	56. 08
2018	9.19	2.97	8.35	5.34	0.97	0.48	0.02	0.02	0. 32	0. 89	5. 68	5. 40	39. 63
2019	8.39	16.09	5.39	3.64	3.11	Т	0.02	0.46	3. 21	2. 08	2. 05	7. 88	52. 32
2020	9.26	1.01	2.80	2.11	5.66	0.53	MT	0.02	0. 77	0. 60	3. 27	5. 14	31. 17
2021	6.81	6.15	4.29	0.67	0.33	1.93	0.11	0.01	1. 68	5. 40	3. 79	6. 73	37. 90
2022	2.92	0.41	2.18	5.08	2.64	2.73	0.60	Т	0. 52	0. 21	6. 47	10. 49	34. 25
2023	6.39	6.47	9.56	3.42	1.15	0.09	0.01	0.07	2. 63	3. 16	4. 08	8. 47	45. 50
2024	13.36	9.33	9.78	M0.81									33. 28
Notes: Data mis	sing in any												

month have an "M" flag. A "T" indicates a trace of precipitation.

Data missing for all days in a month or year is blank.

Creation date: 2024-04-17



Precipitation Data for Groundwater Monitoring

Precipitation data and rainfall measurements for the project site were taken from the National Oceanic Atmospheric Administration (NOAA) rain gage at the Eureka Weather Forecast Office (WFO) on Woodley Island. The Eureka NOAA rain gauge is the station nearest to the project site with sufficient historical data (at least 20 years) required to create an NRCS WETS table.

Table 1 presents NRCS WETS table data applicable to the project site for the 2023 water year. The NRCS WETS data includes the mean monthly below normal, normal, and above normal precipitation values for the period of 1972 to 2022 (AgACIS 2023).

Precipitation (inches)									
Month	Below Normal	Normal	Above Normal						
January	3.59	5.98	7.25						
February	3.21	5.35	6.49						
March	3.74	5.53	6.61						
April	1.94	3.2	3.88						
Мау	0.73	1.57	1.91						
June	0.25	0.66	0.79						
July	0.05	0.17	0.18						
August	0.06	0.28	0.27						
September	0.19	0.8	0.88						
October	0.96	2.45	2.96						
November	3.25	5.26	6.36						
December	4.02	7.22	8.8						

Table 1Eureka, California WETS table (1972-2022)

Rainfall data (as of February 24, 2023) for Eureka for the 2023 water year (October 1, 2022, to September 30, 2023) is shown in **Figure 1**. Below normal, normal, and above normal rainfall data from the WETS Table for Eureka are shown for comparison.



Figure 1 Eureka, California WY 2023 Precipitation and WETS graph

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